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MassHealth Managed Care HEDIS[®] 2007 Final Report

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Executive Summary

The MassHealth Managed Care HEDIS 2007 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 Center for Health Policy and Research (CHPR), the MassHealth Office of Acute and Ambulatory Care (OAAC) and the MassHealth Behavioral Health Program (MHBH) by using a subset of HEDIS (Healthcare Effectiveness Data and Information Set) measures. HEDIS was developed by the National Committee for Quality Assurance (NCQA) and is the most widely used set of standardized performance measures to evaluate and report on the quality of care delivered by health care organizations. Through this collaborative project, CHPR, OAAC and MHBH 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 2007

The MassHealth measurement set for 2007 focused on three domains: “staying healthy” (i.e., breast and cervical cancer screening and prenatal and postpartum care), “living with illness” (i.e., treatment for depression, diabetes care, hypertension control, follow-up after psychiatric hospitalizations, follow-up care for children prescribed attention-deficit/hyperactivity disorder medication, and substance abuse treatment) and “getting better” (i.e., appropriate use of antibiotics for upper respiratory infection).

Summary of Overall Results

Results from the MassHealth Managed Care HEDIS 2007 project demonstrate that MassHealth plans performed well overall when compared to the 2007 rates for other Medicaid plans around the country. For the purpose of this report, we conducted tests of statistical significance and compared the performance of individual MassHealth plans with that of the top 25% of all Medicaid plans reporting HEDIS data for 2007 (represented by the 2007 national Medicaid 75th percentile, obtained from NCQA’s Quality Compass database.)

MassHealth plans generally reported rates that were significantly better than the 2007 national Medicaid 75th percentile for the measures assessing breast cancer screening (52-64 age group only), cervical cancer screening, antidepressant medication management (optimal practitioner contacts only), follow-up care for children prescribed attention-deficit/hyperactivity disorder (ADHD) medication (initiation phase only), and the engagement of alcohol and other drug dependency treatment.

MassHealth plan results were mixed for the Prenatal and Postpartum Care and Frequency of Ongoing Prenatal Care measures, with some plans performing below the benchmark and some plans with rates that were statistically no different from the benchmark.

MassHealth plan performance on the Comprehensive Diabetes Care measure was static, with all plans reporting rates that were statistically no different from the benchmark and no different from past performance. Significant changes to the criteria for several measures meant that no benchmarks were available and/or comparisons to past performance were not possible, including the 42-51 age stratification for the breast cancer screening

measure and the cervical cancer screening, controlling high blood pressure and follow-up care for children prescribed ADHD medication measures.

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

Executive Summary (*continued*)

Breast Cancer Screening

- MassHealth managed care members aged 42-51 had a breast cancer screening rate of 58.9%. Because this is a first-year measure, there is no benchmark and comparison to past performance is not possible.
- MassHealth managed care members aged 52-64 had a breast cancer screening rate of 68.2%. All five MassHealth plans performed significantly better than the 2007 national Medicaid 75th percentile (59.2%).
- One plan (PCCP) reported a rate for the 52-64 age group that was significantly better than its HEDIS 2005 rate.

Cervical Cancer Screening

- The MassHealth managed care cervical cancer screening rate was 78.6%. Three MassHealth managed care plans performed significantly better than the 2007 national Medicaid 75th percentile (72.0%).
- NCQA raised the lower age limit for this measure from 18 to 21 since last reported by MassHealth. Therefore, comparison to past performance is not possible.

Prenatal and Postpartum Care

- The MassHealth managed care timeliness of prenatal care rate was 86.1%. None of the MassHealth managed care plans performed significantly better than the 2007 national Medicaid 75th percentile (88.7%), although four plans had rates that were not statistically different from this benchmark.
- One plan (PCCP) reported a timeliness of prenatal care rate that was significantly better than its HEDIS 2005 rate.
- The MassHealth managed care postpartum care rate was 59.0%. None of the MassHealth managed care plans performed significantly better than the 2007 national Medicaid 75th percentile (65.5%), although three plans had

rates that were not statistically different from this benchmark.

- One plan (PCCP) reported a postpartum care rate that was significantly better than its HEDIS 2005 rate.

Frequency of Ongoing Prenatal Care

- Nearly sixty-two percent (61.7%) of MassHealth managed care live births had more than 81% of the expected number of prenatal visits. None of the MassHealth managed care plans performed significantly better than the 2007 national Medicaid 75th percentile (71.7%), although two plans had rates that were not statistically different from this benchmark.
- None of the MassHealth managed care plans reported a 2007 postpartum care rate that was significantly better than its 2005 rate.

Comprehensive Diabetes Care

- This measure assesses nine areas of diabetes care: HbA1c testing, HbA1c good and poor control, LDL testing, LDL control, blood pressure control (2 rates), eye exams, and screening for kidney disease.
- MassHealth managed care plans had rates that were significantly better or statistically no different from the national Medicaid 75th percentile, for the six rates for which benchmarks are available.
- For the six measures collected by MassHealth for 2006, MassHealth plans had 2007 rates that were statistically no different from their 2006 rates, with one exception. Four MassHealth managed care plans had rates for the monitoring kidney disease measure that were significantly better than their 2006 rates.

Controlling High Blood Pressure

- MassHealth's blood pressure control rate for MassHealth managed care members aged 18-45 with hypertension was 54.1%. Because this is a new age stratification for this measure,

there is no benchmark and comparison to past performance is not possible.

- MassHealth's blood pressure control rate for MassHealth managed care members aged 46-85 with hypertension was 54.7%. Because of changes NCQA made to the definition of blood pressure control, there is no benchmark and comparison to past performance is not possible.

Antidepressant Medication Management

- The MassHealth managed care rate for optimal practitioner contacts during the 84-day acute treatment phase was 31.4%. Three MassHealth managed care plans had rates that were significantly better than the 2007 national Medicaid 75th percentile (27.0%). Two plans (PCCP and NH) had 2007 rates that were significantly better than their 2005 rates.
- The MassHealth managed care rate for effective acute phase treatment was 47.9%. Two MassHealth plans had rates that were significantly better than the 2007 national Medicaid 75th percentile (47.9%). One plan (PCCP) had a 2007 rate that was significantly better than the plan's 2005 rate.
- The MassHealth managed care rate for effective continuation phase treatment was 32.9%. Two MassHealth plans had rates that were significantly better than the 2007 national Medicaid 75th percentile (32.4%). One plan (PCCP) had a 2007 rate that was significantly better than the plan's 2005 rate.

Follow-up After Hospitalization for Mental Illness

- The MassHealth managed care 7-day follow-up rate was 56.9%. One plan had a rate that was significantly better than the 2007 national Medicaid percentile. One plan (PCCP) had a 2007 rate that was significantly better than the plan's 2005 rate.

Executive Summary (*continued*)

- The MassHealth managed care 30-day follow-up rate was 76.2%. Two plans had rates that were significantly better than the 2007 national Medicaid percentile (75.9%). Two plans (PCCP and NHP) had 2007 rates that were significantly better than their 2005 rate.

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

- The MassHealth managed care initiation phase treatment rate (i.e., the percentage of children with one follow-up visit within 30 days of ADHD prescription) was 54.1%. Four MassHealth managed care plans had rates that were significantly better than the 2007 national Medicaid 75th percentile (38.7%). Since this is a new measure for MassHealth reporting, comparison to past MassHealth performance is not possible.
- The MassHealth managed care continuation and maintenance phase treatment rate (% of children who remained on ADHD medication for 210 days and had two additional follow-up visits) was 61.3%. Due to an error by NCQA, benchmarks for this rate are not available. Since this is a new measure for MassHealth reporting, comparison to past MassHealth performance is not possible.

Initiation and Engagement of Alcohol and Other Drug Dependency Treatment

- The MassHealth managed care rate for the initiation of alcohol and other drug dependency treatment was 49.4%. One plan had a rate that was significantly better than the 2007 national Medicaid 75th percentile. Three plans (PCCP, NH and BMCHP) had 2005 rates that were significantly better than their 2007 rates.
- The MassHealth managed care rate for the engagement of alcohol and other drug dependency treatment was 20.6%. Four MassHealth

plans had rates that were significantly better than the 2007 national Medicaid 75th percentile (15.1%). One plan (PCCP) had a 2007 rate that was significantly better than its 2005 rate.

Appropriate Treatment for Children with Upper Respiratory Infection

- The MassHealth managed care rate for appropriate use of antibiotics in children with upper respiratory infection was 87.9%. Two MassHealth plans had rates that were significantly better than the 2007 national Medicaid 75th percentile (89.3%). One plan (PCCP) had a 2007 rate that was significantly better than its 2005 rate.

Summary of MassHealth Managed Care HEDIS 2007 Results

HEDIS 2007 Measure	2007 National Medicaid 75th Percentile	PCCP rate	NHP rate	NH rate	FCHP rate	BMCHP rate
Breast Cancer Screening						
Age 42-51 *	—	57.2%	63.8%	58.9%	62.9%	61.3%
Age 52-69	59.2%	66.9% ↑	70.5% ↑	67.3% ↑	73.9% ↑	76.3% ↑
Cervical Cancer Screening	72.0%	74.1%	85.2% ↑	75.6%	85.2% ↑	81.0% ↑
Prenatal and Postpartum Care						
Timeliness of Prenatal Care	88.7%	88.1%	87.1%	71.0% ↓	89.2%	90.3%
Postpartum Care	65.5%	55.2% ↓	56.1% ↓	60.8%	67.2%	64.2%
Frequency of Ongoing Prenatal Care						
> 81+ percent	71.7%	62.3% ↓	67.2%	49.4% ↓	72.8%	62.0% ↓
Comprehensive Diabetes Care ***						
HbA1C Screening	84.3%	-	91.2% ↑	83.7%	90.4% ↑	88.8% ↑
Poor HbA1c Control **	39.7%	-	31.9% ↑	41.8%	31.1% ↑	41.4%
Good HbA1c Control *	—	-	35.8%	29.2%	29.9%	34.8%
LDL-C Screening	77.9%	-	80.0%	81.3%	77.8%	77.9%
LDL-C level <100 mg/dL	37.2%	-	35.0%	37.0%	35.3%	35.3%
Eye Exam	62.7%	-	70.3% ↑	62.8%	67.7%	74.7% ↑
Monitoring Nephropathy	81.8%	-	83.2%	78.3%	76.6%	83.7%
Blood Pressure <130/80 *	—	-	34.5%	38.2%	45.5%	34.3%
Blood Pressure <140/90 *	—	-	68.4%	66.9%	77.8%	67.9%
Controlling High Blood Pressure						
Age 18-45 *	—	52.6%	59.5%	56.6%	64.1%	52.0%
Age 46-85 *	—	53.2%	63.6%	56.2%	70.9%	55.6%

* Benchmarks are not available for this measure.

** This measure is the percentage of members whose HbA1c was in poor control. Therefore, a lower rate indicates better performance.

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

↑ Indicates a rate that is significantly better than the 2007 national Medicaid 75th percentile.

↓ Indicates a rate that is significantly worse than the 2007 national Medicaid 75th percentile.

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

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Summary of MassHealth Managed Care HEDIS 2007 Results (continued)

HEDIS 2007 Measure	2007 National Medicaid 75th Percentile	PCCP rate	NHP rate	NH rate	FCHP rate	BMCHP rate
Antidepressant Medication Management						
Optimal Practitioner Contacts	27.0%	29.3% ↑	35.3% ↑	30.5%	27.2%	34.4% ↑
Effective Acute Phase Tx	47.9%	52.7% ↑	45.9%	55.1% ↑	49.4%	35.4% ↓
Effective Continuation Phase Tx	32.4%	38.1% ↑	26.8% ↓	43.6% ↑	37.0%	20.0% ↓
Follow-up After Hospitalization for Mental Illness						
7 Days	58.0%	55.7% ↓	71.8% ↑	58.2%	58.3%	55.6%
30 Days	75.9%	74.1% ↓	91.9% ↑	77.0%	79.8%	78.4% ↑
Follow-Up Care for Children Prescribed Attention-Deficit/Hyperactivity Medication						
Initiation	38.7%	63.6% ↑	60.7% ↑	63.4% ↑	67.9% ↑	31.8% ↓
Continuation and Maintenance *	—	75.1%	63.2%	70.7%	-	35.9%
Initiation and Engagement of Alcohol and Other Drug Dependence Treatment						
Initiation Total	50.0%	47.2% ↓	48.2%	48.1%	53.2%	56.7% ↑
Engagement Total	15.1%	19.2% ↑	39.5% ↑	14.9%	23.4% ↑	22.0% ↑
Appropriate Treatment for Children with Upper Respiratory Infection						
	89.3%	84.0% ↓	91.8% ↑	88.0% ↓	90.1%	91.1% ↑

* Benchmarks are not available for this measure.

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

↑ Indicates a rate that is significantly better than the 2007 national Medicaid 75th percentile.
 ↓ Indicates a rate that is significantly worse than the 2007 national Medicaid 75th percentile.

Introduction

Introduction

Purpose of the Report

This report presents the results of the MassHealth Managed Care HEDIS 2007 project. This report was designed to be used by MassHealth program managers and by managed care organization (MCO) managers to identify plan performance on select Healthcare Effectiveness Data and Information Set (HEDIS) measures, compare performance with that of other MassHealth managed care plans and with 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) and the MassHealth Behavioral Health Program (MHBH) to conduct an annual assessment of the performance of all MassHealth managed care organizations (MCOs) and the Primary Care Clinician Plan (PCCP), the primary care case management program administered by the Executive Office of Health and Human Services (EOHHS). CHPR, OAAC and MHBH 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 to measure and report on the quality of ambulatory care delivered by health care organizations. HEDIS includes clinical measures, as well as measures of access to care and utilization of services.

The measures selected for the MassHealth Managed Care HEDIS 2007 project assess the performance of the five MassHealth plans that pro-

vided health care services to MassHealth managed care members during the 2006 calendar year. The five MassHealth plans included in this report are the Primary Care Clinician Plan (PCCP), 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 on page 11.

MassHealth HEDIS 2007 Measures

MassHealth selected eleven measures for the HEDIS 2007 project. The eleven measures included in this report assess health care quality in three key areas: clinical quality, access and availability of care, and use of services.

The clinical quality measures included in this report provide information about preventive services, the management of chronic illness, and the treatment of acute illness. The specific topics evaluated in this report are breast and cervical cancer screening, comprehensive diabetes care, controlling hypertension, antidepressant medication management, appropriate follow-up for people hospitalized with mental illness, and appropriate use of antibiotics in children with upper respiratory infections.

The access and availability of care measures included in this report provide information about the ability of members to get the basic and important services they need. The specific topics evaluated in this report are prenatal and postpartum care visits and the initiation and engagement of alcohol and other drug dependency treatment.

Use of service measures provide information

about what services health plan members utilize. The specific services evaluated in this report are the frequency of prenatal visits, measured as the percentage of expected visits adjusted for gestational age at birth and the month that the member enrolled in the health plan.

Note: MassHealth assessed member satisfaction through the administration of the Consumer Assessment of Healthcare Providers and Systems (CAHPS®) survey. Results of the MassHealth CAHPS measurement effort can be found in the MassHealth CAHPS 2006 report produced by CHPR in collaboration with the UMASS Center for Survey Research (CSR).

Organization of the MassHealth Managed Care HEDIS 2007 Report

This report presents the results of the MassHealth Managed Care HEDIS 2007 project in three sections. These sections are based on the consumer reporting domains used in NCQA's health plan report cards (i.e., Staying Healthy, Living with Illness and Getting Better). These domains group clinical and access to care HEDIS 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.	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • Antidepressant Medication Management • Comprehensive Diabetes Care • Controlling High Blood Pressure • Follow-up After Hospitalization for Mental Illness • Follow-up Care for Children Prescribed Attention-Deficit/Hyperactivity Disorder (ADHD) Medication • Initiation and Engagement of Alcohol and Other Drug Dependency Treatment
Getting Better	This measure provides information about how well a plan helps people recover from illness.	<ul style="list-style-type: none"> • Appropriate Treatment for Children with Upper Respiratory Infection

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

- **Appendix A** includes a list of the MassHealth regions and the service areas the regions cover.
- **Appendix B** includes the <21%, 21-40%, 41-60% and 61-80% of expected visit rates for the Frequency of Ongoing Prenatal Care measure.
- **Appendix C** presents data for the Antidepressant Medication Management measure for PCCP members with Basic, Essential and Non-Basic/Non-Essential coverage.
- **Appendix D** presents data for the Follow-up After Hospitalization for Mental Illness measure for PCCP members with Basic, Essential and Non-Basic/Non-Essential coverage.
- **Appendix E** presents data for the Follow-up Care for Children Prescribed ADHD Medication measure for PCCP members with Basic, Essential and Non-Basic/Non-Essential coverage.
- **Appendix F** includes the age-stratified results for the Initiation and Engagement of Alcohol and Other Drug Dependency Treatment measure.
- **Appendix G** includes the age-stratified results for the Initiation and Engagement of Alcohol and Other Drug Dependency Treatment measure for PCCP members with Basic, Essential and Non-Basic/Non-Essential coverage.

Organization of the MassHealth Managed Care HEDIS 2007 Report

Name of measure

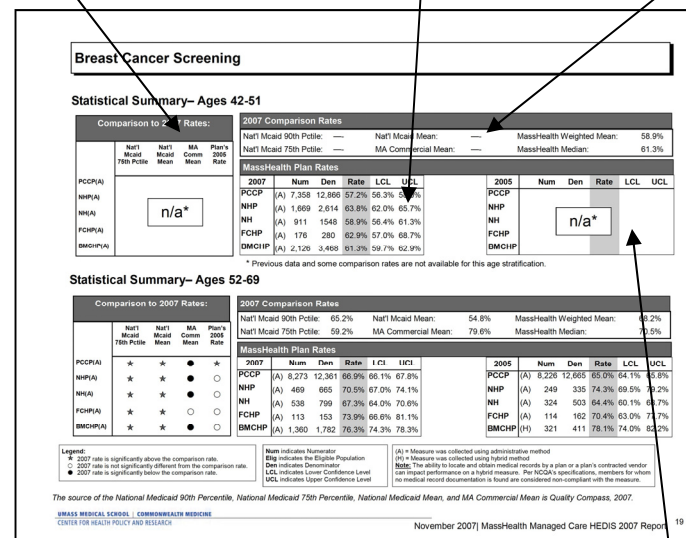
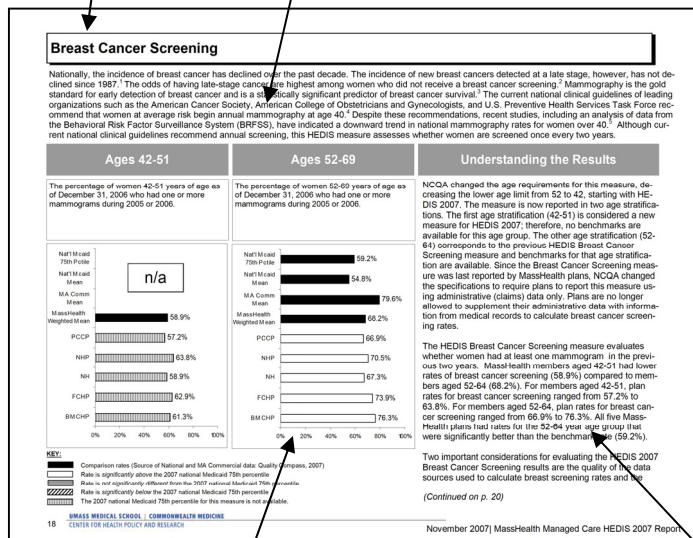
Information on the intent of each measure, including any clinical guidelines on which it is based

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

- ★ 2007 rate is significantly above the comparison rate
- 2007 rate is not significantly different from the comparison rate
- 2007 rate is significantly below the comparison rate

Individual HEDIS 2007 plan data including numerator, eligible population (where applicable) denominator, reported rate, and upper and lower confidence intervals

The 2007 national Medicaid 75th percentile is listed as an benchmark. The 2007 national Medicaid 90th percentile, 2007 national Medicaid mean, 2007 Massachusetts Commercial mean, and 2007 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 2005/2006, if available and if there were no significant changes to the measure's specifications that prohibited comparisons to HEDIS 2005

Health Plan Profiles

MassHealth managed care plans provided care to over 690,000 Massachusetts residents as of December 31, 2006. The MassHealth Managed Care HEDIS 2007 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 "MCO" 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 (PCCP)

- 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.
- 304,411 MassHealth members as of December 31, 2006.
- Provider network includes group practices, community health centers, hospital outpatient departments, hospital-licensed health centers, nurse practitioners, and individual practitioners.
- Behavioral health services are managed through a carve-out contract with the Massachusetts Behavioral Health Partnership (MBHP).
- HEDIS data for select measures were collected separately for PCCP 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). PCCP is the only MassHealth plan serving members with Essential coverage. Approximately seventeen percent

(17%) of the PCCP's membership has MassHealth Essential coverage.

Neighborhood Health Plan (NHP)

- Non-profit managed care organization that serves primarily Medicaid members.
- 116,253 MassHealth members as of December 31, 2006.
- 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)

- Managed care organization serving Massachusetts Medicaid (MassHealth) and Commonwealth Care populations owned and operated by Cambridge Health Alliance.
- Network Health works with a network of more than 13,000 primary care providers and specialists who serve members located in more than 300 cities and towns across Massachusetts.
- 91,437 MassHealth members as of December 31, 2006.
- Primary service areas in Central, Northern and Western Massachusetts, Greater Boston, and South Shore.
- 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 the commercial, Medicare, and Medicaid populations.
- 11,141 MassHealth members as of December 31, 2006.
- Service area is in Central Massachusetts.

- Behavioral health services are managed through a carve-out contract with Beacon Health Services.
- Provider network for MassHealth members is exclusively through Fallon Clinic sites.

Boston Medical Center HealthNet Plan (BMCHP)

- Medicaid-only provider-sponsored health plan, owned and operated by Boston Medical Center, the largest public safety-net hospital in Boston.
- 167,277 MassHealth members as of December 31, 2006.
- 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 are 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 measures.

The data on the next page describe each plan's population in terms of age, gender, and disability status. It is important for readers to consider the differences in the characteristics of each plan's population when reviewing and comparing the HEDIS 2007 performance of the five plans.

Health Plan Profiles: Demographic Characteristics of the Plan Populations

MassHealth Plan	Total MassHealth Managed Care Members as of 12/31/06	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*	255,887	56.4%	29.9%	25.43	28.1%	17.9%	26.8%	26.8%	0.4%
Essential population only	48,524	33.3%	0.0%	38.78	0.0%	0.0%	52.4%	47.0%	0.6%
Neighborhood Health Plan	116,253	60.4%	3.4%	18.35	41.6%	18.1%	27.8%	12.4%	0.1%
Network Health	91,437	57.1%	6.9%	18.95	41.7%	15.2%	29.2%	13.9%	0.1%
Fallon Community Health Plan	11,141	59.8%	9.4%	20.84	36.5%	15.2%	32.3%	16.0%	0.1%
Boston Medical Center HealthNet Plan	167,277	58.4%	9.5%	18.4	42.7%	16.9%	27.3%	13.0%	0.1%
Total for MassHealth Managed Care Program	690,519	56.1%	15.0%	22.5	33.9%	16.1%	29.3%	20.6%	0.2%

Source: MMIS

* HEDIS results based on this PCCP population are compared to MCO results throughout the main body of the report.

** MassHealth managed care plans generally serve members under the age of 65. A small number of MassHealth managed care members were 65 years of age or older as of 12/31/2006 and had not yet had their coverage terminated. MassHealth members 65 years and older were included in the eligible populations for the HEDIS 2007 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 ($p < .005$). Both NHP and FCHP had a significantly higher proportion of females than NH and BMCHP.

Disabled Members: PCCP had a significantly higher proportion of disabled members than any of the four MCOs ($p < .005$). FCHP and BMCHP both had a higher proportion of disabled members than NHP and NH.

Mean Age of Members: All four MCOs had a population whose mean age was significantly lower than that of PCCP ($p < .005$). FCHP's population had a mean age that was significantly higher than that of BMCHP, NHP, and NH ($p < .005$).

Data Collection and Analysis Methods

Data Collection and Submission

In November 2006, the MassHealth Office of Acute and Ambulatory Care (OAAC) provided the MassHealth plans with a list of the measures to be collected for HEDIS 2007. The list of measures was developed by key stakeholders within MassHealth, including stakeholders within OAAC, the Office of Clinical Affairs (OCA), and the MassHealth Behavioral Health Program (MHBH). In general, each plan was responsible for collecting the measures according to the HEDIS 2007 Technical Specifications and for reporting the data using NCQA's Interactive Data Submission System (IDSS). Each plan submitted its results to both NCQA and CHPR.

MassHealth does not require plans to undergo an NCQA HEDIS Compliance Audit™. NCQA HEDIS Compliance Audits are independent reviews conducted by organizations or individuals licensed or certified by NCQA. The purpose of the audit is to validate a plan's HEDIS results by verifying the integrity of the plan's data collection and calculation processes. All plans undergoing NCQA Accreditation must have their HEDIS data audited (one MassHealth plan (FCHP) is currently NCQA-Accredited and several other plans are preparing for future accreditation reviews). NCQA reports only audited data in Quality Compass, a database of regional and national Medicaid, Medicare and Commercial performance benchmarks. Three plans, BMCHP, NHP and FCHP, voluntarily submitted audited HEDIS 2007 data to NCQA and CHPR.

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 program serves members under the age of 65. Occasionally, members 65 and older appear in the denominator of a MassHealth plan's HEDIS rates. 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 2007 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.

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

Enrollment gap: The specifications for most measures allow members to have a gap in enrollment during the continuous enrollment period

and still be eligible for the measure. The allowable gap is specified for each measure but is generally defined for the Medicaid population as one gap of up to 45 days.

Diagnosis/event criteria: Some measures require a member to have a specific diagnosis or health care event to be included in the denominator. Diagnoses are defined by specific administrative codes (e.g., ICD-9, CPT). Other health care events may include prescriptions, hospitalizations, or outpatient visits.

The measure descriptions included in this report do not include every requirement for the eligible populations (e.g., enrollment gaps). For complete specifications for each measure included in this report, please see *HEDIS 2007 Volume 2: Technical Specifications*.

MassHealth Coverage Types Included in HEDIS 2007

MassHealth has several Medicaid coverage types whose members are eligible to enroll in any of the five MassHealth plans including Basic, Standard, CommonHealth, and Family Assistance. Members with one coverage type, MassHealth Essential, may only enroll 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 sixteen percent (15.9%) of the PCC Plan's managed care membership has MassHealth Essential coverage.

During the planning for the MassHealth Managed Care HEDIS 2007 project, it was decided that the

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

Data Collection and Analysis Methods (*continued*)

PCC Plan would submit HEDIS 2007 data for all of its coverage types for the measures where the population covered by the measure (e.g., age range) includes the population included in the coverage type. This coverage types include Basic, Essential and non-Basic/non-Essential coverage. The measures that include these coverage type breakouts include the Antidepressant Medication Management, Follow-up after Hospitalization for Mental Illness, Follow-up Care for Children Prescribed ADHD Medication, and the Initiation and Engagement of Alcohol and Other Drug Dependency Treatment measures. The data for the PCC Plan population without members with Essential coverage is used in all tables and charts in the main body of the report.

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 SoftwareSM purchased from a vendor. For measures collected through the administrative method, the denominator includes all members who satisfy all criteria specified in the measure including any age and continuous enrollment requirements (these members are known as the “eligible population”). The plan’s HEDIS rate is based on all members in the denominator who are found through administrative data to have received the service reported in the numerator (e.g., visit, treatment, etc.).

The **hybrid method** requires plans to identify the numerator through both administrative and medical record data. Plans may collect medical record data using plan staff and a plan-developed data collection tool. Plans may also contract with a vendor for the tool, staffing, or both. For measures collected using the hybrid method, the denominator consists of a systematic sample of members drawn from the measure’s eligible population. This systematic sample generally consists of a minimum required sample size of 411 members plus an over sample determined by the plan to account for valid exclusions and contraindications. The measure’s rate is based on members in the sample (411) who are found through either administrative or medical record data to have received the service reported in the numerator. Plans may report data with denominators smaller than 411 for two reasons: 1) the plan had a small eligible population or 2) the plan reduced its sample size based on its current year’s administrative rate or the previous year’s audited rate, according to NCQA’s specifications.

It is important to note that performance on a hybrid measure can be impacted by the ability of a plan or its contracted vendor to locate and obtain member medical records. Per NCQA’s specifications, members for whom no medical record documentation is found are considered non-compliant with the measure.

Data Analysis

Throughout this report, HEDIS 2007 results from each plan are compared to several benchmarks and comparison rates, including the 2007 national Medicaid 75th percentile, 2007 national

Medicaid mean, and 2007 Massachusetts Commercial mean. In addition, CHPR calculated MassHealth medians and weighted means from the 2007 data.

2007 National Medicaid 75th Percentile

For this report, the 2007 national Medicaid 75th percentile serves as the primary benchmark to which plan performance is compared (including statistical significance).

CHPR obtained the 2007 national Medicaid data from 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 late Fall.

Other Comparison Rates Included in this Report

The other comparison rates included in the data tables of this report are the 2007 national Medicaid mean, national Medicaid 90th percentile, Massachusetts Commercial mean, MassHealth weighted mean, and MassHealth median.

The 2007 national Medicaid mean is the average performance of all Medicaid plans that submitted HEDIS 2007 data. The 2007 national Medicaid 90th percentile represents a level of performance that was exceeded by only the top 10% of all Medicaid plans that submitted HEDIS 2007 data. The 2007 Massachusetts Commercial mean is the average performance of all Massachusetts Commercial plans that submitted audited HEDIS 2007 data to NCQA. Although the populations served by Massachusetts Commercial plans differ from the population served by MassHealth, the Massachusetts Commercial mean may be an appropriate goal for MassHealth plans in some

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

Data Collection and Analysis Methods (*continued*)

instances.

The 2007 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 individuals 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. Because the MassHealth mean is a weighted average, the effect of a plan's performance on the mean depends on the size of that plan. The largest MassHealth plan (PCCP) serves 44.1% 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 weighted mean is still an appropriate statistic to indicate overall MassHealth performance on a measure, however.

The 2007 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.

Late Submission of Data by Plans

Three MassHealth plans requested and were granted extensions to submit data after the original due date. These plans (BMCHP, FCHP and NH) submitted data late to CHPR and to NCQA for varying reasons, including problems with subcontracted software vendors, medical record review vendors, NCQA auditors, and difficulties using the new NCQA data submission system. The impact

of these problems and of the extra time given to these plans to complete their submission on HEDIS 2007 rates is unknown.

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 for 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 unadjusted 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. CHPR and MassHealth are working on new methodologies to analyze MassHealth HEDIS results to address this issue for future reports.

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 through the plan profile chart on page 12, PCCP 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 2007 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 plans 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.

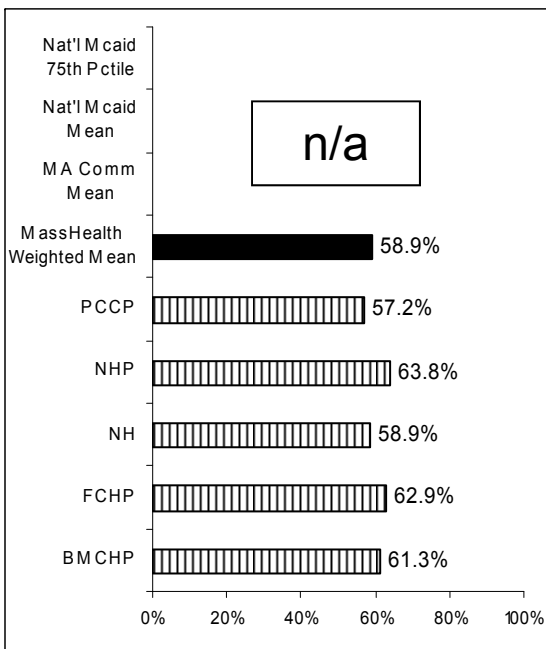
Staying Healthy

Breast Cancer Screening

Nationally, the incidence of breast cancer has declined over the past decade. The incidence of new breast cancers detected at a late stage, however, has not declined since 1987.¹ The odds of having late-stage cancer are highest among women who did not receive a breast cancer screening.² Mammography is the gold standard for early detection of breast cancer and is a statistically significant predictor of breast cancer survival.³ The current national clinical guidelines of leading organizations such as the American Cancer Society, American College of Obstetricians and Gynecologists, and U.S. Preventive Health Services Task Force recommend that women at average risk begin annual mammography at age 40.⁴ Despite these recommendations, recent studies, including an analysis of data from the Behavioral Risk Factor Surveillance System (BRFSS), have indicated a downward trend in national mammography rates for women over 40.⁵ Although current national clinical guidelines recommend annual screening, this HEDIS measure assesses whether women are screened once every two years.

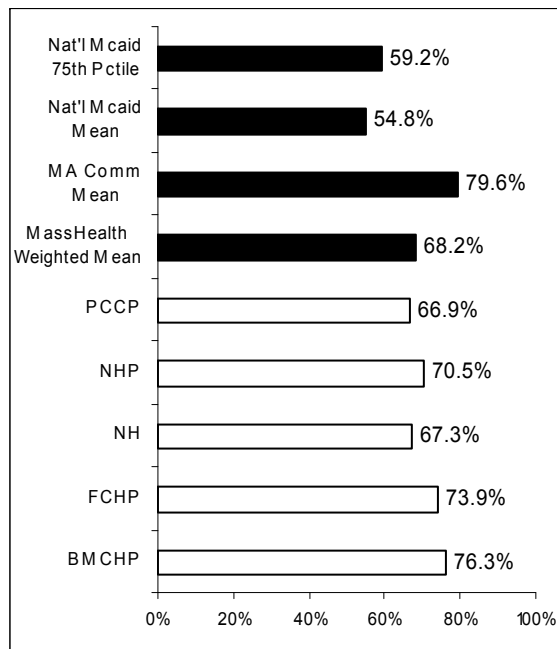
Ages 42-51

The percentage of women 42-51 years of age as of December 31, 2006 who had one or more mammograms during 2005 or 2006.



Ages 52-69

The percentage of women 52-69 years of age as of December 31, 2006 who had one or more mammograms during 2005 or 2006.



Understanding the Results

NCQA changed the age requirements for this measure, decreasing the lower age limit from 52 to 42, starting with HEDIS 2007. The measure is now reported in two age stratifications. The first age stratification (42-51) is considered a new measure for HEDIS 2007; therefore, no benchmarks are available for this age group. The other age stratification (52-69) corresponds to the previous HEDIS Breast Cancer Screening measure and benchmarks for that age stratification are available. Since the Breast Cancer Screening measure was last reported by MassHealth plans, NCQA changed the specifications to require plans to report this measure using administrative (claims) data only. Plans are no longer allowed to supplement their administrative data with information from medical records to calculate breast cancer screening rates.

The HEDIS Breast Cancer Screening measure evaluates whether women had at least one mammogram in the previous two years. MassHealth members aged 42-51 had lower rates of breast cancer screening (58.9%) compared to members aged 52-69 (68.2%). For members aged 42-51, plan rates for breast cancer screening ranged from 57.2% to 63.8%. For members aged 52-69, plan rates for breast cancer screening ranged from 66.9% to 76.3%. All five MassHealth plans had rates for the 52-69 year age group that were significantly better than the benchmark rate (59.2%).

Two important considerations for evaluating the HEDIS 2007 Breast Cancer Screening results are the quality of the data sources used to calculate breast screening rates and the

(Continued on p. 20)

KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2007)
- Rate is significantly above the 2007 national Medicaid 75th percentile
- Rate is not significantly different from the 2007 national Medicaid 75th percentile
- Rate is significantly below the 2007 national Medicaid 75th percentile
- The 2007 national Medicaid 75th percentile for this measure is not available.

Breast Cancer Screening

Statistical Summary– Ages 42-51

Comparison to 2007 Rates:					2007 Comparison Rates										
PCCP(A) NHP(A) NH(A) FCHP(A) BMCHP(A)	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2005 Rate	Nat'l Mcaid 90th Pctile: —					Nat'l Mcaid Mean: —		MassHealth Weighted Mean: 58.9%			
					Nat'l Mcaid 75th Pctile: —					MA Commercial Mean: —		MassHealth Median: 61.3%			
	MassHealth Plan Rates														
	2007	Num	Den	Rate	LCL	UCL		2005	Num	Den	Rate	LCL	UCL		
	PCCP	(A) 7,358	12,866	57.2%	56.3%	58.0%		PCCP							
	NHP	(A) 1,669	2,614	63.8%	62.0%	65.7%		NHP							
NH	(A) 911	1548	58.9%	56.4%	61.3%		NH								
FCHP	(A) 176	280	62.9%	57.0%	68.7%		FCHP								
BMCHP	(A) 2,126	3,468	61.3%	59.7%	62.9%		BMCHP								

* Previous data and some comparison rates are not available for this age stratification.

Statistical Summary– Ages 52-69

Comparison to 2007 Rates:					2007 Comparison Rates										
	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2005 Rate	Nat'l Mcaid 90th Pctile:		65.2%	Nat'l Mcaid Mean:		54.8%	MassHealth Weighted Mean:			68.2%	
					Nat'l Mcaid 75th Pctile:		59.2%	MA Commercial Mean:		79.6%	MassHealth Median:			70.5%	
					MassHealth Plan Rates										
2007	Num	Den	Rate	LCL	UCL		2005	Num	Den	Rate	LCL	UCL			
PCCP(A)	★	★	●	★			PCCP	(A)	8,273	12,361	66.9%	66.1%	67.8%		
NHP(A)	★	★	●	○			NHP	(A)	469	665	70.5%	67.0%	74.1%		
NH(A)	★	★	●	○			NH	(A)	538	799	67.3%	64.0%	70.6%		
FCHP(A)	★	★	○	○			FCHP	(A)	113	153	73.9%	66.6%	81.1%		
BMCHP(A)	★	★	●	○			BMCHP	(A)	1,360	1,782	76.3%	74.3%	78.3%		

Legend:

- ★ 2007 rate is significantly above the comparison rate.
- 2007 rate is not significantly different from the comparison rate.
- 2007 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, 2007.

Breast Cancer Screening

Understanding the Results (continued)

ongoing controversy over universal screening for women ages 40-49 years.⁶ The HEDIS Breast Cancer Screening measure is now calculated using administrative data only. There is some evidence that reliance on administrative data may yield rates that underestimate breast cancer screening in the measured population.⁷

Although medical record review may offer more accurate data on screening, medical record review is costly and the quality of medical record data is subject to problems such as incomplete charts, patients with multiple charts, and other data collection problems.

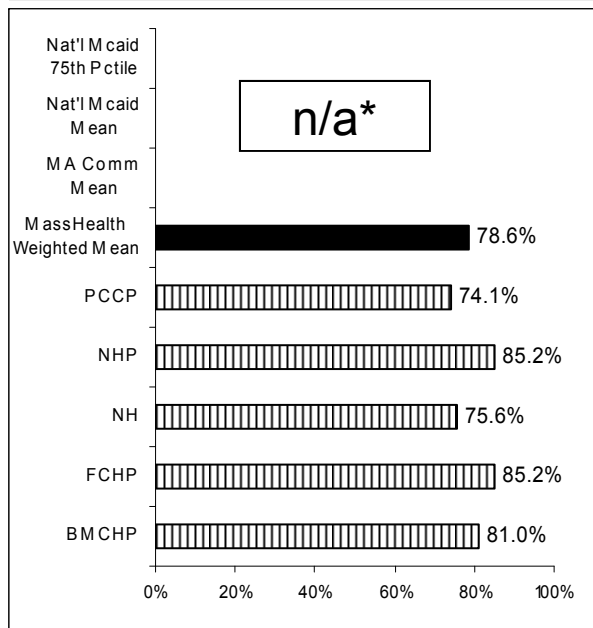
HEDIS 2007 is the first HEDIS measurement set to require plans to report breast screening rates for the 40-49 year old population. Despite some current clinical guidelines that recommend universal annual screening beginning with age 40 and the cost-effectiveness of screening this population there is ongoing controversy over the benefits of subjecting women ages 40-49 to population-based breast cancer screening.⁸ Some researchers suggest that clinicians tailor breast cancer screening practices for women 40-49 years based on individual risk for breast cancer as well as the benefits and risks for screening.⁹ The ongoing controversy around screening women ages 40-49 years of age may lead to slower adoption of current clinical guidelines by some providers and lower HEDIS rates for this group.

Cervical Cancer Screening

The National Cancer Institute estimates that there will be 11,150 new cases of cervical cancer in the United States in 2007 with 3,670 deaths. Cervical cancer is the second leading cause of death from cancer in women ages 20-39.¹² With a 73% 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.

Cervical Cancer Screening

The percentage of women 21-64 who received one or more Pap tests to screen for cervical cancer in the preceding three years (2004-2006).



* Benchmarks are unavailable for this measure.

KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2007)
- Rate is *significantly above* the 2007 national Medicaid 75th percentile
- Rate is *not significantly different from* the 2007 national Medicaid 75th percentile
- Rate is *significantly below* the 2007 national Medicaid 75th percentile
- The 2007 national Medicaid 75th percentile for this measure is not available.

Understanding the Results

NCQA changed the age requirements for this measure, raising the lower age limit from 18 to 21, starting with HEDIS 2007. The measure's age range of 21-64 corresponds with current guidelines that recommend initiation of cervical cancer screening approximately three years after the onset of sexual activity but no later than age 21. Because NCQA changed the age range for this measure, no benchmarks are available and comparison to past performance is not possible.

Seventy-nine percent (78.6%) of MassHealth members aged 21-64 received one or more Pap tests to screen for cervical cancer in the preceding three years. Plan rates for cervical cancer screening ranged from 74.1% to 85.2%.

The HEDIS Cervical Cancer Screening measure evaluates whether women had at least one Pap test in the previous three years. Many providers continue to provide their patients with annual Pap tests. In fact, many doctors are reluctant to reduce the frequency of screening to every 3 years because annual Pap tests bring women into their office and many women prefer annual screening.¹³

One of the greatest factors for screening is physician recommendation; lack of physician recommendation contributes to underuse of the Pap test.¹⁵ Other factors contributing to cervical cancer screening rates include access to preventive services and using personalized communications.

Cervical Cancer Screening

Statistical Summary

Comparison to 2007 Rates:				
	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2005 Rate*
PCCP(H)	<div>n/a *</div>			
NHP(H)				
NH(H)				
FCHP(H)				
BMCHP(H)				

2007 Comparison Rates												
Nat'l Mcaid 90th Pctile:			77.4%		Nat'l Mcaid Mean:			65.7%		MassHealth Weighted Mean: 78.6%		
Nat'l Mcaid 75th Pctile:			72.0%		MA Commercial Mean:			86.1%		MassHealth Median: 81.0%		

MassHealth Plan Rates															
2007		Num	Elig	Den	Rate	LCL	UCL	2005		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	243	35,592	328	74.1%	69.2%	79.0%	PCCP							
NHP	(H)	350	18,145	411	85.2%	81.6%	88.7%	NHP							
NH	(H)	248	10,920	328	75.6%	70.8%	80.4%	NH							
FCHP	(H)	350	1,936	411	85.2%	81.6%	88.7%	FCHP							
BMCHP	(H)	333	24,992	411	81.0%	77.1%	84.9%	BMCHP							

<div>n/a**</div>												
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* Due to changes in the specifications of this measure, benchmark comparisons are not appropriate for this cycle.

** Due to changes in the specifications of this measure, results from previous cycles are not comparable.

Legend:

- ★ 2007 rate is significantly above the comparison rate.
- 2007 rate is not significantly different from the comparison rate.
- 2007 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.

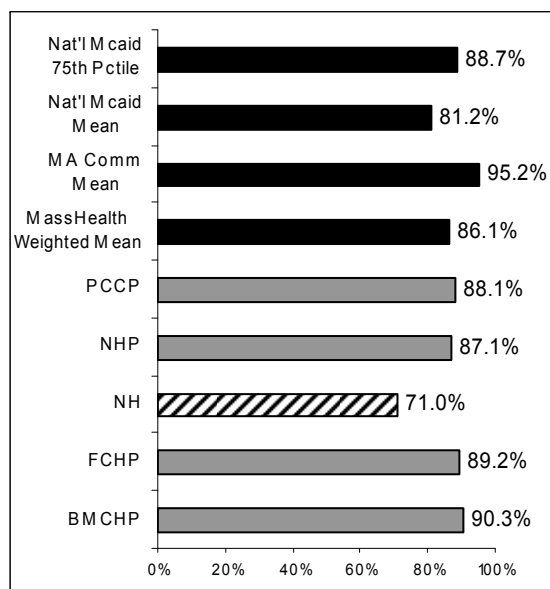
The source of the National Medicaid 90th Percentile, National Medicaid 75th Percentile, National Medicaid Mean, and MA Commercial Mean is Quality Compass, 2007.

Prenatal and Postpartum Care

The U.S. infant mortality rate, the rate at which babies less than one year of age die, has declined steadily over the past four decades. Despite this, the U.S. infant mortality rate ranked 28th among all industrialized nations in 2005.¹⁵ 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).¹⁶ 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 help 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.¹⁷

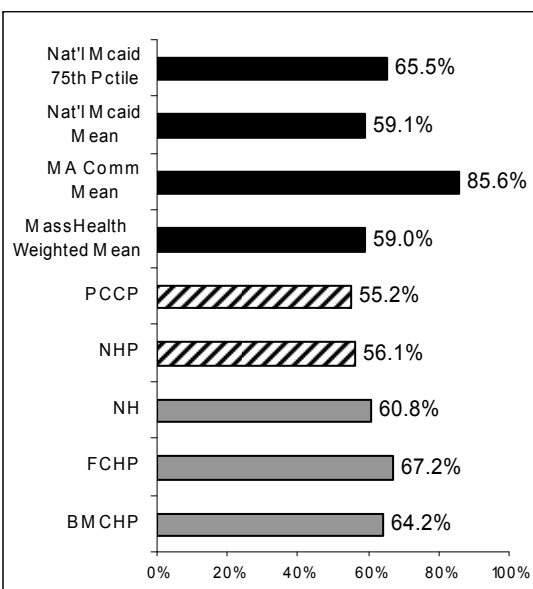
Timeliness of Prenatal Care

The percentage of live births where the mother received a prenatal care visit in the first trimester or within 42 days of enrollment in the health plan.



Postpartum Care

The percentage of live births where the mother had a postpartum visit on or between 21 and 56 days after delivery.



Understanding the Results

Eighty-six percent (86.1%) of MassHealth members had a prenatal visit in the first trimester or within 42 days of enrollment. None of the MassHealth plans performed significantly better than the national Medicaid 75th percentile (88.7%), however, four plan's rates were statistically no different from the benchmark rate.

Fifty-nine percent (59.0%) of MassHealth members had a postpartum visit on or between 21 and 56 days after delivery. None of the MassHealth plans performed significantly better than the national Medicaid 75th percentile (65.5%), however, three plan's rates were statistically no different from the benchmark rate.

Some external analyses of national HEDIS timeliness of prenatal care rates questioned whether rates were driven by data collection issues and were not an accurate reflection of the quality of prenatal care. One 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 administrative data or administrative data combined with medical record data, 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).¹⁸

KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2007)
- Rate is *significantly above* the 2007 national Medicaid 75th percentile
- Rate is *not significantly different* from the 2007 national Medicaid 75th percentile
- Rate is *significantly below* the 2007 national Medicaid 75th percentile

Prenatal and Postpartum Care

Statistical Summary— Timeliness of Prenatal Care

Comparison to 2007 Rates:					2007 Comparison Rates																
	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2005 Rate	Nat'l Mcaid 90th Pctile: 91.5%					Nat'l Mcaid Mean: 81.2%			MassHealth Weighted Mean: 86.1%								
					Nat'l Mcaid 75th Pctile: 88.7%					MA Commercial Mean: 95.2%			MassHealth Median: 88.1%								
					MassHealth Plan Rates																
PCCP(H)	○	★	●	★	2007	Num	Elig	Den	Rate	LCL	UCL	2005	Num	Elig	Den	Rate	LCL	UCL			
NHP(H)	○	★	●	○	PCCP	(H)	362	5,150	411	88.1%	84.8%	91.3%	PCCP	(H)	284	5,560	411	69.1%	64.5%	73.7%	
NH(H)	●	●	●	○	NHP	(H)	351	3,303	403	87.1%	83.7%	90.5%	NHP	(H)	359	2,758	392	91.6%	88.7%	94.5%	
FCHP(A)	○	★	●	○	NH	(H)	292	2,164	411	71.0%	66.5%	75.6%	NH	(H)	326	1,628	411	79.3%	75.3%	83.4%	
BMCHP(H)	○	★	●	○	FCHP	(H)	256	287	287	89.2%	85.4%	93.0%	FCHP	(H)	220	236	234	94.0%	90.8%	97.3%	
					BMCHP	(H)	371	4,408	411	90.3%	87.3%	93.3%	BMCHP	(H)	374	3,430	411	91.0%	88.1%	93.9%	

Statistical Summary— Postpartum Care

Comparison to 2007 Rates:				
PCCP(H) NHP(H) NH(H) FCHP(H) BMCHP(H)	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2005 Rate
	●	○	●	★
	●	○	●	○
	○	○	●	○
	○	★	●	○
	○	★	●	○

2007 Comparison Rates																	
Nat'l Mcaid 90th Pctile:		71.1%		Nat'l Mcaid Mean:		59.1%		MassHealth Weighted Mean:		59.0%							
Nat'l Mcaid 75th Pctile:		65.5%		MA Commercial Mean:		85.6%		MassHealth Median:		60.8%							
MassHealth Plan Rates																	
2007	Num			Elig	Den	Rate	LCL	UCL	2005	Num			Elig	Den	Rate	LCL	UCL
PCCP	(H)	227	5150	411	55.2%	50.3%	60.2%	PCCP	(H)	179	5,560	411	43.6%	38.6%	48.5%		
NHP	(H)	226	3303	403	56.1%	51.1%	61.0%	NHP	(H)	227	2,758	392	57.9%	52.9%	62.9%		
NH	(H)	250	2164	411	60.8%	56.0%	65.7%	NH	(H)	249	1,628	411	60.6%	55.7%	65.4%		
FCHP	(H)	193	287	287	67.2%	61.6%	72.9%	FCHP	(H)	156	236	234	66.7%	60.4%	72.9%		
BMCHP	(H)	264	4408	411	64.2%	59.5%	69.0%	BMCHP	(H)	247	3,430	411	60.1%	55.2%	65.0%		

Legend:

- ★ 2007 rate is significantly above the comparison rate.
- 2007 rate is not significantly different from the comparison rate.
- 2007 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.

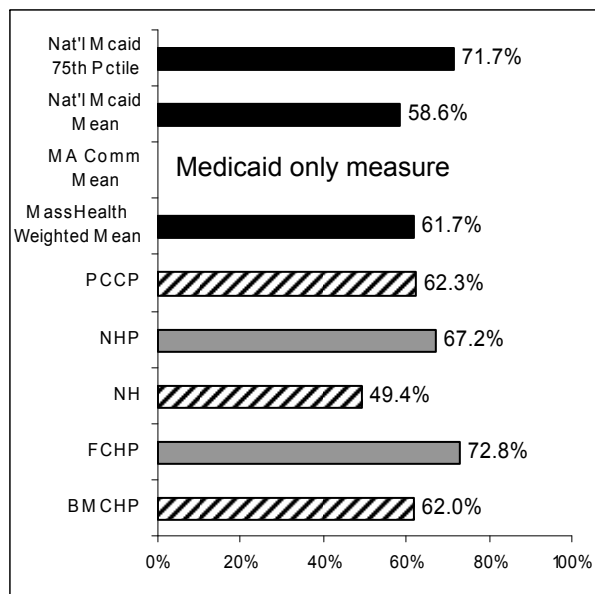
The source of the National Medicaid 90th Percentile, National Medicaid 75th Percentile, National Medicaid Mean, and MA Commercial Mean is Quality Compass, 2007.

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 thereafter, 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 woman 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 live births where the mother received 81 percent or more of the expected number of prenatal care visits, adjusted for gestational age and the month that the member enrolled in the health plan. This measure uses the same denominator as the Prenatal and Postpartum Care measure.



KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2007)
- Rate is *significantly above* the 2007 national Medicaid 75th percentile
- Rate is *not significantly different* from the 2007 national Medicaid 75th percentile
- Rate is *significantly below* the 2007 national Medicaid 75th percentile

Understanding the Results

Sixty-two percent (61.7%) of MassHealth members 81% or more of the expected number of prenatal visits, adjusted for gestational age and the month that the member enrolled in the health plan. None of the MassHealth plans performed significantly better than the benchmark rate (71.7%). Performance on this measure varied widely. Individual plan rates ranged from 49.4% to 72.8% of members receiving more than 81% of the expected number of prenatal visits, adjusted for gestational age and the month that the member enrolled in the health plan.

There are a number of factors that may contribute to whether women receive the recommended number of prenatal visits including logistical barriers such as transportation and child care for other children and psychosocial barriers such as fear and negative attitudes.¹⁹⁻²²

Frequency of Ongoing Prenatal Care

Statistical Summary— ≥81% of Expected Visits

Comparison to 2007 Rates:				
PCCP(H) NHP(H) NH(H) FCHP(H) BMCHP(H)	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean *	Plan's 2004 Rate
	●	○	n/a	○
	○	★	n/a	●
	●	●	n/a	○
	○	★	n/a	○
	●	○	n/a	●

2007 Comparison Rates																			
Nat'l Mcaid 90th Pctile:				78.6%			Nat'l Mcaid Mean:				58.6%			MassHealth Weighted Mean:				61.7%	
Nat'l Mcaid 75th Pctile:				71.7%			MA Commercial Mean:				n/a *			MassHealth Median:				62.3%	
MassHealth Plan Rates																			
2007		Num	Elig	Den	Rate	LCL	UCL		2005		Num	Elig	Den	Rate	LCL	UCL			
PCCP	(H)	256	5,150	411	62.3%	57.5%	67.1%	PCCP	(H)	224	5,560	411	54.5%	49.6%	59.4%				
NHP	(H)	271	3,303	403	67.2%	62.5%	72.0%	NHP	(H)	322	2,758	392	82.1%	78.2%	86.1%				
NH	(H)	203	2164	411	49.4%	44.4%	54.3%	NH	(H)	231	1,628	411	56.2%	51.3%	61.1%				
FCHP	(H)	209	287	287	72.8%	67.5%	78.1%	FCHP	(H)	165	236	234	70.5%	64.5%	76.6%				
BMCHP	(H)	255	4,408	411	62.0%	57.2%	66.9%	BMCHP	(H)	296	3,430	411	72.0%	67.6%	76.5%				

* This is a Medicaid-only measure

Legend:

- ★ 2006 rate is significantly above the comparison rate.
- 2006 rate is not significantly different from the comparison rate.
- 2006 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, 2007.

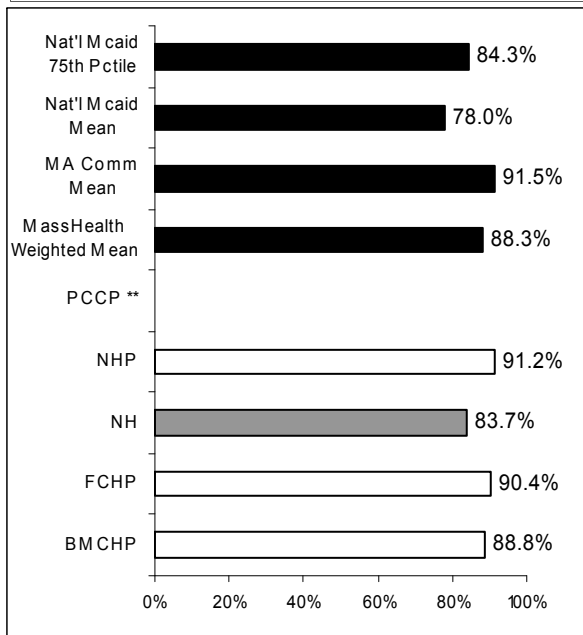
Living With Illness

Comprehensive Diabetes Care

Nearly 21 million Americans had type 1 or type 2 diabetes in 2005 and the prevalence of diabetes has increased nearly 5% annually between 1990 and 2005.²³ Diabetes is the sixth leading cause of death in the U.S. For those living with diabetes, it can lead to significant health complications such as heart disease, kidney disease, blindness and amputations.²⁴ Controlling levels of blood glucose, blood pressure, and cholesterol are key 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 type 1 or type 2 diabetes who had at least one hemoglobin A1c (HbA1c) test during 2006.



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

KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2007)
- Rate is *significantly above* the 2007 national Medicaid 75th percentile
- Rate is *not significantly different from* the 2007 national Medicaid 75th percentile
- Rate is *significantly below* the 2007 national Medicaid 75th percentile

Understanding the Results

MassHealth required MassHealth plans to report the Comprehensive Diabetes Care measure two years in a row (HEDIS 2006 and HEDIS 2007) in order to align MassHealth's measurement requirements with NCQA's measure rotation schedule. PCCP did not report the Comprehensive Diabetes Care measure for HEDIS 2007.

Some important changes were made to this measure. The LDL-C control <130 mg/dL was retired for HEDIS 2007, but the LDL-C control <100 mg/dL was retained. Three new indicators were added: two measures of blood pressure control (<130/80 and <140/90) and a measure of good HbA1c control (<7.0%). The addition of these three indicators aligns the overall measure with the clinical guidelines promoted by the American Diabetes Association.

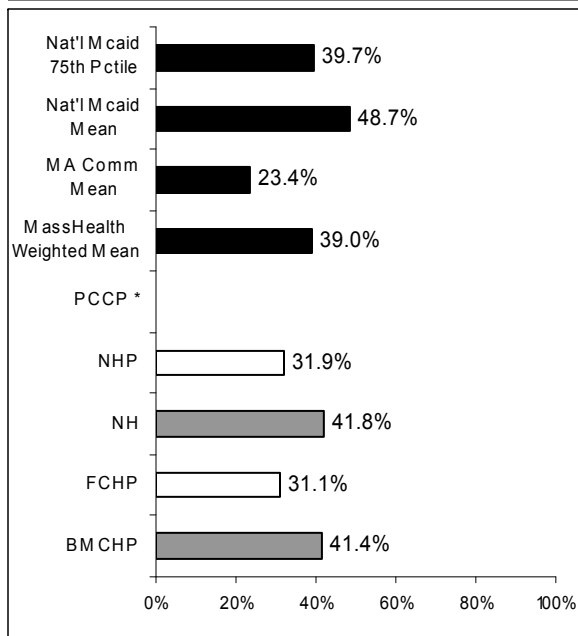
Eighty-eight percent (88.3%) of MassHealth members 18-75 years of age with diabetes had a HbA1c test performed during 2006. Individual plan rates ranged from 83.7% to 91.2%. Three MassHealth plans had rates that were significantly better than the benchmark rate (84.3%). All four plans had 2007 rates that were statistically no different than their 2006 rates.

* This measure's age range is 18-75. 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 due to a number of valid reasons (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

Poor HbA1c Control (>9.0%)

The percentage of members 18-75* years of age with type 1 or type 2 diabetes whose most recent HbA1c test during 2006 was > 9.0% (poor control). **A lower rate indicates better performance for this measure.**



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

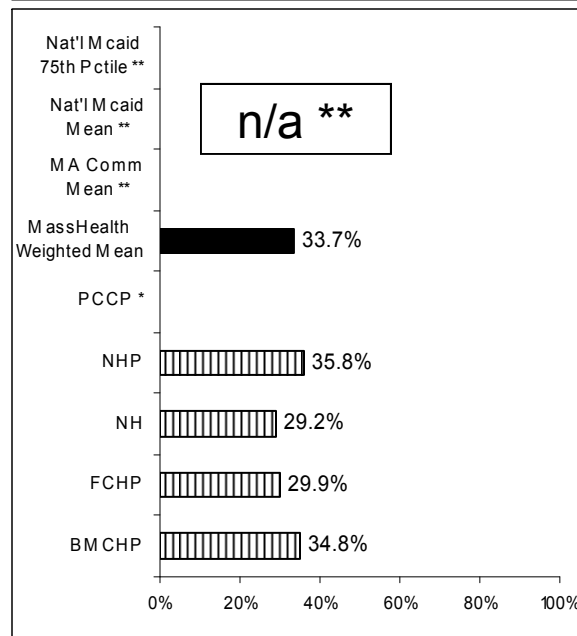
** No benchmarks are available.

KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2006)
- Rate is *significantly above* the 2007 national Medicaid 75th percentile
- Rate is *not significantly different from* the 2007 national Medicaid 75th percentile
- Rate is *significantly below* the 2007 national Medicaid 75th percentile
- The 2007 national Medicaid 75th percentile for this measure is not available.

Good HbA1c Control (<7.0%)

The percentage of members 18-75* years of age with type 1 or type 2 diabetes whose most recent HbA1c test during 2006 was < 7.0% (good control).



Understanding the Results

Thirty-nine percent (39.0%) of MassHealth members 18-75 years of age with diabetes had poor HbA1c control (>9.0%). Individual plan rates ranged from 31.1% to 41.8%. (For this measure, a lower rate means better performance.) Two plans had rates that were significantly lower than the benchmark rate (39.7%), indicating performance that is better than the benchmark. All four plans had 2007 rates that were statistically no different than their 2006 rates.

Thirty-four percent (33.7%) of MassHealth members 18-75 years of age with diabetes had good HbA1c control (<7.0%) as indicated by their most recent HbA1c test result during the measurement year. (For this measure, a higher rate means better performance.) Individual plan rates ranged from 29.2% to 35.8%. Because this is a first-year measure, no benchmarks are available for comparison.

* This measure's age range is 18-75. 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 due to a number of valid reasons (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 2007 Rates:					2007 Comparison Rates																
	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2006 Rate	Nat'l Mcaid 90th Pctile: 89.1%				Nat'l Mcaid Mean: 78.0%				MassHealth Weighted Mean: 88.3%								
					Nat'l Mcaid 75th Pctile: 84.3%				MA Commercial Mean: 91.5%				MassHealth Median: 89.6%								
					MassHealth Plan Rates																
PCCP(H) *	n/a	n/a	n/a	n/a	2007	Num	Elig	Den	Rate	LCL	UCL		2006	Num	Elig	Den	Rate	LCL	UCL		
NHP(H)	★	★	○	○	PCCP *	.	.	.	.	.	.		PCCP	(H)	355	11,659	411	86.4%	82.9%	89.8%	
NH(H)	○	★	●	○	NHP	(H)	375	1,392	411	91.2%	88.4%	94.1%		NHP	(H)	375	1,054	411	91.2%	88.4%	94.1%
FCHP(H)	★	★	○	○	NH	(H)	344	1,290	411	83.7%	80.0%	87.4%		NH	(H)	350	1,105	411	85.2%	81.6%	88.7%
BMCHP(H)	★	★	○	○	FCHP	(H)	151	170	167	90.4%	85.7%	95.2%		FCHP	(H)	142	155	151	94.0%	89.9%	98.1%
					BMCHP	(H)	365	3,210	411	88.8%	85.6%	92.0%		BMCHP	(H)	373	2,793	411	90.8%	87.8%	93.7%

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

Statistical Summary—Poor HbA1c Control (>9.0)

Comparison to 2007 Rates:					2007 Comparison Rates															
	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2006 Rate	Nat'l Mcaid 90th Pctile: 32.1%				Nat'l Mcaid Mean: 48.7%		MassHealth Weighted Mean: 39.0%									
					Nat'l Mcaid 75th Pctile: 39.7%				MA Commercial Mean: 23.4%		MassHealth Median: 36.7%									
					MassHealth Plan Rates															
2007	Num	Elig	Den	Rate	LCL	UCL		2006	Num	Elig	Den	Rate	LCL	UCL						
PCCP(H) *	n/a	n/a	n/a	n/a	PCCP *	.	.	.	.	PCCP	(H)	200	11,659	411	48.7%	43.7%	53.6%			
NHP(H)	★	★	★	○	NHP	(H)	131	1,392	411	31.9%	27.2%	36.5%	NHP	(H)	134	1,054	411	32.6%	27.9%	37.3%
NH(H)	○	★	★	○	NH	(H)	172	1,290	411	41.8%	37.0%	46.7%	NH	(H)	211	1,105	411	51.3%	46.4%	56.3%
FCHP(H)	★	★	★	○	FCHP	(H)	52	170	167	31.1%	23.8%	38.5%	FCHP	(H)	41	155	151	27.2%	19.7%	34.6%
BMCHP(H)	○	★	★	○	BMCHP		170	3,210	411	41.4%	36.5%	46.2%	BMCHP	(H)	139	2,793	411	33.8%	29.1%	38.5%

Legend:

- ★ 2007 rate is significantly below the comparison rate.
- 2007 rate is not significantly different from the comparison rate.
- 2007 rate is significantly above 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, 2006.

Comprehensive Diabetes Care

Statistical Summary—Good HbA1c Control (<7.0)

Comparison to 2007 Rates:					2007 Comparison Rates												
PCCP(H) * NHP(H) NH(H) FCHP(H) BMCHP(H)	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2006 Rate**	Nat'l Mcaid 90th Pctile: —				Nat'l Mcaid Mean: —				MassHealth Weighted Mean: 33.7%				
					Nat'l Mcaid 75th Pctile: —				MA Commercial Mean: —				MassHealth Median: 32.4%				
	MassHealth Plan Rates																
	2007	Num	Elig	Den	Rate	LCL	UCL	2006	Num	Elig	Den	Rate	LCL	UCL			
	PCCP *	.	.	.	.	.	.	PCCP	n/a**							
	NHP	(H)	147	1392	411	35.8%	31.0%	40.5%								NHP	
NH	(H)	120	1290	411	29.2%	24.7%	33.7%	NH									
FCHP	(H)	50	170	167	29.9%	22.7%	37.2%	FCHP									
BMCHP	(H)	143	3210	411	34.8%	30.1%	39.5%	BMCHP									

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

** This measure is new for 2007 - previous data and some comparisons rates are unavailable.

Legend:

- ★ 2007 rate is significantly above the comparison rate.
- 2007 rate is not significantly different from the comparison rate.
- 2007 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

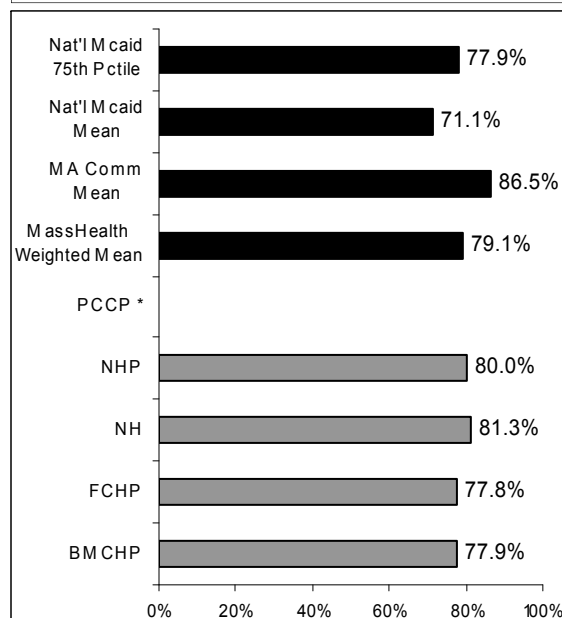
(A) = Measure was collected using administrative method
(H) = Measure was collected using hybrid method
Note: The ability to locate and obtain medical records by a plan or a plan's contracted vendor can impact performance on a hybrid measure. Per NCQA's specifications, members for whom no medical record 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, 2006.

Comprehensive Diabetes Care

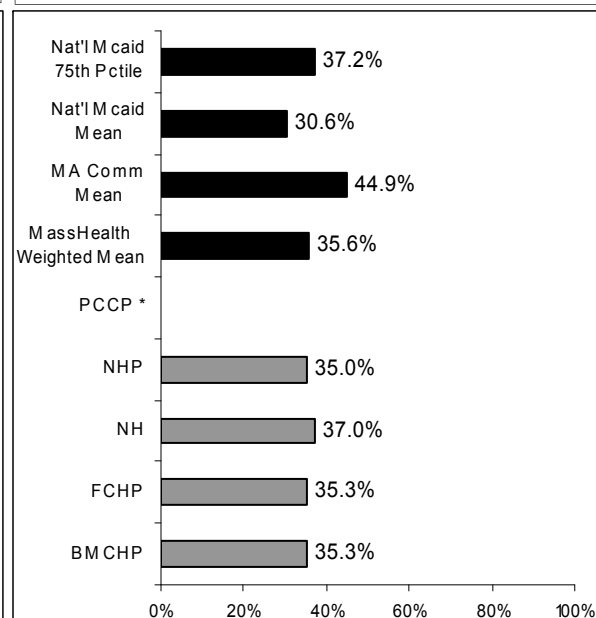
LDL-C Testing

The percentage of adults 18 to 75* years of age with type 1 or type 2 diabetes who had an LDL-C test in 2006.



Good LDL Control

The percentage of adults 18 to 75* years of age with type 1 or type 2 diabetes whose most recent LDL-C test during 2006 was <100 mg/dL.



Understanding the Results

NCQA made changes to both LDL cholesterol testing and control measures for HEDIS 2007 by restricting the criteria to require testing during the measurement year. For previous measurement cycles, tests from the measurement year and the year before were allowed. As such, 2007 rates for both of these measures cannot be compared to those from 2006.

Seventy-nine percent (79.1%) of MassHealth members 18-75 years of age with diabetes had an LDL cholesterol test during 2006. Individual plan rates ranged from 77.8% to 81.3%. None of the MassHealth plans had a rate that was significantly different from the benchmark rate (77.9%).

The target goal of cholesterol management in people with diabetes is an LDL less than 100 mg/dL. Thirty-six percent (35.6%) of MassHealth members 18-75 years of age with diabetes had their most recent cholesterol level in 2006 controlled to <100mg/dL. Individual plan ranged from 35.0% to 37.0%. None of the MassHealth plans had a rate that was significantly above or no different from the benchmark rate (37.2%).

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

KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2007)
- Rate is *significantly above* the 2007 national Medicaid 75th percentile
- Rate is *not significantly different from* the 2007 national Medicaid 75th percentile
- Rate is *significantly below* the 2007 national Medicaid 75th percentile

* This measure's age range is 18-75. 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 due to a number of valid reasons (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 2007 Rates:					2007 Comparison Rates												
	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2006 Rate	Nat'l Mcaid 90th Pctile:		81.0%		Nat'l Mcaid Mean:		71.1%		MassHealth Weighted Mean:		79.1%		
					Nat'l Mcaid 75th Pctile:		77.9%		MA Commercial Mean:		86.5%		MassHealth Median:		79.0%		
MassHealth Plan Rates																	
PCCP(H) *	2007		Num	Elig	Den	Rate	LCL	UCL	2006		Num	Elig	Den	Rate	LCL	UCL	
	PCCP *		.	.	.	.	.	.	PCCP		n/a**					
	NHP		(H)	329	1,392	411	80.0%	76.1%	84.0%	NHP							
	NH		(H)	334	1,290	411	81.3%	77.4%	85.2%	NH							
	FCHP		(H)	130	170	167	77.8%	71.2%	84.4%	FCHP							
	BMCHP		(H)	320	3,210	411	77.9%	73.7%	82.0%	BMCHP							

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

** This measure is new for 2007 - previous data and some comparisons rates are unavailable.

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

Comparison to 2007 Rates:					2007 Comparison Rates											
	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2006 Rate	Nat'l Mcaid 90th Pctile:		44.1%		Nat'l Mcaid Mean:		30.6%		MassHealth Weighted Mean:		35.6%	
					Nat'l Mcaid 75th Pctile:		37.2%		MA Commercial Mean:		44.9%		MassHealth Median:		35.3%	
MassHealth Plan Rates																
	2007	Num	Elig	Den	Rate	LCL	UCL		2006	Num	Elig	Den	Rate	LCL	UCL	
PCCP(H) *	n/a	n/a	n/a	n/a				PCCP *	.	.	.	.	.	.	.
NHP(H)	○	○	●	★	NHP	(H)	144	1,392	411	35.0%	30.3%	39.8%	NHP			
NH(H)	○	★	●	○	NH	(H)	152	1,290	411	37.0%	32.2%	41.8%	NH			
FCHP(H)	○	○	●	○	FCHP	(H)	59	170	167	35.3%	27.8%	42.9%	FCHP			
BMCHP(H)	○	○	●	○	BMCHP	(H)	145	3,210	411	35.3%	30.5%	40.0%	BMCHP			

Legend:

- ★ 2007 rate is significantly above the comparison rate.
- 2007 rate is not significantly different from the comparison rate.
- 2007 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

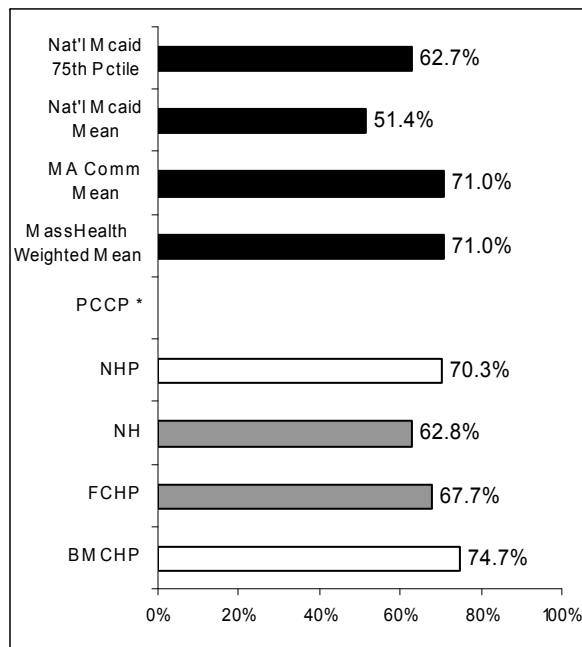
(A) = Measure was collected using administrative method
(H) = Measure was collected using hybrid method
Note: The ability to locate and obtain medical records by a plan or a plan's contracted vendor can impact performance on a hybrid measure. Per NCQA's specifications, members for whom no medical record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

Comprehensive Diabetes Care

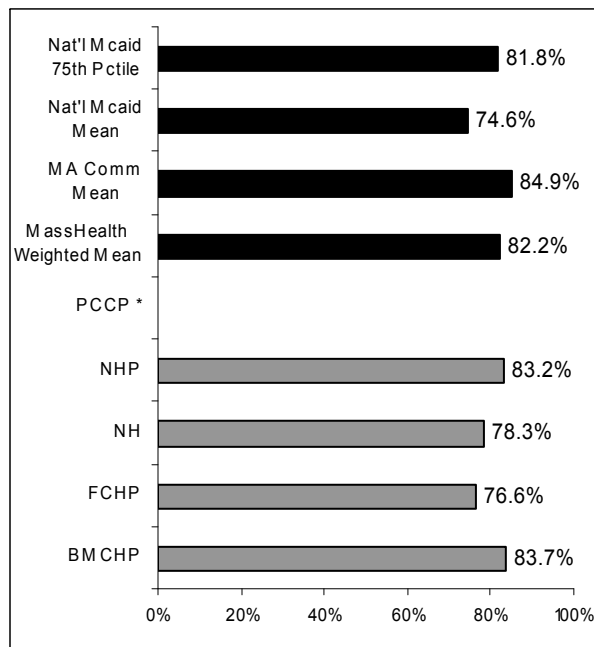
Eye Exams

The percentage of adults 18 to 75* years of age with type 1 or type 2 diabetes who had a retinal or dilated eye exam by an eye care professional in 2006 or a negative retinal exam by an eye care professional in 2005.



Monitoring Kidney Disease

The percentage of adults 18 to 75* years of age with type 1 or type 2 diabetes who were screened for kidney disease (nephropathy) during 2006 (adults with a history of the disease were also considered compliant).



Understanding the Results

Seventy-one percent (71.0%) of MassHealth members 18-75 years of age with diabetes had an eye exam in 2006 or a negative eye exam in 2005. Individual plan rates ranged from 62.8% to 74.7%. Two plans had rates that were significantly above the benchmark rate (62.7%). None of the plans had rates that were statistically significant compared to their 2006 rates.

Beginning with HEDIS 2007, NCQA allowed the use of ACE/ARBs to count toward numerator compliance for the monitoring kidney disease measure. Therefore, 2007 rates cannot be compared to those from 2006. Eighty-two percent (82.2%) of MassHealth members 18-75 years of age with diabetes were either screened for kidney disease in 2006 or had evidence of disease. Individual plan rates ranged from 76.6% to 83.7%. None of the MassHealth plans had a rate that was statistically different from the benchmark rate (81.8%).

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

KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2006)
- Rate is *significantly above* the 2006 national Medicaid 75th percentile
- Rate is *not significantly different* from the 2007 national Medicaid 75th percentile
- Rate is *significantly below* the 2006 national Medicaid 75th percentile

* This measure's age range is 18-75. 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 due to a number of valid reasons (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 2007 Rates:				
	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2006 Rate
PCCP(H) *	n/a	n/a	n/a	n/a
NHP(H)	★	★	○	○
NH(H)	○	★	●	○
FCHP(H)	○	★	○	○
BMCHP(H)	★	★	○	○

2007 Comparison Rates											
Nat'l Mcaid 90th Pctile:		68.3%		Nat'l Mcaid Mean:		51.4%		MassHealth Weighted Mean:		71.0%	
Nat'l Mcaid 75th Pctile:		62.7%		MA Commercial Mean:		71.0%		MassHealth Median:		69.0%	

MassHealth Plan Rates													
2007	Num	Elig	Den	Rate	LCL	UCL	2006	Num	Elig	Den	Rate	LCL	UCL
PCCP *	.	.	.	.	.	.	PCCP	(H) 223	11,659	411	54.3%	49.3%	59.2%
NHP	(H) 289	1392	411	70.3%	65.8%	74.9%	NHP	(H) 269	1,054	411	65.5%	60.7%	70.2%
NH	(H) 258	1290	411	62.8%	58.0%	67.6%	NH	(H) 246	1,105	411	59.9%	55.0%	64.7%
FCHP	(H) 113	170	167	67.7%	60.3%	75.1%	FCHP	(H) 85	155	151	56.3%	48.0%	64.5%
BMCHP	(H) 307	3210	411	74.7%	70.4%	79.0%	BMCHP	(H) 287	2,793	411	69.8%	65.3%	74.4%

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

** This measure is new for 2007 - previous data and some comparisons rates are unavailable.

Statistical Summary—Monitoring Kidney Disease

Comparison to 2007 Rates:					2007 Comparison Rates												
PCCP(H) *	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2006 Rate	Nat'l Mcaid 90th Pctile:		85.5%		Nat'l Mcaid Mean:		74.6%		MassHealth Weighted Mean:		82.2%		
					Nat'l Mcaid 75th Pctile:		81.8%		MA Commercial Mean:		84.9%		MassHealth Median:		80.8%		
	MassHealth Plan Rates																
	2007	Num	Elig	Den	Rate	LCL	UCL	2006	Num	Elig	Den	Rate	LCL	UCL			
	PCCP *	PCCP	n/a**								
NHP	(H)	342	1392	411	83.2%	79.5%	86.9%	NHP									
NH	(H)	322	1290	411	78.3%	74.2%	82.4%	NH									
FCHP	(H)	128	170	167	76.6%	69.9%	83.4%	FCHP									
BMCHP	(H)	344	3210	411	83.7%	80.0%	87.4%	BMCHP									

Legend:

- ★ 2007 rate is significantly above the comparison rate.
- 2007 rate is not significantly different from the comparison rate.
- 2007 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

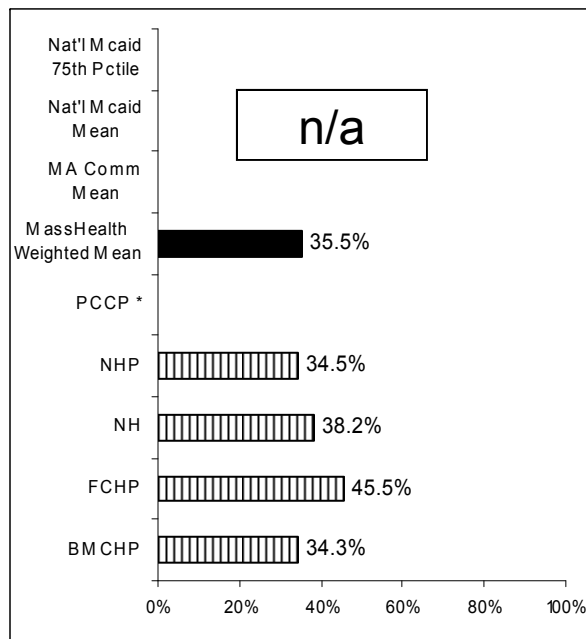
Note: The ability to locate and obtain medical records by a plan or a plan's contracted vendor can impact performance on a hybrid measure. Per NCQA's specifications, members for whom no medical record documentation is found are considered non-compliant with the measure.

The source of the National Medicaid 90th Percentile, National Medicaid 75th Percentile, National Medicaid Mean, and MA Commercial Mean is Quality Compass, 2007.

Comprehensive Diabetes Care

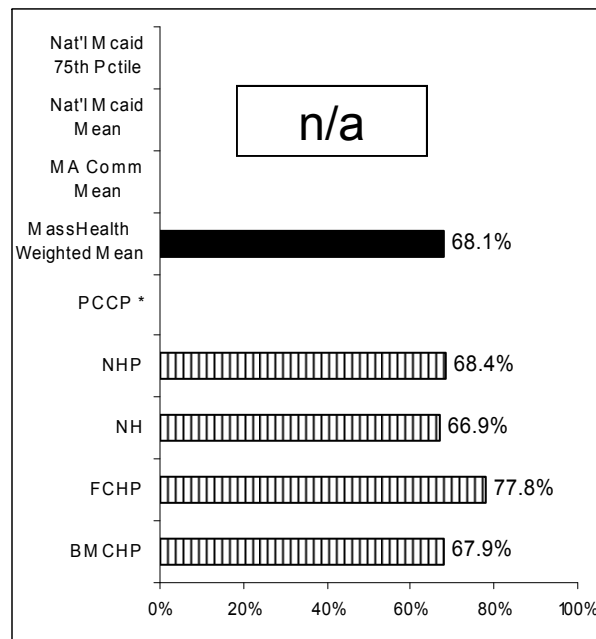
Blood Pressure Control (<130/80)

The percentage of adults 18 to 75* years of age with type 1 or type 2 diabetes whose most recent blood pressure reading in 2006 was <130/80 mm Hg.



Blood Pressure Control (<140/90)

The percentage of adults 18 to 75* years of age with type 1 or type 2 diabetes whose most recent blood pressure reading in 2006 was <140/90 mm Hg.



Understanding the Results

Both blood pressure control measures (<130/80 and <140/90) were added for HEDIS 2007. Because these are first-year measures, no benchmarks are available and comparison to past performance is not possible. The addition of these indicators aligns the measure more closely with the clinical guidelines promoted by the American Diabetes Association.

Thirty-six percent (35.5%) of MassHealth members 18-75 years old had their blood pressure controlled to less than 130/80 during the measurement year. Individual plan rates ranged from 34.3% to 45.5%.

Sixty-eight percent (68.1%) of MassHealth members 18-75 years old had their blood pressure controlled to less than 140/90 during the measurement year. Individual plan rates ranged from 66.9% to 77.8%.

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

KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2006)
- Rate is *significantly above* the 2007 national Medicaid 75th percentile
- Rate is *not significantly different from* the 2007 national Medicaid 75th percentile
- Rate is *significantly below* the 2007 national Medicaid 75th percentile
- The 2007 national Medicaid 75th percentile for this measure is not available.

* This measure's age range is 18-75. 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 due to a number of valid reasons (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 2007 Rates:					2007 Comparison Rates													
PCCP(H) *	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2006 Rate**	Nat'l Mcaid 90th Pctile: —		Nat'l Mcaid Mean: —		MassHealth Weighted Mean: 35.5%									
					Nat'l Mcaid 75th Pctile: —		MA Commercial Mean: —		MassHealth Median: 36.4%									
					MassHealth Plan Rates													
	2006	Num	Elig	Den	Rate	LCL	UCL	2006	Num	Elig	Den	Rate	LCL	UCL				
	PCCP *	.	.	.	.	.	.	PCCP						
NHP(H)	n/a**				NHP	(H)	142	1392	411	34.5%	29.8%	39.3%	NHP					
NH(H)					NH	(H)	157	1290	411	38.2%	33.4%	43.0%	NH					
FCHP(H)					FCHP	(H)	76	170	167	45.5%	37.7%	53.4%	FCHP					
BMCHP(H)					BMCHP	(H)	141	3210	411	34.3%	29.6%	39.0%	BMCHP					

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

** This measure is new for 2007, so previous data and some comparison rates are not available.

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

Comparison to 2007 Rates:					2007 Comparison Rates														
PCCP(H) *	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2006 Rate**	Nat'l Mcaid 90th Pctile: —					Nat'l Mcaid Mean: —			MassHealth Weighted Mean: 68.1%			68.1%			
					Nat'l Mcaid 75th Pctile: —					MA Commercial Mean: —			MassHealth Median: 68.2%			68.2%			
	MassHealth Plan Rates																		
	2006	Num	Elig	Den	Rate	LCL	UCL	2006	Num	Elig	Den	Rate	LCL	UCL					
	PCCP *	PCCP											
NHP(H)	n/a**				NHP	(H)	281	1392	411	68.4%	63.8%	73.0%	NHP	n/a**					
NH(H)					NH	(H)	275	1290	411	66.9%	62.2%	71.6%	NH						
FCHP(H)					FCHP	(H)	130	170	167	77.8%	71.2%	84.4%	FCHP						
BMCHP(H)					BMCHP	(H)	279	3210	411	67.9%	63.2%	72.5%	BMCHP						

Legend:

- ★ 2007 rate is significantly above the comparison rate.
- 2007 rate is not significantly different from the comparison rate.
- 2007 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, 2007.

Comprehensive Diabetes Care

Understanding the Results (continued)

Successful diabetes care requires effective communication between physicians and other health care professionals and their patients so that information on the importance of screenings and self management tools and skills for this chronic disease can be relayed. Patients must learn to practice effective self management strategies such as monitoring blood glucose levels, eating healthfully, getting adequate exercise, and taking medications for blood pressure and cholesterol control, if necessary, to prevent or manage diabetes complications.²⁵

Several individual and organizational factors impact the communication between physicians and patients regarding self management strategies and are associated with the quality of diabetes care. Some of these factors include:

- limited health literacy.²⁶
- limited English proficiency.²⁶
- low self-efficacy or confidence in the ability to perform healthy behaviors, and^{26,27}
- presence and intensity of diabetes disease management programs.²⁸

Individuals with diabetes typically need support from resources in addition to providers to successfully self manage their diabetes. A recent evaluation of self-management support programs found that a weekly automated telephone disease management program helped individuals with diabetes set and achieve goals for diabetes self management behaviors.²⁵ This program was especially helpful for individuals with communication barriers such as limited English proficiency or low health literacy.

The American Diabetes Association's 2006 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:

- incorporating diabetes care guidelines into the point of service
- providing diabetes self management education to patients
- access to care management services, and
- use of electronic medical record technology to identify patients requiring assessments or treatment modifications.

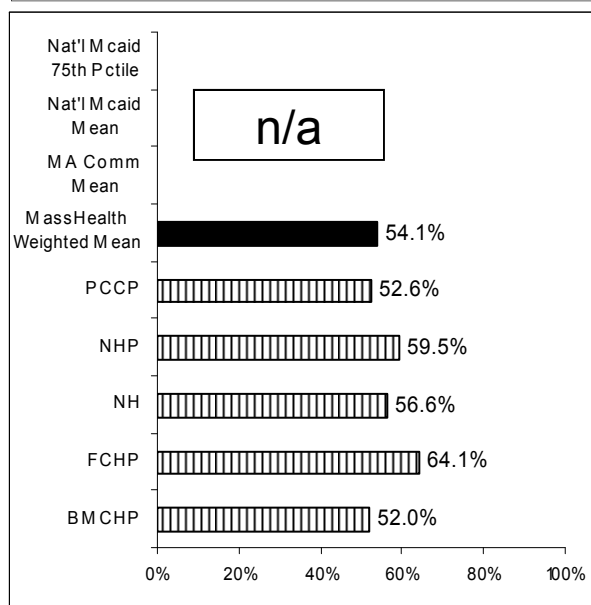
Additionally, an area that is critical for diabetes care is preventing or managing heart disease. Unfortunately, a recent survey conducted by ADA found that only 18 percent of people with diabetes believed that they were at increased risk of developing heart disease.²⁹ Increasing awareness regarding the risk of heart disease for patients with diabetes may help improve blood pressure and cholesterol control rates in the future.

Controlling Blood Pressure

Nearly one-third of the U.S. population has hypertension and only 30% of those people have their blood pressure in good control.³⁰ 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 the Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure or JNCVIII, which defines good control as <130/80. Lifestyle modifications such as increased exercise 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.³¹

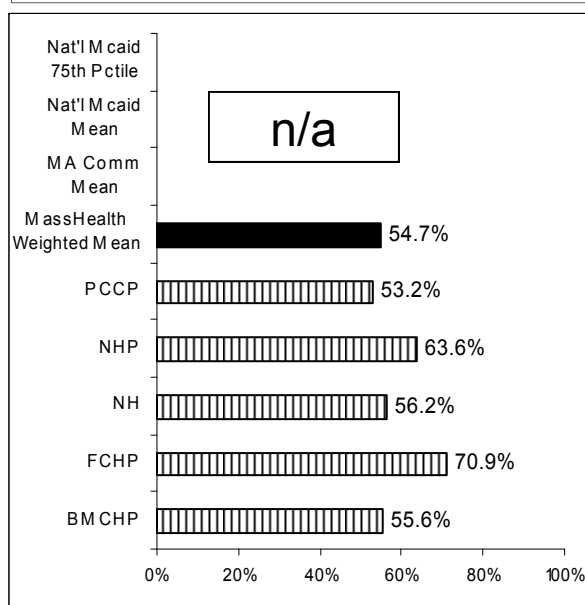
Ages 18-45

The percentage of members 18-45 years of age who had a diagnosis of hypertension and whose most recent blood pressure in 2006 was adequately controlled (<140/90).



Ages 46-85

The percentage of members 46-85* years of age who had a diagnosis of hypertension and whose most recent blood pressure in 2006 was adequately controlled (<140/90).



Understanding the Results

For HEDIS 2007, NCQA decreased the lower age limit of this measure from 46 to 18. This measure is now reported in two age stratifications. The first age stratification (18-45) is considered a new measure for HEDIS 2007; therefore, no benchmarks are available for this age group. Although the other age stratification (46-85) corresponds to the previous HEDIS Controlling High Blood Pressure measure, NCQA also changed the definition of control from ≤140/90 to <140/90. This change in the definition of control means no benchmarks are available and comparison to past performance is not possible.

Fifty-four percent (54.1%) of MassHealth members aged 18-45 had their most recent blood pressure in 2006 controlled to <140/90. Individual plan rates ranged from 52.0% to 64.1%.

Fifty-five percent (54.7%) of MassHealth members aged 46-85 had their most recent blood pressure in 2006 controlled to <140/90. Individual plan rates ranged from 53.2% to 70.9%.

(Continued on page 44)

KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2007)
- Rate is *significantly above* the 2007 national Medicaid 75th percentile
- Rate is *not significantly different from* the 2007 national Medicaid 75th percentile
- Rate is *significantly below* the 2007 national Medicaid 75th percentile
- The 2007 national Medicaid 75th percentile for this measure is not available.

* This measure's age range is 18-85. 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 due to a number of valid reasons (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.

Controlling Blood Pressure

Statistical Summary—Ages 18-45

Comparison to 2007 Rates:					2007 Comparison Rates											
	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2005 Rate*	Nat'l Mcaid 90th Pctile: —			Nat'l Mcaid Mean: —			MassHealth Weighted Mean: 54.1%			54.1%		
					Nat'l Mcaid 75th Pctile: —			MA Commercial Mean: —			MassHealth Median: 56.6%			56.6%		
MassHealth Plan Rates																
	2007	Num	Elig	Den	Rate	LCL	UCL	2005	Num	Elig	Den	Rate	LCL	UCL		
PCCP(H)	PCCP	(H)	50	2,730	95	52.6%	42.1%	63.2%	PCCP	n/a*						
NHP(H)	NHP	(H)	122	944	205	59.5%	52.5%	66.5%	NHP							
NH(H)	NH	(H)	86	563	152	56.6%	48.4%	64.8%	NH							
FCHP(H)	FCHP	(H)	41	74	64	64.1%	51.5%	76.6%	FCHP							
BMCHP(H)	BMCHP	(H)	79	1,568	152	52.0%	43.7%	60.2%	BMCHP							

* Due to changes in the specifications of this measure, previous data and some comparison rates are unavailable.

Statistical Summary—Ages 46-85

Comparison to 2007 Rates:					2006 Comparison Rates												
PCCP(H) NHP(H) NH(H) FCHP(H) BMCHP(H)	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2005 Rate*	Nat'l Mcaid 90th Pctile: — Nat'l Mcaid Mean: — MassHealth Weighted Mean: 54.7%												
					Nat'l Mcaid 75th Pctile: — MA Commercial Mean: — MassHealth Median: 56.2%												
	MassHealth Plan Rates																
	2007	Num	Elig	Den	Rate	LCL	UCL	2005	Num	Elig	Den	Rate	LCL	UCL			
	PCCP	(H)	168	9,003	316	53.2%	47.5%	58.8%	PCCP	n/a*							
NHP	(H)	131	901	206	63.6%	56.8%	70.4%	NHP									
NH	(H)	127	804	226	56.2%	49.5%	62.9%	NH									
FCHP	(H)	95	137	134	70.9%	62.8%	79.0%	FCHP									
BMCHP	(H)	144	2,326	259	55.6%	49.4%	61.8%	BMCHP									

Legend:

- ★ 2007 rate is significantly above the comparison rate.
- 2007 rate is not significantly different from the comparison rate.
- 2007 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
 (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.

Controlling High Blood Pressure

Understanding the Results (continued)

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 and does not exclude 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 co-morbid diabetes or heart disease, who should have their blood pressure controlled to at least <130/80.³³

Uncontrolled hypertension is associated with lack of adherence to drug treatment and a lack of access to health care.^{34,35} An external review of this HEDIS measure demonstrated that patients who meet the HEDIS blood pressure measure may take fewer blood pressure drugs and have lower antihypertensive drug costs than patients who do not meet the measure.³⁶

A number of patient factors may be related to adherence to hypertension treatment plans (and therefore blood pressure control) such as the severity of the hypertension, number of comorbidities, and side effects to treatment.

Strategies to improve patient adherence to hypertension treatment include designing treatment plans to reflect patient preferences and lifestyles, identifying specific blood pressure targets, in-

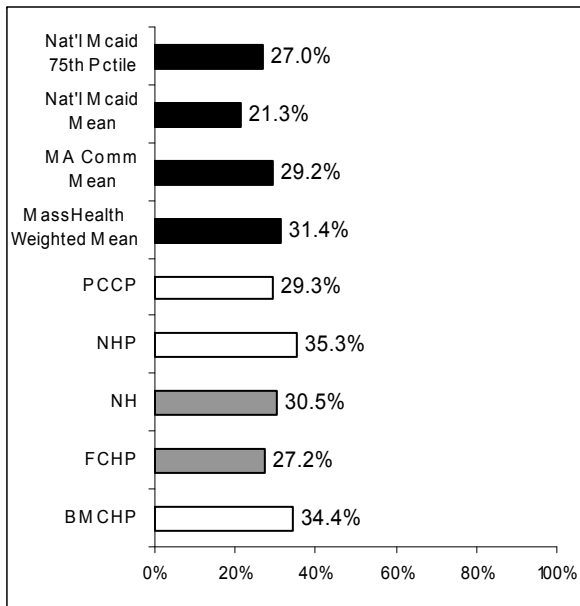
structing patients to perform self-management, and discussing strategies for managing side effects.³⁷

Antidepressant Medication Management

Antidepressants are effective in treating depression, however poor adherence is often an issue especially among lower socioeconomic populations.³⁸ Discontinuing antidepressants prematurely can lead to increased risk of depression relapse and development of new episodes of depression.³⁹ The HEDIS Antidepressant Medication Management measure assesses three aspects of the successful pharmacological management of depression for newly diagnosed MassHealth members 18 years of age and older. A recent study using the HEDIS Antidepressant Medication Management measure on a commercial population found that only 19% of patients achieved overall adherence for all three of the measure's indicators (optimal practitioner contacts, effective acute phase treatment and effective continuation phase treatment).⁴⁰

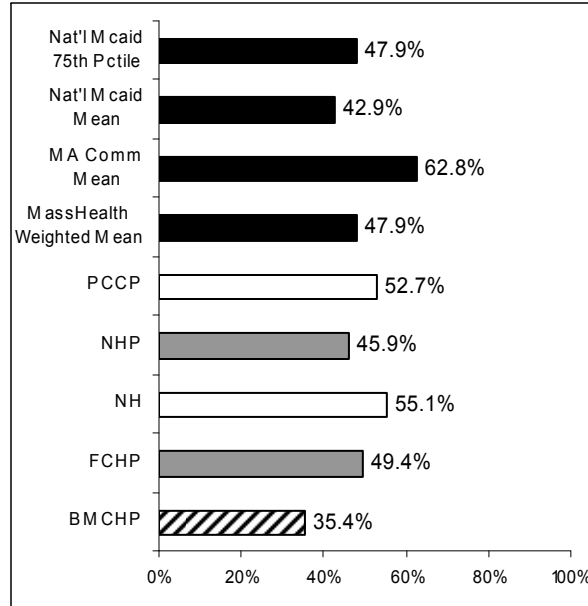
Optimal Practitioner Contacts

The percentage of members 18 years of age and older who were diagnosed with a new episode of depression and treated with antidepressant medication, and who had at least three follow-up contacts with a practitioner coded with a mental health diagnosis during the 84-day Acute Treatment Phase.



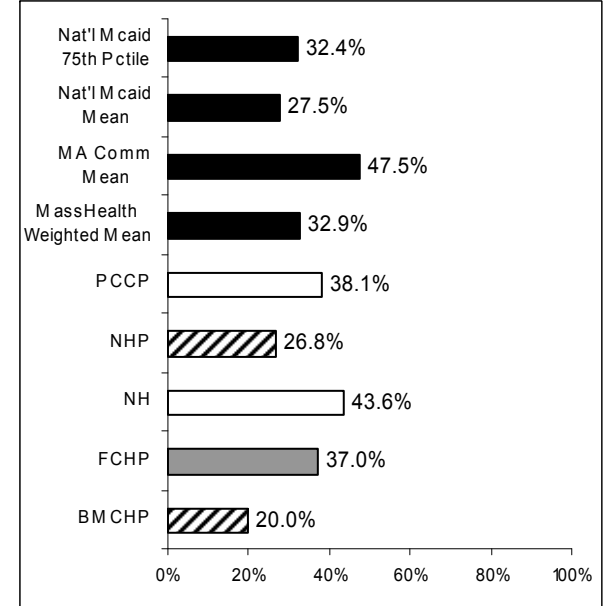
Effective Acute Phase

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



Effective Continuation Phase

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



KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2006)
- Rate is *significantly above* the 2007 national Medicaid 75th percentile
- Rate is *not significantly different from* the 2007 national Medicaid 75th percentile
- Rate is *significantly below* the 2007 national Medicaid 75th percentile

Antidepressant Medication Management

Statistical Summary—Optimal Practitioner Contacts

Comparison to 2007 Rates:				
	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2005 Rate
PCCP(A)	★	★	○	★
NHP(A)	★	★	★	○
NH(A)	○	★	○	★
FCHP(A)	○	○	○	○
BMCHP(A)	★	★	★	○

2007 Comparison Rates														
Nat'l Mcaid 90th Pctile:		31.8%		Nat'l Mcaid Mean:		21.3%		MassHealth Weighted Mean:		31.4%				
Nat'l Mcaid 75th Pctile:		27.0%		MA Commercial Mean:		29.2%		MassHealth Median:		30.5%				
MassHealth Plan Rates														
2007		Num	Den	Rate	LCL	UCL		2005		Num	Den	Rate	LCL	UCL
PCCP	(A)	614	2,092	29.3%	27.4%	31.3%		PCCP	(A)	461	2,454	18.8%	17.2%	20.4%
NHP	(A)	199	564	35.3%	31.3%	39.3%		NHP	(A)	151	504	30.0%	25.9%	34.1%
NH	(A)	140	459	30.5%	26.2%	34.8%		NH	(A)	51	356	14.3%	10.5%	18.1%
FCHP	(A)	22	81	27.2%	16.9%	37.5%		FCHP	(A)	27	77	35.1%	23.8%	46.4%
BMCHP	(A)	343	998	34.4%	31.4%	37.4%		BMCHP	(A)	293	834	35.1%	31.8%	38.4%

Statistical Summary—Effective Acute Phase

Comparison to 2007 Rates:					2007 Comparison Rates													
	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2005 Rate	Nat'l Mcaid 90th Pctile:		51.1%	Nat'l Mcaid Mean:		42.9%	MassHealth Weighted Mean:		47.9%					
					Nat'l Mcaid 75th Pctile:		47.9%	MA Commercial Mean:		62.8%	MassHealth Median:		49.4%					
MassHealth Plan Rates																		
	2007	Num	Den	Rate	LCL	UCL		2005	Num	Den	Rate	LCL	UCL					
PCCP(A)	★	★	●	★	PCCP	(A)	1,102	2,092	52.7%	50.5%	54.8%	PCCP	(A)	1,180	2,454	48.1%	46.1%	50.1%
NHP(A)	○	○	●	○	NHP	(A)	259	564	45.9%	41.7%	50.1%	NHP	(A)	208	504	41.3%	36.9%	45.7%
NH(A)	★	★	●	○	NH	(A)	253	459	55.1%	50.5%	59.8%	NH	(A)	185	356	52.0%	46.6%	57.3%
FCHP(A)	○	○	●	○	FCHP	(A)	40	81	49.4%	37.9%	60.9%	FCHP	(A)	34	77	44.2%	32.4%	55.9%
BMCHP(A)	●	●	●	○	BMCHP	(A)	353	998	35.4%	32.4%	38.4%	BMCHP	(A)	288	834	34.5%	31.2%	37.8%

Legend:

- ★ 2007 rate is significantly above the comparison rate.
- 2007 rate is not significantly different from the comparison rate.
- 2007 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

(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.

Antidepressant Medication Management

Statistical Summary—Effective Continuation Phase

Comparison to 2007 Rates:				
	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2005 Rate
PCCP(A)	★	★	●	★
NHP(A)	●	○	●	○
NH(A)	★	★	○	○
FCHP(A)	○	○	○	○
BMCHP(A)	●	●	●	○

Legend:
★ 2007 rate is significantly above the comparison rate.
○ 2007 rate is not significantly different from the comparison rate.
● 2007 rate is significantly below the comparison rate.

2007 Comparison Rates						
Nat'l Mcaid 90th Pctile:	34.8%	Nat'l Mcaid Mean:	27.5%	MassHealth Weighted Mean:	32.9%	
Nat'l Mcaid 75th Pctile:	32.4%	MA Commercial Mean:	47.5%	MassHealth Median:	37.0%	

MassHealth Plan Rates														
2007		Num	Den	Rate	LCL	UCL		2005		Num	Den	Rate	LCL	UCL
PCCP	(A)	798	2,092	38.1%	36.0%	40.3%		PCCP	(A)	799	2,454	32.6%	30.7%	34.4%
NHP	(A)	151	564	26.8%	23.0%	30.5%		NHP	(A)	124	504	24.6%	20.7%	28.5%
NH	(A)	200	459	43.6%	38.9%	48.2%		NH	(A)	132	356	37.1%	31.9%	42.2%
FCHP	(A)	30	81	37.0%	25.9%	48.2%		FCHP	(A)	17	77	22.1%	12.2%	32.0%
BMCHP	(A)	200	998	20.0%	17.5%	22.6%		BMCHP	(A)	162	834	19.4%	16.7%	22.2%

Num indicates Numerator
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, 2007.

Understanding the Results

Thirty-one percent (31.4%) of MassHealth members who were diagnosed with a new episode of depression and treated with antidepressant medication had at least three follow-up contacts with a practitioner during the 84-day Acute Phase. Individual plan rates ranged from 27.2% to 35.3%. Three plans had rates of optimal practitioner contact that were significantly above the benchmark rate (27.0%).

Forty-eight percent (47.9%) of members with a new episode of depression and treated with antidepressant medication remained on an antidepressant drug during the entire 84-day Acute Treatment Phase. Individual plan rates ranged from 35.4% to 55.1%. Two plans had rates of effective acute phase treatment that were significantly above the benchmark rate (47.9%) and one plan had a rate significantly below the benchmark. Finally, thirty-three percent (32.9%) of members who were diagnosed with a new episode of depression and treated with antidepressant medication remained on an antidepressant drug for at least 180 days. Individual plan rates ranged from 20% to 43.6%. Two plans had a rate significantly above the benchmark rate (32.4%) and two plans had a rate significantly below the benchmark.

There are a number of factors that are associated with antidepressant non-adherence:

- Antidepressant discontinuation during the first 30 days is more likely among Hispanics, patients with fewer than 12 years of education, and patients

Antidepressant Medication Management

Understanding the Results

with low family income as compared with those with middle and high income.³⁸

- Comorbid substance use, use of older generation antidepressants, and living in lower income neighborhoods is associated with lower rates of adherence.⁴¹
- Being treated by a non-psychiatric specialist as opposed to a primary care physician or psychiatrist is associated with higher odds of nonadherence.⁴²
- Younger patient age is associated with greater rates of nonadherence.⁴¹

Conversely, receiving mental health specialty care in addition to being prescribed antidepressants is associated with higher rates of adherence:

- Patients are significantly more likely to continue antidepressant treatment past 30 days if they receive psychotherapy.⁴¹
- Receipt of mental health specialty care in addition to antidepressants is strongly associated with adherence to an antidepressant regimen.^{40,41}

The following quality improvement strategies may improve rates of adherence to antidepressants:

- Improving provider-patient communication can have a positive impact on rates of adherence to antidepressants. Specifically, three key messages increase the odds of being adherent to antidepressant treatment. These consist of talking with patients about expectations with respect to change in mood and potential side effects, and letting patients know what to do if they have questions about the medication.⁴³
- Implementing a telephone care management program for outpatients prescribed antidepressants by primary care physicians can help improve adherence rates.⁴⁴
- However, a more recent study revealed that this same type of model did not improve adherence rates over usual care for patients prescribed antidepressants by psychiatrists.⁴⁵
- Implementing a telemedicine model for primary care clinics that lack on-site psychiatrists can improve adherence rates, especially in rural communities with limited access to psychiatrists.⁴⁶

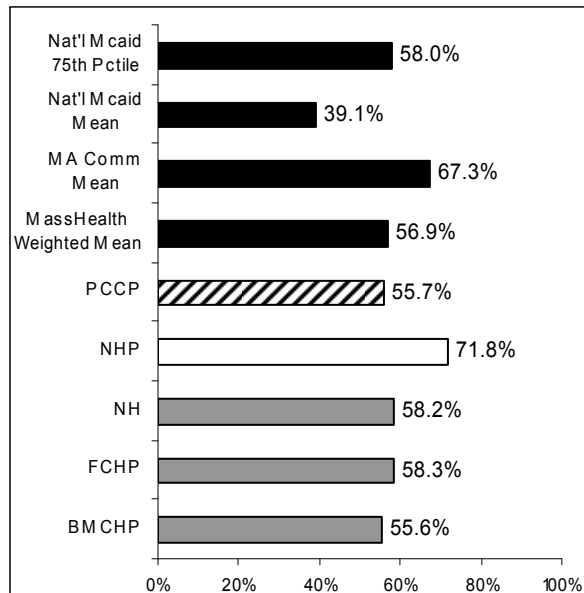
The source of the National Medicaid 90th Percentile, National Medicaid 75th Percentile, National Medicaid Mean, and MA Commercial Mean is Quality Compass, 2006.

Follow-up After Hospitalization for Mental Illness

Research has shown the importance of timely follow-up for individuals discharged from a psychiatric hospitalization. Patients who follow-up with outpatient appointments have a lower readmission rate than those that don't.⁴⁷ Studies have shown that longer intervals between discharge and outpatient visits are associated with increased odds of missing appointments underscoring the importance of expedient aftercare upon discharge.^{48,49}

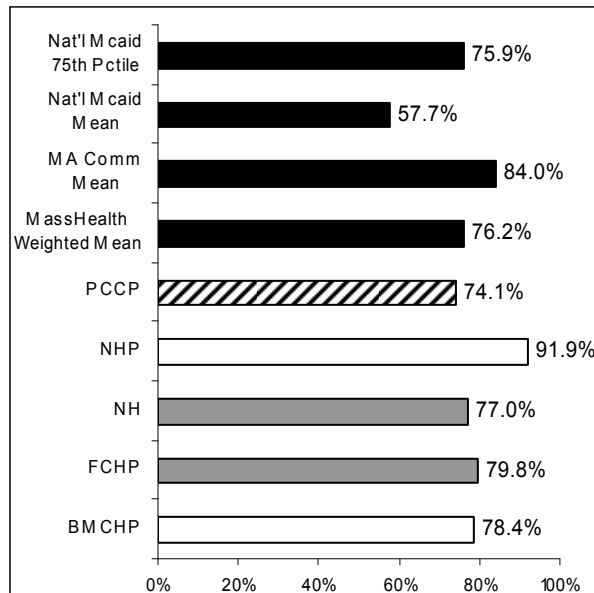
7 Day

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



30 Day

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



Understanding the Results

Fifty-seven percent (56.9%) of MassHealth members 6 years of age and older who were hospitalized for treatment of mental illness had a follow-up visit within seven days of discharge. Individual plan rates ranged from 55.6% to 71.8%. One plan had a 7-day follow-up rate that was significantly above the benchmark rate (58%). Although PCCP's rate (55.7%) was significantly below the benchmark rate, it was a significant improvement compared with the 2005 rate (46.0%). The other four plans had rates that were statistically no different than their 2005 rates.

Seventy-six percent (76.2%) of MassHealth members 6 years of age and older who were hospitalized for treatment of mental illness had a follow-up visit within thirty days of discharge. Individual plan rates ranged from 74.1% to 91.9%. Two plans had a 30-day follow-up rate that was significantly above the benchmark rate (75.9%), while one plan had a rate significantly below the benchmark. Two plans had 2007 rates significantly above their 2005 rates for this measure.

Several factors are associated with missed outpatient appointments after discharge from a psychiatric hospitalization, including:

- Involuntary legal status at hospital discharge or leaving the hospital against medical advice

(Continued on page 52)

KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2007)
- Rate is *significantly above* the 2007 national Medicaid 75th percentile
- Rate is *not significantly different from* the 2007 national Medicaid 75th percentile
- ▨ Rate is *significantly below* the 2007 national Medicaid 75th percentile

Follow-up After Hospitalization for Mental Illness

Statistical Summary—7 Day

Comparison to 2007 Rates:					2007 Comparison Rates																	
	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2005 Rate	Nat'l Mcaid 90th Pctile:			66.2%			Nat'l Mcaid Mean:			39.1%			MassHealth Weighted Mean:			56.9%		
					Nat'l Mcaid 75th Pctile:			58.0%			MA Commercial Mean:			67.3%			MassHealth Median:			58.2%		
MassHealth Plan Rates																						
2007		Num	Den	Rate	LCL	UCL		2005		Num	Den	Rate	LCL	UCL								
PCCP(A)	●	★	●	★	PCCP	(A)		3,139	5,631	55.7%	54.4%	57.1%	PCCP	(A)	3,349	7,287	46.0%	44.8%	47.1%			
NHP(A)	★	★	★	○	NHP	(A)		346	482	71.8%	67.7%	75.9%	NHP	(A)	256	393	65.1%	60.3%	70.0%			
NH(A)	○	★	●	○	NH	(A)		334	574	58.2%	54.1%	62.3%	NH	(A)	276	494	55.9%	51.4%	60.4%			
FCHP(A)	○	★	○	○	FCHP	(A)		49	84	58.3%	47.2%	69.5%	FCHP	(A)	46	75	61.3%	49.6%	73.0%			
BMCHP(A)	○	★	●	○	BMCHP	(A)		781	1405	55.6%	53.0%	58.2%	BMCHP	(A)	497	821	60.5%	57.1%	63.9%			

Statistical Summary—30 Day

Comparison to 2007 Rates:					2007 Comparison Rates													
	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2005 Rate	Nat'l Mcaid 90th Pctile:		79.8%		Nat'l Mcaid Mean:		57.7%		MassHealth Weighted Mean:		76.2%			
					Nat'l Mcaid 75th Pctile:		75.9%		MA Commercial Mean:		84.0%		MassHealth Median:		78.4%			
					MassHealth Plan Rates													
PCCP(A)	●	★	●	★	2007	Num	Den	Rate	LCL	UCL		2005	Num	Den	Rate	LCL	UCL	
NHP(A)	★	★	★	★	PCCP	(A)	4,175	5,631	74.1%	73.0%	75.3%	PCCP	(A)	4,770	7,287	65.5%	64.4%	66.6%
NH(A)	○	★	●	○	NHP	(A)	443	482	91.9%	89.4%	94.4%	NHP	(A)	335	393	85.2%	81.6%	88.9%
FCHP(A)	○	★	○	○	NH	(A)	442	574	77.0%	73.5%	80.5%	NH	(A)	371	494	75.1%	71.2%	79.0%
BMCHP(A)	★	★	●	○	FCHP	(A)	67	84	79.8%	70.6%	88.9%	FCHP	(A)	60	75	80.0%	70.3%	89.7%
					BMCHP	(A)	1,102	1,405	78.4%	76.2%	80.6%	BMCHP	(A)	659	821	80.3%	77.5%	83.1%

Legend:

- ★ 2007 rate is significantly above the comparison rate.
- 2007 rate is not significantly different from the comparison rate.
- 2007 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, 2007.

Follow-up After Hospitalization for Mental Illness

Understanding the Results (continued)

- Lack of an established outpatient clinician
- Emotional problems related to primary supports in community (e.g., lack of family support, death of a family member, etc)
- Longer interval between discharge date and follow-up appointment date.⁵⁰

Plans might improve their follow-up rates by targeting interventions specifically to individuals with one or more of the above risk factors for missing outpatient appointments after discharge. For example, staff could help patients without an established outpatient clinician select a clinician and set up a first appointment prior to discharge date. Setting up an outpatient appointment relatively soon after hospital discharge increases the chances of successful follow up.⁵⁰

For patients with limited or negative social supports in the community, staff could assist in identifying new or more positive supports in the community. One promising model built on this principle was developed by the New York Association of Psychiatric Rehabilitation Services. The Peer Bridger model connects individuals who have a history of psychiatric hospitalization with patients who are still in the hospital, helping them connect to supports in the community for when they are discharged.⁵⁰

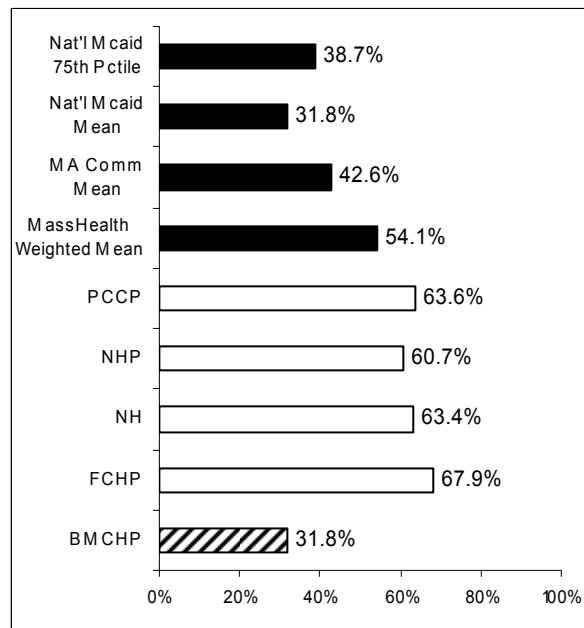
Follow-up Care for Children Prescribed Attention-Deficit/Hyperactivity Disorder (ADHD) Medication

A recently released 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.⁵¹ This study also revealed that ADHD is more common among poorer children with 11% of children in the poorest quintile meeting criteria for ADHD according to the DSM-IV. 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, primary care clinicians serving Medicaid populations are likely to see these children in their practices.

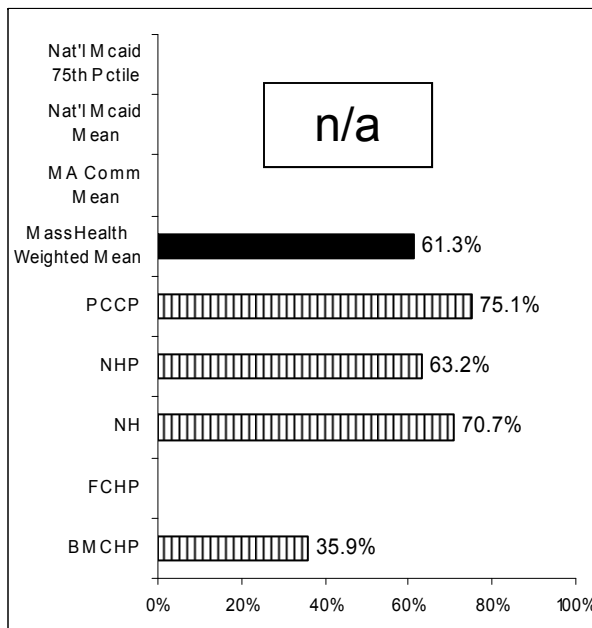
Initiation Phase

The percentage of children 6-12 years of age with an ambulatory prescription dispensed for ADHD medication who had one follow-up visit with a practitioner with prescribing authority within 30 days of receiving the prescription.



Continuation & Maintenance Phase

The percentage of members 6-12 years of age who remained on the ADHD medication for at least 210 days and who, in addition to the Initiation Phase visit, had at least 2 follow-up visits within 9 months of the end of the Initiation Phase.



Understanding the Results

This measure assesses follow-up care for children newly prescribed ADHD medication. Fifty-four percent (54.1%) of MassHealth members 6-12 years of age who were prescribed ADHD medication had at least one follow-up visit with a practitioner with prescribing authority during the 30-day period after the prescription start date. Individual plan rates ranged from 31.8% to 67.9%. Four plans had rates that were significantly above the benchmark rate (38.7%), while one plan had a rate significantly below the benchmark.

Sixty-one percent (61.3%) of MassHealth members 6-12 years of age who were prescribed ADHD medication and who remained on the medication for at least 210 days had at least two follow-up visits with a practitioner after the 30-day Initiation Phase ended. Individual plan rates ranged from 35.9% to 75.1%. Due to an error made by NCQA, no benchmark data are available for this rate.

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:

(Continued on page 56)

KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2007)
- Rate is significantly above the 2007 national Medicaid 75th percentile
- Rate is not significantly different from the 2007 national Medicaid 75th percentile
- Rate is significantly below the 2007 national Medicaid 75th percentile
- The 2007 national Medicaid 75th percentile for this measure is not available.

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

Statistical Summary—Initiation

Comparison to 2007 Rates:				
	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2005 Rate*
PCCP(A)	★	★	★	n/a
NHP(A)	★	★	★	n/a
NH(A)	★	★	★	n/a
FCHP(A)	★	★	★	n/a
BMCHP(A)	●	○	●	n/a

2007 Comparison Rates												
Nat'l Mcaid 90th Pctile:		44.5%		Nat'l Mcaid Mean:		31.8%		MassHealth Weighted Mean:		54.1%		
Nat'l Mcaid 75th Pctile:		38.7%		MA Commercial Mean:		42.6%		MassHealth Median:		63.4%		
MassHealth Plan Rates												
2007	Num	Den	Rate	LCL	UCL		2005	Num	Den	Rate	LCL	UCL
PCCP	(A)	912	1433	63.6%	61.1%	66.2%	PCCP					
NHP	(A)	333	549	60.7%	56.5%	64.8%	NHP					
NH	(A)	282	445	63.4%	58.8%	68.0%	NH					
FCHP	(A)	36	53	67.9%	54.4%	81.4%	FCHP					
BMCHP	(A)	317	996	31.8%	28.9%	34.8%	BMCHP					

* This measure has not been collected by MassHealth before, so no previous data exists.

** No benchmarks are available due to changes in the specifications of this measure.

Statistical Summary—Continuation and Maintenance

Comparison to 2007 Rates:					2007 Comparison Rates												
					Nat'l Mcaid 90th Pctile:		—		Nat'l Mcaid Mean:		—		MassHealth Weighted Mean:			61.3%	
					Nat'l Mcaid 75th Pctile:		—		MA Commercial Mean:		—		MassHealth Median:			66.9%	
MassHealth Plan Rates																	
		2007	Num	Den	Rate	LCL	UCL		2004	Num	Den	Rate	LCL	UCL			
PCCP(A)		PCCP	(A)	334	445	75.1%	70.9%	79.2%	PCCP	n/a**							
NHP(A)		NHP	(A)	60	95	63.2%	52.9%	73.4%	NHP								
NH(A)		NH	(A)	70	99	70.7%	61.2%	80.2%	NH								
FCHP(A)		FCHP	(A)	2	3	.	.	.	FCHP								
BMCHP(A)		BMCHP	(A)	99	276	35.9%	30.0%	41.7%	BMCHP								

Legend:

- ★ 2007 rate is significantly above the comparison rate.
- 2007 rate is not significantly different from the comparison rate.
- 2007 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, 2007.

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

Understanding the Results (continued)

- 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. (AAP ADHD guidelines).
- African American families were more likely to see a specialist after their child was diagnosed with ADHD, especially if their child was prescribed medication (Gardner et al, 2004)

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%).⁵²

Relatively few studies have examined factors associated with suboptimal follow up care for children prescribed ADHD medications. One study examined factors associated with overall 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
- Children receiving Medicaid were more likely to see specialists after being diagnosed with ADHD
- 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.

Monastra (2005) surveyed families of 856 children with ADHD on the reasons that they postponed or discontinued the use of ADHD treatment for their child.⁵³ The most common reasons included:

Building off of these findings, some ways to improve rates of follow up care for children prescribed ADHD medication could be:

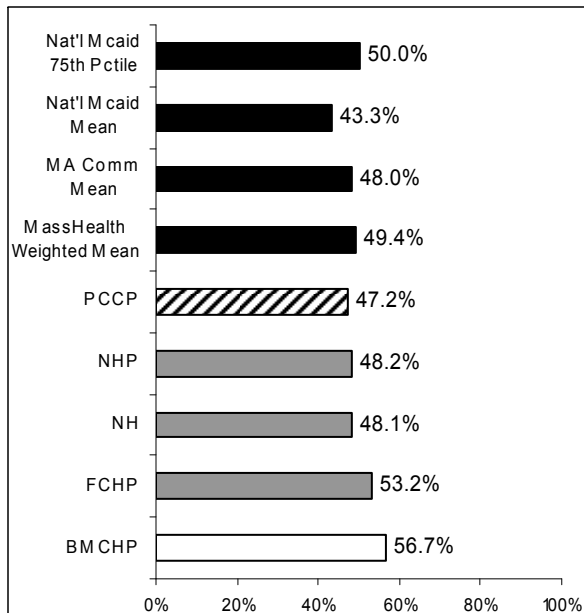
- Provide education, both verbal and written, to parents or caregivers on ADHD, treatment options, and importance of follow up
- Address concerns of parents and children on ADHD medications including their side effects, and what to do if these arise
- Provide training on the AAP ADHD clinical guidelines 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. More than nine percent of Americans age 12 and older suffer from alcohol or other drug abuse.⁵⁴ 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 longer have better outcomes than those who leave treatment prematurely.⁵⁵ Fully engaging in therapy after initiation is key to preventing relapse. Initiation of substance abuse treatment without engagement is unfortunately a reality for many individuals with substance abuse disorders.

Initiation of Treatment

The percentage of adults diagnosed with alcohol and other dependence who initiated treatment in the 2006 calendar year through either 1) an inpatient AOD admission or 2) an outpatient service for AOD abuse or dependence and an additional AOD service within 14 days

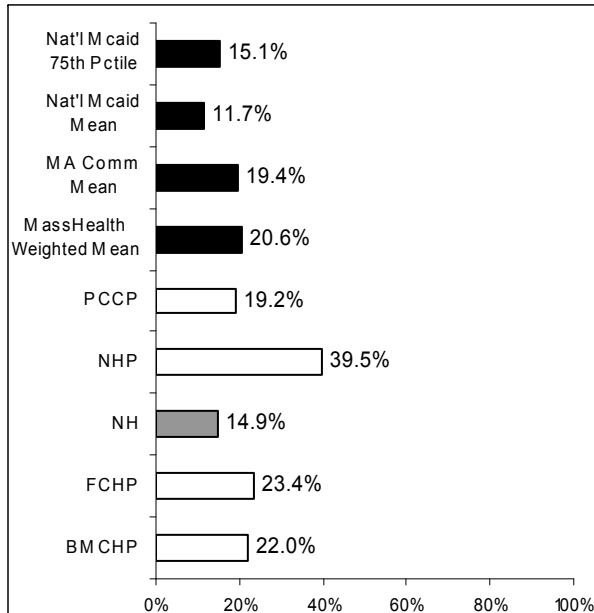


KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2007)
- Rate is significantly above the 2007 national Medicaid 75th percentile
- Rate is not significantly different from the 2007 national Medicaid 75th percentile
- Rate is significantly below the 2007 national Medicaid 75th percentile

Engagement of Treatment

The percentage of adult members diagnosed with AOD disorders who received two additional AOD services during the 2006 calendar year within 30 days after the initiation of AOD treatment.



Understanding the Results

Forty-nine percent (49.4%) of MassHealth members diagnosed with AOD dependence initiated treatment in 2006. Individual plan rates ranged from 47.2% to 56.7%. One plan had a rate significantly higher than the benchmark rate (50%), while one plan had a significantly lower rate than the benchmark. Three plans had 2007 initiation rates that were significantly better than their 2005 rates, while two plans had 2007 rates that were significantly poorer than their 2005 rate.

Considerably fewer MassHealth members (20.6%) engaged in AOD treatment than initiated treatment in 2006. Individual plan rates for engagement in treatment ranged from 14.9% to 39.5%. All but one plan had an engagement rate that was significantly above the benchmark rate (15.1%). One plan had a 2007 engagement rate significantly above their 2005 rate, and one plan had a rate significantly below their 2005 rate.

Several individual factors are associated with lower rates of initiation and engagement in substance abuse treatment. These include:⁵⁶

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

(Continued on page 60)

Initiation and Engagement of Alcohol and Other Drug Dependence Treatment

Statistical Summary—Initiation Rate (All Ages)

Comparison to 2007 Rates:				
PCCP(A) NHP(A) NH(A) FCHP(A) BMCHP(A)	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2005 Rate
	●	★	○	★
	○	★	○	●
	○	★	○	★
	○	★	○	●
	★	★	★	★

2007 Comparison Rates												
Nat'l Mcaid 90th Pctile:		57.5%		Nat'l Mcaid Mean:		43.3%		MassHealth Weighted Mean:		49.4%		
Nat'l Mcaid 75th Pctile:		50.0%		MA Commercial Mean:		48.0%		MassHealth Median:		48.2%		
MassHealth Plan Rates												
2007	Num	Den	Rate	LCL	UCL		2005	Num	Den	Rate	LCL	UCL
PCCP	(A) 4,278	9,060	47.2%	46.2%	48.3%		PCCP	(A) 3,187	8,771	36.3%	35.3%	37.3%
NHP	(A) 395	820	48.2%	44.7%	51.7%		NHP	(A) 481	653	73.7%	70.3%	77.0%
NH	(A) 619	1,286	48.1%	45.4%	50.9%		NH	(A) 426	1,054	40.4%	37.5%	43.4%
FCHP	(A) 100	188	53.2%	45.8%	60.6%		FCHP	(A) 88	93	94.6%	90.0%	99.2%
BMCHP	(A) 1,670	2,946	56.7%	54.9%	58.5%		BMCHP	(A) 1,026	2,027	50.6%	48.4%	52.8%

Statistical Summary—Engagement Rate (All Ages)

Comparison to 2007 Rates:					2007 Comparison Rates														
	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2005 Rate	Nat'l Mcaid 90th Pctile:			23.6%		Nat'l Mcaid Mean:			11.7%		MassHealth Weighted Mean:			20.6%	
					Nat'l Mcaid 75th Pctile:			15.1%		MA Commercial Mean:			19.4%		MassHealth Median:			22.0%	
MassHealth Plan Rates																			
	2007	Num	Den	Rate	LCL	UCL		2005	Num	Den	Rate	LCL	UCL						
PCCP(A)	★	★	○	★	PCCP	(A)	1,738	9,060	19.2%	18.4%	20.0%	PCCP	(A)	1,534	8,771	17.5%	16.7%	18.3%	
NHP(A)	★	★	★	○	NHP	(A)	324	820	39.5%	36.1%	42.9%	NHP	(A)	290	653	44.4%	40.6%	48.2%	
NH(A)	○	★	●	○	NH	(A)	191	1,286	14.9%	12.9%	16.8%	NH	(A)	150	1,054	14.2%	12.1%	16.3%	
FCHP(A)	★	★	○	●	FCHP	(A)	44	188	23.4%	17.1%	29.7%	FCHP	(A)	65	93	69.9%	60.6%	79.2%	
BMCHP(A)	★	★	★	○	BMCHP	(A)	647	2,946	22.0%	20.5%	23.5%	BMCHP	(A)	494	2,027	24.4%	22.5%	26.2%	

Legend:

- ★ 2007 rate is significantly above the comparison rate.
- 2007 rate is not significantly different from the comparison rate.
- 2007 rate is significantly below the comparison rate.

Num indicates Numerator
 Elig indicates the Eligible Population
 Den indicates Denominator
 LCL indicates Lower Confidence Level
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(A) = Measure was collected using administrative method
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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.

Initiation and Engagement of Alcohol and Other Drug Dependence Treatment

Understanding the Results (continued)

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:⁵⁷

- 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.⁵⁸ 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 also a significant predictor of successful engagement.

Plans should consider whether program and organizational factors are facilitating or hindering successful treatment engagement of their members with identified substance abuse issues. Factors such as a positive working relationships among staff and agreement on treat-

ment 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.

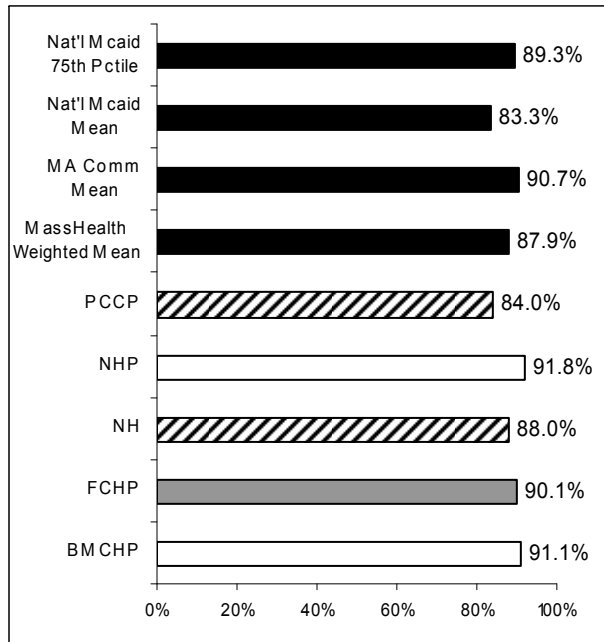
Getting Better

Appropriate Treatment for Children with Upper Respiratory Infection

Current clinical guidelines recommend against prescribing antibiotics for upper respiratory infections (URIs) which are commonly caused by viruses, not bacteria. Adherence to these guidelines is important to control the emergence and spread of antibiotic-resistant bacteria, which is due in part to the inappropriate use of antibiotics for conditions which do not warrant antibiotic treatment. Despite this, approximately three-fourths of all outpatient prescriptions are given to children with URIs.⁵⁹

Appropriate Treatment for URI

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



KEY:

- Comparison rates (Source of National and MA Commercial data: Quality Compass, 2007)
- Rate is *significantly above* the 2007 national Medicaid 75th percentile
- Rate is *not significantly different* from the 2007 national Medicaid 75th percentile
- Rate is *significantly below* the 2007 national Medicaid 75th percentile

Understanding the Results

Eighty-eight percent (87.9%) of children aged 3 months to 18 years who had a URI were not prescribed an antibiotic within the first three days after diagnosis. Individual plan rates ranged from 84.0% to 91.8%. Two plans had rates that were significantly better than the 2007 national Medicaid 75th percentile. One plan (PCCP) had a 2007 rate that was significantly better than its 2005 rate, although the plan's 2007 rate was significantly below the 2007 national Medicaid 75th percentile.

There are a number of other factors that influence inappropriate prescription of antibiotics for children with URI including physician's perception of parental expectations for an antibiotic prescription in response to an illness episode, whether the child is of school age, whether the child has a chronic illness such as asthma, whether the physician is a pediatrician, and the number of years that a provider has been in practice.^{60,61,62} Activities that can help decrease rates of inappropriate antibiotic use for URIs include provider education about current clinical guidelines as well as availability and distribution of education materials in examination rooms.⁶³

Appropriate Treatment for Children with URI

Statistical Summary—

Comparison to 2007 Rates:				
	Nat'l Mcaid 75th Pctile	Nat'l Mcaid Mean	MA Comm Mean	Plan's 2005 Rate
PCCP(A)	●	★	●	★
NHP(A)	★	★	★	○
NH(A)	●	★	●	○
FCHP(A)	○	★	○	○
BMCHP(A)	★	★	○	○

2007 Comparison Rates											
Nat'l Mcaid 90th Pctile:		92.5%		Nat'l Mcaid Mean:		83.3%		MassHealth Weighted Mean:		87.9%	
Nat'l Mcaid 75th Pctile:		89.3%		MA Commercial Mean:		90.7%		MassHealth Median:		90.1%	

MassHealth Plan Rates														
2007		Num	Den	Rate *	LCL	UCL		2005		Num	Den	Rate *	LCL	UCL
PCCP	(A)	2,513	15,692	84.0%	83.4%	84.6%		PCCP	(A)	4,673	15,607	70.1%	69.3%	70.8%
NHP	(A)	535	6,504	91.8%	91.1%	92.4%		NHP	(A)	498	6,113	91.9%	91.2%	92.5%
NH	(A)	557	4,652	88.0%	87.1%	89.0%		NH	(A)	310	3,059	89.9%	88.8%	91.0%
FCHP	(A)	48	487	90.1%	87.4%	92.9%		FCHP	(A)	43	440	90.2%	87.3%	93.1%
BMCHP	(A)	948	10,656	91.1%	90.6%	91.6%		BMCHP	(A)	731	8,191	91.1%	90.5%	91.7%

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

Legend:

- ★ 2007 rate is significantly above the comparison rate.
- 2007 rate is not significantly different from the comparison rate.
- 2007 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.

Appendix A:

MassHealth Regions and Service Areas

MassHealth Service Areas and Regions

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

* each service area includes multiple cities and towns.

Appendix B:

Frequency of Ongoing Prenatal Care % of All Expected Visit Rates

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

<21%							
2007		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	25	5,150	411	6.1%	3.7%	8.5%
NHP	(H)	23	3,303	403	5.7%	3.3%	8.1%
NH	(H)	98	2,164	411	23.8%	19.6%	28.1%
FCHP	(H)	22	287	287	7.7%	4.4%	10.9%
BMCHP	(H)	42	4,408	411	10.2%	7.2%	13.3%

21%-40%							
2007		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	27	5,150	411	6.6%	4.1%	9.1%
NHP	(H)	11	3,303	403	2.7%	1.0%	4.4%
NH	(H)	26	2,164	411	6.3%	3.9%	8.8%
FCHP	(H)	2	287	287	0.7%	0.0%	1.8%
BMCHP	(H)	19	44,08	411	4.6%	2.5%	6.8%

41%-60%							
2007		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	37	5150	411	9.0%	6.1%	11.9%
NHP	(H)	29	3303	403	7.2%	4.5%	9.8%
NH	(H)	36	2164	411	8.8%	5.9%	11.6%
FCHP	(H)	16	287	287	5.6%	2.7%	8.4%
BMCHP	(H)	29	4408	411	7.1%	4.5%	9.7%

61%-80%							
2007		Num	Elig	Den	Rate	LCL	UCL
PCCP	(H)	66	5,150	411	16.1%	12.4%	19.7%
NHP	(H)	67	3,303	403	16.6%	12.9%	20.4%
NH	(H)	48	2,164	411	11.7%	8.5%	14.9%
FCHP	(H)	38	287	287	13.2%	9.1%	17.3%
BMCHP	(H)	66	4,408	411	16.1%	12.4%	19.7%

Appendix C:

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

Antidepressant Medication Management - Basic, Essential, NonBasic/NonEssential

Optimal Practitioner Contacts						
2007	Num	Elig	Den	Rate	LCL	UCL
Basic	(A) 54	167	167	32.3%	24.9%	39.7%
Essential	(A) 151	502	502	30.1%	26.0%	34.2%
NonBasic/NonEssntl	(A) 560	1,925	1,925	29.1%	27.0%	31.1%

Effective Acute Phase Treatment						
2007	Num	Elig	Den	Rate	LCL	UCL
Basic	(A) 91	167	167	54.5%	46.6%	62.3%
Essential	(A) 276	502	502	55.0%	50.5%	59.4%
NonBasic/NonEssntl	(A) 1,011	1,925	1,925	52.5%	50.3%	54.8%

Effective Continuous Phase Treatment						
2007	Num	Elig	Den	Rate	LCL	UCL
Basic	(A) 68	167	167	40.7%	33.0%	48.5%
Essential	(A) 203	502	502	40.4%	36.0%	44.8%
NonBasic/NonEssntl	(A) 730	1,925	1,925	37.9%	35.7%	40.1%

Appendix D:

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

Follow-up After Hospitalization for Mental Illness

7 Day						
2007	Num	Elig	Den	Rate	LCL	UCL
Basic	(A) 129	284	284	45.4%	39.5%	51.4%
Essential	(A) 332	842	842	39.4%	36.1%	42.8%
NonBasic/NonEssntl	(A) 3,010	5,347	5,347	56.3%	55.0%	57.6%

30 Day						
2007	Num	Elig	Den	Rate	LCL	UCL
Basic	(A) 184	284	284	64.8%	59.1%	70.5%
Essential	(A) 469	842	842	55.7%	52.3%	59.1%
NonBasic/NonEssntl	(A) 3,991	5,347	5,347	74.6%	73.5%	75.8%

Appendix E:

PCC Plan Follow-up Care for Children
Prescribed ADHD Medication rates for
Members with Basic, Essential, and Non-
Basic/Non-Essential Coverage

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

Initiation						
2007	Num	Elig	Den	Rate	LCL	UCL
Basic	.	.	.	.	.	.
Essential	.	.	.	.	.	.
NonBasic/NonEssntl	(A) 912	1,433	1,433	63.6%	61.1%	66.2%

Continuation and Maintenance						
2007	Num	Elig	Den	Rate	LCL	UCL
Basic	.	.	.	.	.	.
Essential	.	.	.	.	.	.
NonBasic/NonEssntl	(A) 334	445	445	75.1%	70.9%	79.2%

Appendix F:

Initiation and Engagement of Alcohol and Other Drug Dependency Treatment - Age stratified Rates

Initiation and Engagement of Alcohol and Other Drug Dependency Treatment

13-17 Initiation						
2007		Num	Elig	Den	Rate	LCL UCL
PCCP	(A)	115	342	342	33.6%	28.5% 38.8%
NHP	(A)	31	81	81	38.3%	27.1% 49.5%
NH	(A)	39	131	131	29.8%	21.6% 38.0%
FCHP	(A)	3	14	14	.	. .
BMCHP	(A)	87	218	218	39.9%	33.2% 46.6%

13-17 Engagement						
2007		Num	Elig	Den	Rate	LCL UCL
PCCP	(A)	53	342	342	15.5%	11.5% 19.5%
NHP	(A)	26	81	81	32.1%	21.3% 42.9%
NH	(A)	23	131	131	17.6%	10.7% 24.5%
FCHP	(A)	0	14	14	.	. .
BMCHP	(A)	44	218	218	20.2%	14.6% 25.7%

18-25 Initiation						
2007		Num	Elig	Den	Rate	LCL UCL
PCCP	(A)	493	1088	1088	45.3%	42.3% 48.3%
NHP	(A)	70	143	143	49.0%	40.4% 57.5%
NH	(A)	128	257	257	49.8%	43.5% 56.1%
FCHP	(A)	19	33	33	57.6%	39.2% 76.0%
BMCHP	(A)	301	532	532	56.6%	52.3% 60.9%

18-25 Engagement						
2007		Num	Elig	Den	Rate	LCL UCL
PCCP	(A)	210	1088	1088	19.3%	16.9% 21.7%
NHP	(A)	59	143	143	41.3%	32.8% 49.7%
NH	(A)	37	257	257	14.4%	9.9% 18.9%
FCHP	(A)	10	33	33	30.3%	13.1% 47.5%
BMCHP	(A)	132	532	532	24.8%	21.0% 28.6%

26-34 Initiation						
2007		Num	Elig	Den	Rate	LCL UCL
PCCP	(A)	754	1444	1444	52.2%	49.6% 54.8%
NHP	(A)	111	210	210	52.9%	45.9% 59.8%
NH	(A)	144	245	245	58.8%	52.4% 65.1%
FCHP	(A)	33	48	48	68.8%	54.6% 82.9%
BMCHP	(A)	362	612	612	59.2%	55.2% 63.1%

26-34 Engagement						
2007		Num	Elig	Den	Rate	LCL UCL
PCCP	(A)	342	1444	1444	23.7%	21.5% 25.9%
NHP	(A)	90	210	210	42.9%	35.9% 49.8%
NH	(A)	45	245	245	18.4%	13.3% 23.4%
FCHP	(A)	15	48	48	31.3%	17.1% 45.4%
BMCHP	(A)	156	612	612	25.5%	22.0% 29.0%

Initiation and Engagement of Alcohol and Other Drug Dependency Treatment

35-64 Initiation						
2007		Num	Elig	Den	Rate	LCL UCL
PCCP	(A)	2909	6160	6160	47.2%	46.0% 48.5%
NHP	(A)	183	386	386	47.4%	42.3% 52.5%
NH	(A)	307	651	651	47.2%	43.2% 51.1%
FCHP	(A)	45	93	93	48.4%	37.7% 59.1%
BMCHP	(A)	917	1581	1581	58.0%	55.5% 60.5%

35-64 Engagement						
2007		Num	Elig	Den	Rate	LCL UCL
PCCP	(A)	1131	6160	6160	18.4%	17.4% 19.3%
NHP	(A)	149	386	386	38.6%	33.6% 43.6%
NH	(A)	86	651	651	13.2%	10.5% 15.9%
FCHP	(A)	19	93	93	20.4%	11.7% 29.2%
BMCHP	(A)	313	1581	1581	19.8%	17.8% 21.8%

65 Initiation						
2007		Num	Elig	Den	Rate	LCL UCL
PCCP	(A)	7	26	26	.	. .
NHP	(A)	0	0	0	.	. .
NH	(A)	1	2	2	.	. .
FCHP	(A)	0	0	0	.	. .
BMCHP	(A)	3	3	3	.	. .

65 Engagement						
2007		Num	Elig	Den	Rate	LCL UCL
PCCP	(A)	2	26	26	.	. .
NHP	(A)	0	0	0	.	. .
NH	(A)	0	2	2	.	. .
FCHP	(A)	0	0	0	.	. .
BMCHP	(A)	2	3	3	.	. .

Appendix G:

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

Initiation and Engagement of Alcohol and Other Drug Dependency Treatment

13 - 17 Initiation						
2007	Num	Elig	Den	Rate	LCL	UCL
Basic	(A)	.	.	.	.	.
Essential	(A)	.	.	.	.	.
NonBasic/NonEsntl	(A)	115	342	33.6%	28.5%	38.8%

18 - 25 Initiation						
2007	Num	Elig	Den	Rate	LCL	UCL
Basic	(A)	44	81	54.3%	42.9%	65.8%
Essential	(A)	378	738	51.2%	47.5%	54.9%
NonBasic/NonEsntl	(A)	449	1,007	44.6%	41.5%	47.7%

26 - 34 Initiation						
2007	Num	Elig	Den	Rate	LCL	UCL
Basic	(A)	113	201	56.2%	49.1%	63.3%
Essential	(A)	556	1,112	50.0%	47.0%	53.0%
NonBasic/NonEsntl	(A)	641	1,243	51.6%	48.8%	54.4%

35 - 64 Initiation						
2007	Num	Elig	Den	Rate	LCL	UCL
Basic	(A)	343	698	49.1%	45.4%	52.9%
Essential	(A)	1,178	2,447	48.1%	46.1%	50.1%
NonBasic/NonEsntl	(A)	2,566	5,462	47.0%	45.6%	48.3%

65+ Initiation						
2007	Num	Elig	Den	Rate	LCL	UCL
Basic	(A)	.	.	.	.	.
Essential	(A)	1	2	.	.	.
NonBasic/NonEsntl	(A)	7	26	.	.	.

Total Initiation						
2007	Num	Elig	Den	Rate	LCL	UCL
Basic	(A)	500	980	51.0%	47.8%	54.2%
Essential	(A)	2,113	4,299	49.2%	47.6%	50.7%
NonBasic/NonEsntl	(A)	3,778	8,080	46.8%	45.7%	47.9%

Initiation and Engagement of Alcohol and Other Drug Dependency Treatment

13 - 17 Engagement						
2007	Num	Elig	Den	Rate	LCL	UCL
Basic	(A)	.	.	.	.	.
Essential	(A)	.	.	.	.	.
NonBasic/NonEsntl	(A)	53	342	342	15.5%	11.5% 19.5%

18 - 25 Engagement						
2007	Num	Elig	Den	Rate	LCL	UCL
Basic	(A)	24	81	81	29.6%	19.1% 40.2%
Essential	(A)	220	738	738	29.8%	26.4% 33.2%
NonBasic/NonEsntl	(A)	186	1,007	1,007	18.5%	16.0% 20.9%

26 - 34 Engagement						
2007	Num	Elig	Den	Rate	LCL	UCL
Basic	(A)	64	201	201	31.8%	25.2% 38.5%
Essential	(A)	310	1,112	1,112	27.9%	25.2% 30.6%
NonBasic/NonEsntl	(A)	278	1,243	1,243	22.4%	20.0% 24.7%

35 - 64 Engagement						
2007	Num	Elig	Den	Rate	LCL	UCL
Basic	(A)	161	698	698	23.1%	19.9% 26.3%
Essential	(A)	534	2,447	2,447	21.8%	20.2% 23.5%
NonBasic/NonEsntl	(A)	970	5,462	5,462	17.8%	16.7% 18.8%

65+ Engagement						
2007	Num	Elig	Den	Rate	LCL	UCL
Basic	(A)	.	.	.	.	.
Essential	(A)	0	2	2	.	.
NonBasic/NonEsntl	(A)	2	26	26	.	.

Total Engagement						
2007	Num	Elig	Den	Rate	LCL	UCL
Basic	(A)	249	980	980	25.4%	22.6% 28.2%
Essential	(A)	1,064	4,299	4,299	24.7%	23.4% 26.1%
NonBasic/NonEsntl	(A)	1,489	8,080	8,080	18.4%	17.6% 19.3%

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