

APPENDIX D

TECHNICAL DOCUMENTATION

This appendix contains tables and charts that were not included in the main body of the report, as well as technical documentation of methodology.

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1.1 Methodology for Evaluating MCO Performance

The following analysis evaluates the data submitted by the MCOs which includes HEDIS®, CAHPS®, and Department-specified Rule 9-03 measures, with the exception of geographic access data, and appointment wait time data which were presented in the previous section. Department-specified Rule 9-03 measures were developed by the Department in cooperation with the MCOs. These measures are not found in a national measurement set such as HEDIS®.

The HEDIS® and CAHPS® data were subject to two different types of statistical analyses: point-in-time analysis and trend analysis, both of which are described below. The Department-specified Rule 9-03 measures were analyzed with respect to Department-required performance levels, and were not subject to any statistical tests.

Point-in-Time Analysis

For the point-in-time analysis, the MCO data for the current reporting year are compared to the applicable New England regional and national HEDIS® and CAHPS® rates, as reported by NCQA. This year, MCO (without PPO) experience is compared to the “All Lines of Business minus PPO” national and New England regional averages. All PPO experience is compared to NCQA’s “PPO-only” national and New England regional averages. The statistical analysis includes all measures that the Department considered for inclusion in the 2012 Health Plan Report Card. Within this report, performance differences that reach statistical significance are referred to as “significantly different” from the national or New England regional average.

Trend Analysis

This is the tenth consecutive year in which there has been enough data to complete a statistical analysis to determine whether there was any significant change in MCO performance for specific measures over time. As in the past, the statistical test measures whether there is a significant change between two points in time: 1) performance during a base reference year and 2) performance during the most recent year. For this report, we used 2011 HEDIS® data and 2009 base year data. The most recent CAHPS® data are from 2012, and the base year data are from 2010.

The trend analysis requires two elapsed time periods with no significant changes in measurement methodology over these time periods. Not all measures are good candidates for statistical analysis over a span of years because:

- the population meeting the measurement criteria is too small to generate reliable rates;
- the measurement specifications have changed significantly over time; or
- there is no earlier data point, as is the case with first-year measures.

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Graphing Trends

Wherever possible a line graph is included in this report, which shows the longest continuous data series in the Department's database. It is important to note that for specific HEDIS® measures that are rotated out of a given reporting cycle by NCQA, data for every other year are used to create the graph. Regardless of the number of years shown on the graph, statistical significance is assessed using only data from the base year and most recent year, as described above.

Significance Tests

In order to determine if an MCO's performance significantly differed from the New England regional or national average in the point-in-time analysis, the Department requires that two separate relevance tests be met. The first is a statistical significance test, which requires a resulting "p" value of 0.05 or less. The second significance test is a "practical" significance test, which requires that there be at least four (4) percentage points between the MCO's performance and the standard against which the MCO's performance is being evaluated.

For example, an MCO may have a rate of 94.25%, which is statistically significantly different from the average rate of 90.45%, but would not meet the practical significance test because the rate differential is 3.80 percentage points, which is less than the required four (4) percentage points. The practical significance test is designed to identify differences that a reader would find important, and eliminate statistically significant differences that might be so small that the reader would find them immaterial.

In interpreting the results of tests of trend analysis (change-over-time), a statistical significance test requiring a "p" value of 0.05 or less is used. No practical significance test is applied to the change-over-time measures.

In the sections that follow, tables depict MCO performance for each of the HEDIS® measures using the acronyms shown below:

- **NA** means "**not applicable**" and indicates that the population of members meeting the conditions for this measure is too small to produce a meaningful score (or rate), an MCO has no cases to report, or a significance test or trend analysis cannot be performed because there are no data with which to make the comparison.
- **NR** means "**not required to report**" and indicates that an MCO did not report the measure because it is not required to do so; and
- **FTR** means "**failed to report**" and indicates that an MCO was required to report data, but failed to do so.

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1.2 Overall MCO Performance Rankings - SUPERSCORES

The measures included in the Superscore calculations are selected from the measures highlighted in this report and focus on effectiveness of care, access to services, and member’s experience of care and service. These ratings do not include managed mental health organizations. Superscores are developed using four performance categories listed below and are based on percentiles calculated by NCQA and reported in NCQA’s Quality Compass as national “All Lines of Business Minus PPO (MCO w/o PPO)” for the HMOs, and national “PPO Only” for the PPOs. The score for each measure is compared to NCQA’s percentiles for that measure and assigned to the applicable performance category as shown in the chart below.

Ranking	Percentile	Stars
Excellent	90th percentile or higher	★★★★
Good	75th through 89th percentile	★★★
Fair	50th through 74th percentile	★★
Poor	Less than the 50th percentile	★

Each performance ranking is then assigned a certain number of stars “★” for each measure and the rankings are then added across all measures. The number of stars earned by each plan is then divided by the number of measures to create an overall average score. The overall average scores are rounded to the nearest whole number of stars. Each measure is weighted equally and composite measures are excluded.

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1.2.1 HEDIS® Performance Measures - SUPERScore

The following HEDIS® measures are included in the Superscore calculation:

- Adult BMI Assessment
- Weight Assessment & Counseling for Children & Adolescents - BMI Percentile 3 - 11 Years
- Weight Assessment & Counseling for Children & Adolescents - BMI Percentile 12 - 17 Years
- Weight Assessment & Counseling for Children & Adolescents - Counseling for Nutrition 3 - 11 Years
- Weight Assessment & Counseling for Children & Adolescents - Counseling for Nutrition 12 - 17 Years
- Weight Assessment & Counseling for Children & Adolescents - Counseling for Physical Activity 3 - 11 Years
- Weight Assessment & Counseling for Children & Adolescents - Counseling for Physical Activity 12 - 17 Years
- Immunizations for Adolescents: Combination
- Childhood Immunization Status: Combo 10¹
- Breast Cancer Screening
- Cervical Cancer Screening
- Colorectal Cancer Screening
- Chlamydia 16-20
- Chlamydia 21-24
- Flu Shot for Ages 50-64
- Medical Assistance with Smoking Cessation - Advising to Quit
- Medical Assistance with Smoking Cessation - Discussing Medications
- Medical Assistance with Smoking Cessation - Discussing Strategies
- Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life
- Well-Child Visits in the First 15 Months of Life
- Adolescent Well-care Visits
- Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis
- Children with Pharyngitis
- Children w/Upper Respiratory Infection
- F/U after Hospitalization for Mental Illness: 30 Days
- F/U after Hospitalization for Mental Illness: 7 Days
- Use of Imaging Studies for Low Back Pain
- Use of Appropriate Medications for People with Asthma - Total
- Initiation of Alcohol and Other Drug Dependence Treatment
- Engagement of Alcohol and Other Drug Dependence Treatment
- Effective Acute Phase Treatment

¹ MCOs report combinations 2-10, combination 10 was chosen because it is the most comprehensive of the measures.

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- Effective Continuation Phase Treatment
- Annual Monitoring for Patients on Persistent Medications for Members on ACE Inhibitors or ARB
- Annual Monitoring for Patients on Persistent Medications for Members on Anticonvulsants
- Annual Monitoring for Patients on Persistent Medications for Members on Diuretics
- Disease Modifying Anti-Rheumatic Drug Therapy in Rheumatoid Arthritis
- Use of Spirometry Testing in the Assessment of and Diagnosis of COPD
- Diabetic Management LDL-C Level <100
- Diabetic Management LDL-C Screening
- Diabetic Management Diabetic Eye Exam
- Diabetic Management Poor HbA1c Control >9%
- Diabetic Management HbA1c Testing
- Diabetic Management Monitoring Blood Pressure Control <140/90
- Diabetic Management Monitoring Blood Pressure Control <140/80
- Diabetic Management Monitoring for Diabetic Nephropathy
- Diabetic Management Good HbA1c Control <8%
- Cholesterol Management for Patients with Cardiovascular Conditions - LDL-C Screening
- Cholesterol Management for Patients with Cardiovascular Conditions - LDL-C Control (<100 mg/dL)

1.2.2 CAHPS® Experience of Care Measures - SUPERScore

Only CAHPS® measures that focus on member experience involving MCO policies or procedures are included in the calculation of the CAHPS® Superscore. For example, the measure “getting to see a specialist that you needed to see,” is included because access to specialists can involve MCO policies and procedures. The measures “how well doctors communicate” and “getting care quickly” are not included, because they assess elements of performance that are generally not under the direct control of the MCO.

The following CAHPS® survey measures are included in the experience of care Superscore calculation:

- Getting to see a specialist that you needed to see
- Easy to get the care, tests or treatment you thought you needed
- How often customer service treated you with courtesy and respect
- Customer service gave information or help needed
- Claims processing was timely
- Claims were processed correctly
- Rate your overall health plan experience
- Got needed care as soon as wanted, when needed care right away
- Got appointment for routine health care as soon as wanted
- Able to find out how much to pay for a health care service or equipment
- Able to find out how much to pay for prescription medications

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1.3 Comparative Measures Methodology

This section of the report discusses quality improvement recommendations for managed care organizations. There are two criteria that are used to identify improvement opportunities for HEDIS® and CAHPS® measures: 1) the HMO's² or PPO's rate is statistically and practically³ significantly worse than the better of the national or regional average, or 2) both the HMO's or PPO's rate and the better of the national or regional average are below 50%. For most Department-specified Rule 9-03 measures, MCOs are expected to achieve a 90% performance level.

Opportunities for improvements are identified in the following tables using the criteria described above and are identified with a “stop sign”.

When reviewing the **point-in-time** tables, please note that the symbols have the following meanings:

- ▲ = Means that the HMO's or PPO's point-in-time score *is better than* the national or New England regional average by a statistically and practically significant amount; therefore, the difference is unlikely explained by chance alone.
- ◎ = Means that there is *no significant difference* between the HMO's or PPO's point-in-time score and the national or New England regional average.
- ▼ = Means that the HMO's or PPO's point-in-time score *is worse than* the national or New England regional average by a statistically and practically significant amount; therefore, the difference unlikely explained by chance alone.
- = Means that either: 1) the HMO's or PPO's point-in-time score *is below* the better of the national or New England regional average by a statistically and practically significant amount, or 2) all rates (HMO or PPO, regional and national) are *below 50%*. Either of these conditions indicates an opportunity where the HMO or PPO can improve its performance.

² As noted above in this report the term HMO encompasses HMO, HMO/POS and POS

³ Practical significance is defined as the MCO's performance varying by at least four percentage points from the benchmark. The practical significance test is designed to identify differences that a reader would find important, by eliminating statistically significant differences that might be so small that the reader would find them immaterial.

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When reviewing the **change-over-time** evaluations, please note that the results are reported as follows:

▲ = Means that the HMO's or PPO's *performance improved* between the base year and the measurement year by an amount that is statistically significant; therefore, the improved performance is unlikely explained by chance alone.

◎ = Means that the HMO's or PPO's performance in the base year was *statistically no different* from its performance in the measurement year.

▼ = Means that the HMO's or PPO's *performance declined* between the base year and the measurement year by an amount that is statistically significant; therefore, the decline in performance is unlikely explained by chance alone.

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1.4 Childhood Immunization Status - Composite and Nine Vaccine Combinations

This measure reports the percentage of children 2 years of age who had the following vaccinations by their second birthday: four diphtheria, tetanus and acellular pertussis; three polio; one measles, mumps and rubella; three H influenza type B; three hepatitis B; one chicken pox; four pneumococcal conjugate; two hepatitis A; two or three rotavirus; and two flu vaccines. For this measure the Department presents a composite rate and nine different combinations. Definitions for the different combinations can be found at: <http://www.ncqa.org/portals/0/Childhood%20Immunization%20Status.pdf>

Childhood Immunization Status: Composite and Individual Measures, 2011									
		BCBSVT	CIGNA	TVHP	MCO (w/o PPO) Average	BCBSVT PPO	CIGNA PPO	MVP PPO	PPO Average
Composite	Plan Rate	44%	38%	43%		47%	NR	12%	
	Compared to National Average	⊙	⊙	⊙	48%	⊙	NA	▼	39%
	Compared to Regional Average	▼	⊙	⊙	50%	⊙	NA	▼	48%
	Improvement Opportunity					●		●	
Combo 2	Plan Rate	75%	54%	71%		76%	56%	22%	
	Compared to National Average	⊙	▼	▼	78%	⊙	▼	▼	65%
	Compared to Regional Average	▼	▼	▼	80%	⊙	▼	▼	76%
	Improvement Opportunity	●	●	●			●	●	
Combo 3	Plan Rate	74%	52%	70%		73%	NR	19%	
	Compared to National Average	⊙	▼	⊙	76%	⊙	NA	▼	63%
	Compared to Regional Average	▼	▼	▼	78%	⊙	NA	▼	75%
	Improvement Opportunity	●	●	●				●	
Combo 4	Plan Rate	21%	24%	27%		28%	NR	9%	
	Compared to National Average	▼	⊙	▼	35%	⊙	NA	▼	26%
	Compared to Regional Average	▼	⊙	⊙	33%	⊙	NA	▼	30%
	Improvement Opportunity	●	●	●		●		●	

Chart continued on next page.

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Childhood Immunization Status: Composite and Individual Measures, 2011

		BCBSVT	CIGNA	TVHP	MCO (w/o PPO) Average	BCBSVT PPO	CIGNA PPO	MVP PPO	PPO Average
Combo 5	Plan Rate	62%	48%	55%		60%	NR	14%	
	Compared to National Average	⊙	▼	▼	64%	⊙	NA	▼	52%
	Compared to Regional Average	⊙	▼	▼	64%	⊙	NA	▼	63%
	Improvement Opportunity		●	●				●	
Combo 6	Plan Rate	62%	48%	59%		61%	NR	15%	
	Compared to National Average	▲	⊙	⊙	52%	▲	NA	▼	43%
	Compared to Regional Average	⊙	⊙	⊙	62%	⊙	NA	▼	61%
	Improvement Opportunity							●	
Combo 7	Plan Rate	19%	22%	20%		25%	NR	6%	
	Compared to National Average	▼	⊙	▼	31%	⊙	NA	▼	23%
	Compared to Regional Average	▼	⊙	▼	29%	⊙	NA	▼	27%
	Improvement Opportunity	●	●	●		●		●	
Combo 8	Plan Rate	17%	22%	23%		25%	NR	8%	
	Compared to National Average	▼	⊙	⊙	25%	⊙	NA	▼	19%
	Compared to Regional Average	▼	⊙	⊙	27%	⊙	NA	▼	26%
	Improvement Opportunity	●	●	●		●		●	
Combo 9	Plan Rate	53%	46%	48%		52%	NR	12%	
	Compared to National Average	▲	⊙	⊙	46%	▲	NA	▼	38%
	Compared to Regional Average	⊙	⊙	⊙	56%	⊙	NA	▼	53%
	Improvement Opportunity							●	
Combo 10	Plan Rate	15%	20%	18%		24%	NR	6%	
	Compared to National Average	▼	⊙	⊙	23%	⊙	NA	▼	17%
	Compared to Regional Average	▼	⊙	⊙	24%	⊙	NA	▼	23%
	Improvement Opportunity	●	●	●		●		●	

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