# Medicaid Managed Care Quality Benchmarking Project: Final Report

# August 23, 2010

Prepared for: Centers for Medicare & Medicaid Services

7500 Security Blvd., MS: C2-21-15 Baltimore MD, 21244-1850P

Contract No. HHSM-500-2008-00137

Prepared by: National Committee for Quality Assurance

1100 13<sup>th</sup> Ave, NW, Suite 1000

Washington DC, 20005

#### **ACKNOWLEDGEMENTS**

This report is the result of the hard work and commitment of Medicaid stakeholders across the country. The National Committee for Quality Assurance is grateful for the participation of state Medicaid directors and their colleagues, who worked with NCQA to provide insight into their Medicaid programs and submit the data which made this analysis possible. We are also very appreciative of the support and guidance of the Medicaid Evaluation Advisory Committee who donated their, time, energy and expertise toward developing this final report.

The analysis upon which this study is based were performed under contact number HHSM-500-2008-00137, entitled: "Medicaid Modernization: Quality Measurement Analysis" sponsored by the Centers for Medicare & Medicaid Services, Department of Health & Human Services. The content of this report does not necessarily reflect the views or policies of the Department of Health & Human Services, or imply endorsement by the U.S. Government.

# **Table of Contents**

INTRODUCTION	1
BACKGROUND	2
Medicaid and Managed Care	2
HEDIS Measures	2
About HEDIS.	2
HEDIS and Medicaid	3
NCQA HEDIS Collection and Auditing	3
Public Reporting	4
Medicaid Managed Care Quality Requirements	
State Quality Strategies	
External Quality Review and Performance Measurement	4
Medicaid Managed Care Benchmarking Project	5
METHODOLOGY	6
National Scan for Supplemental Data	6
Health Plan Verification	6
The Criteria Survey	
Excluded Medicaid Programs	7
Criteria Survey Findings	7
HEDIS Measures Collected	7
Non-HEDIS Measures	
Modifications to HEDIS Specifications	
Modifications to the Data Collection Process	
Data Validation Process	
CHIP	
Fee-for-Service and Primary Care Case Management Programs	
Criteria Survey Conclusions	
Implications	
Recommendations for Future Surveys	14
Creating the Project Database	16
Supplemental Database	
Supplemental Data Criteria	
Supplemental Data Collection	
Preparation of Supplemental Database	17
Existing HEDIS Database	18
Merging Supplemental Data with Existing HEDIS Data	18

Project Database	18
Project Regions	
Rules for Reporting Regional Rate: The 50-20 Threshold	19
Statistical Analysis	
Calculation of Means, Variances, and Standard Deviations	
Absolute Rate Relative to National Calculations	
Calculations of Changes in Rate From 2006-2008	21
Considerations for Interpreting Results	23
Data Completeness	
Non- Available Data, Non-Reportable and Non Trendable Data	23
Table Legends	
Comparing Data	
RESULTS	25
National benchmarks-Absolute Rates and Change Rates	25
Effectiveness of Care	
Access/Availability of Care	26
Use of Services	26
Health Plan Descriptive Information	26
Relative to National Regional Performance	
Effectiveness of Care	
Access/Availability of Care	
Use of Services	
Health Plan Descriptive Information	28
Additional Analysis	
Plan vs. State Calculated Rates	
Hybrid vs. Administrative Calculations	29
MEDICAID PERFORMANCE BENCHMARKS	30
Effectiveness of Care	31
Childhood Immunization Status	
Lead Screening in Children	
Breast Cancer Screening	
Cervical Cancer Screening	
Chlamydia Screening in Women	
Appropriate Testing for Children With Pharyngitis	
Appropriate Treatment for Children With Upper Respiratory Infection	
Avoidance of Antibiotic Treatment in Adults With Acute Bronchitis	
Use of Spirometry Testing in the Assessment and Diagnosis of COPD	
Use of Appropriate Medications for People With Asthma	
Cholesterol Management for Patients With Cardiovascular Conditions	
Controlling High Blood Pressure	
Persistence of Beta-Blocker Treatment After a Heart Attack	
Comprehensive Diabetes Care (CDC)	
Disease Modifying Anti-Rheumatic Drug Therapy for Rheumatoid Arthritis	55
Use of Imaging Studies for Low Back Pain	
Antidepressant Medication Management.	
Follow-Up Care for Children Prescribed ADHD Medication	59

Palland II. A Care II. and the Care Manufal III.	(1
Follow-Up After Hospitalization for Mental Illness	
Access and Availability of Care	
Children's and Adolescents' Access to Primary Care Practitioners	
Annual Dental Visit	
Prenatal and Postpartum Care- Postpartum Care	/1
Use of Services	
Frequency of Ongoing Prenatal Care	
Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life	
Adolescent Well-Care Visits	
Health Plan Descriptive Information	82
Board Certification	83
Weeks of Pregnancy at Time of Enrollment	86
CONCLUSIONS	89
Reflections on Quality of Care	89
Supplemented Data and its Effect on National Benchmarks	89
Study Limitations	89
Future Analyses	90
•	
APPENDICES	91
Appendix A - States Using NCQA Accreditation for Medicaid Plans	92
Appendix B – Advisory Committee Members	94
Appendix C – Health Plan Verification Form	95
Appendix D – Criteria Survey	98
Appendix E – Other Performance Measures Collected by States	109
Appendix F – Data Submission Instructions	
Appendix G – Data Sources by State	112
Appendix H – Number of Supplemented Measures and Plans by State	113
Appendix I – Number of States Reporting Valid Rates in HEDIS Database	114
Appendix J- National Benchmarks Summary	120
Appendix K- Weighted Performance Benchmark Tables	125
Appendix L- Hybrid versus Administrative Rates	150

# Medicaid Managed Care Quality Benchmarking Project: Final Report

#### **INTRODUCTION**

The National Committee for Quality Assurance (NCQA), under contract with the Centers for Medicare & Medicaid Services (CMS), has conducted the Medicaid Managed Care Quality Benchmarking Project to provide CMS, state Medicaid agencies and other stakeholders with a robust set of benchmarks and analysis of quality measures. The purpose of this project is to support Medicaid managed care quality improvement efforts through standardized, validated and comparable performance information. This report incorporates three years of data, collected most recently in 2008. The core data source for this analysis is the Healthcare Effectiveness Data and Information Set (HEDIS<sup>®1</sup>) rates in NCQA's Quality Compass<sup>®2</sup> database. These data are annually submitted by health plans through NCQA's standard HEDIS data submission process.

For this study, NCQA collected comparable performance measurement data from states to supplement NCQA's existing pool of Medicaid HEDIS data. The process of analyzing the existing pool of data and identifying states to submit supplemental performance measurement data yielded key information on the scope of state Medicaid program's performance measurement activities. This report highlights these findings and using the supplemented data includes an analysis of the quality of care delivered by Medicaid managed care plans; identifying significant differences in regional performance results, and assessing how regions perform against national benchmarks.

<sup>&</sup>lt;sup>1</sup> HEDIS ® is a registered trademark of the National Committee for Quality Assurance (NCQA).

<sup>&</sup>lt;sup>2</sup> Quality Compass ® is a registered trademark of the National Committee for Quality Assurance (NCQA). NCQA – August 23, 2010

#### **BACKGROUND**

### **Medicaid and Managed Care**

States began significantly utilizing managed care in the mid-1990s to provide care to beneficiaries with complex health care needs. Since then, the use of managed care for Medicaid has grown to include 47 states serving 33.4 million enrollees (70.91% of the Medicaid population). This includes states that use primary care case management (PCCM), pre-paid inpatient health plans (PIHPs), and other state health care reform programs outside of Managed Care Organization (MCO) contracting.<sup>3</sup> After a dozen years, managed care is now a common tool for states to provide quality health care to all types of Medicaid beneficiaries.

Of the 47 state Medicaid programs using some form of managed care<sup>4</sup>, 37 contract with MCOs to provide Medicaid services to approximately 21.7 million enrollees.<sup>5</sup> Between 2000 and 2007 Medicaid managed care expenditures grew from \$27 billion to \$61 billion.<sup>6</sup>

#### **HEDIS Measures**

#### About HEDIS

NCQA assumed responsibility for the evolution of the HEDIS in 1992, with the goal of developing and maintaining a standardized set of performance measures that could be used by various constituencies to compare health plans in order to help drive quality improvement in managed care. Since the release of HEDIS 2.0 in 1993, the demand for health plan performance data has grown dramatically. HEDIS has been embraced by employers, consumer organizations, state and federal regulators, consultants and health plans as the performance measurement tool of choice, and surveys indicate that almost 90 percent of all health plans collect and report at least some HEDIS data.

Currently, HEDIS consists of 76 measures across eight domains of care. Where appropriate, HEDIS measures apply to commercial, Medicaid and Medicare populations. Because so many plans collect HEDIS data, and because the measures are so specifically defined, HEDIS makes it possible to compare the performance of health plans on an "apples-to-apples" basis. Health plans also use HEDIS results themselves to see where they need to focus their improvement efforts.

To ensure that HEDIS stays current, NCQA has an established a process to evolve the measurement set each year. NCQA's Committee on Performance Measurement (CPM), a broad-based group representing employers, consumers, health plans and others, debates and decides collectively on the content of HEDIS. This group determines what HEDIS measures are to be developed, tested, included in the full HEDIS set, re-evaluated and updated to reflect new evidence in health care delivery, or retired. In addition, the CPM and the NCQA staff ensure that

3 CI VIC

<sup>&</sup>lt;sup>3</sup> Medicaid Managed Care Penetration Rates by State as of June 30, 2008, Centers for Medicare & Medicaid Services, U.S. Department of Health and Human Services.

<sup>&</sup>lt;sup>4</sup> Includes DC, Puerto Rico, Guam and the Virgin Islands

<sup>&</sup>lt;sup>5</sup> Medicaid Managed Care Penetration Rates by State as of June 30, 2008, Centers for Medicare and Medicaid Services, U.S. Department of Health and Human Services.

<sup>&</sup>lt;sup>6</sup> Medicaid and Managed Care: Key Data, Trends and Issues Policy Brief. Kaiser Family Foundation. February 2010.

HEDIS measures continue to meet the desirable attributes for performance measures: relevance, scientific soundness and feasibility.

#### **HEDIS** and Medicaid

An important constituent group utilizing HEDIS data are state Medicaid agencies. NCQA has been collecting performance measurement data from Medicaid MCOs since 1997. Of the 76 HEDIS measures, 54 are specified for Medicaid. According to a survey conducted by the National Association of Children's Hospitals and Health Management Associates (HMA), 96 percent (45 of 47) of surveyed Medicaid and State Children's Health Insurance Programs (CHIP) programs, including a cross-section of managed care, PCCM and fee-for-service (FFS) programs, will require reporting on HEDIS measures in 2010. For children's coverage programs nearly 90 percent of state Medicaid programs and 100% of CHIP programs reported using HEDIS to measure access and effectiveness of care. Much of what drives HEDIS reporting to NCQA by Medicaid is state recognition or mandates for health plans to hold NCQA Health Plan Accreditation. While HEDIS reporting is voluntary for accredited plans, performance on HEDIS measures accounts for nearly 40 percent of the Accreditation score. In 2009, accredited health plans significantly outperformed non-accredited health plans on half of the measures submitted.

Twenty-five Medicaid programs use or require NCQA Accreditation (See Table 1). See Appendix A for details about each states use of NCQA Health Plan Accreditation.

# Table 1: States That Recognize or Require NCQA Accreditation for Medicaid in 2009

Arizona	Indiana*	Minnesota	South Carolina
California	Iowa	Missouri*	Tennessee**
District of Columbia*	Kentucky*	New Mexico*	Texas
Florida	Maryland	Oregon	Utah
Georgia	Massachusetts*	Pennsylvania	Virginia*
Hawaii	Michigan	Rhode Island*	Washington
			Wisconsin

\*Requires NCQA Accreditation

#### NCQA HEDIS Collection and Auditing

HEDIS data collection is an annual process. Health plans submit HEDIS data to NCQA in June of each year for the previous calendar year. All HEDIS data submitted to NCQA must undergo a HEDIS Compliance Audit<sup>TM</sup>. The Audit indicates whether a managed care organization has adequate and sound capabilities for processing medical, member and provider information as a foundation for accurate and automated performance measurement, including HEDIS reporting. The Audit addresses information practices and control procedures, sampling methods and processes, data integrity, and compliance with HEDIS specifications.

<sup>&</sup>lt;sup>7</sup> Kaiser Commission on Medicaid and the Uninsured survey of Medicaid officials in 50 states and DC conducted by Health Management Associates, October 2009.

<sup>&</sup>lt;sup>8</sup> Smith, V, Edwards, J., et al. "Medicaid and CHIP Strategies for Improving Child Health" Health Management Associates, May 2009.

#### **Public Reporting**

Each fall, NCQA publishes the State of Health Care Quality Report summarizing performance trends over time, tracking variations in patterns of care and providing recommendations for future quality improvement. The report analyzes these changes by product line (Medicare, Medicaid and commercial) and reports out national performance rates by HEDIS measure. This report is free and available to the public.

Detailed plan-level HEDIS rates are published each year in Quality Compass. It is an interactive, web-based comparison tool that allows users to view plan-level HEDIS results and benchmark information. Quality Compass provides the largest database of comparative commercial and Medicaid health plan performance information used by health plans, states, and other stakeholders to conduct competitor analyses, examine quality improvement and benchmark plan performance.

# **Medicaid Managed Care Quality Requirements**

#### State Quality Strategies

States that utilize MCOs for providing Medicaid services are required by CMS to delineate how the state will measure the quality of care provided in their Quality Strategy. Additionally, the Quality Strategy must address how states will improve the quality of care delivered through managed care based on the results of their performance assessment. States must have an up-to-date Quality Strategy on file with CMS.

#### External Quality Review and Performance Measurement

Federal regulations require states utilizing Medicaid managed care to contract with an External Quality Review Organization (EQRO) to conduct quality monitoring activities. Currently, there are about 20 EQROs in operation, many of which also serve as Medicare Quality Improvement Organizations (QIOs). The mandatory external quality review (EQR) activities that states must contract for are:

- 1. Validation of performance improvement projects
- 2. Validation of health plan performance measures reported to, or calculated by, the state
- 3. A review to determine health plan compliance with requirements for access to care, health plan structure and operations, and quality measurement and improvement

States frequently utilize HEDIS measures to meet the federal requirements for performance measurement. States may use the HEDIS data plans have submitted to NCQA, require plans to submit data directly to the state or the EQRO, or calculate performance rates themselves. States may use the HEDIS specifications and administrative claims data, other existing performance measures, develop their own measures, or any combination of these options.

CMS's EQR protocol for validating performance measures was significantly modeled from NCQA's HEDIS Compliance Audit program and the programs remain consistent to this day. NCQA has extensive interactions with EQROs and state Medicaid programs as they have increasingly relied on NCQA products to meet federal and state oversight activities. EQR regulations on financial relationships prohibit states from accepting audited HEDIS data to meet the federal requirements of validating performance measures when the health plan has paid for the HEDIS Compliance Audit.

While states are required to collect performance measurement data from Medicaid managed care plans, there are no requirements that dictate which measures states should collect. Without uniform requirements across the board, it is impossible to assess the quality of care across Medicaid managed care or the full Medicaid program. The accountability is in place but without standardized measurement efforts it is impossible to accurately measure quality across states. The need for consistency in performance measurement is becoming more evident as the demand for data to meet national quality improvement goals continues to increase. This was recognized in the Children's Health Insurance Program Reauthorization Act (CHIPRA), which requires HHS to identify an initial core set of children's healthcare quality measures for voluntary use by Medicaid and CHIP programs.

# **Medicaid Managed Care Benchmarking Project**

The Medicaid Managed Care Benchmarking Project seeks to test the feasibility of collecting comparable performance measure results from state Medicaid agencies and combining these data with existing HEDIS data in NCQA's database to develop robust benchmarks for Medicaid health plans.

Working with CMS, NCQA convened an Advisory Committee comprised of experts and stakeholders in Medicaid managed care to provide advice and guidance on this project. The committee consisted of stakeholders representing state Medicaid agencies, Medicaid health plans, EQRO vendors, and industry experts. See Appendix B for a list of the Advisory Committee members. The Advisory Committee was charged with:

- Providing guidance in developing criteria for accepting supplemental data for the analysis
- Providing guidance on project scope, data collection, data criteria and the project data analysis
- Encouraging state Medicaid agencies to submit performance measurement data for the project
- Providing input on the final report

The Advisory Committee met four times throughout the project. All meetings were conducted via webinar.

Letters were sent to the directors of Medicaid programs with managed care plans (37 states) to provide notification of the project and request participation, if applicable. In addition, the National Association of State Medicaid Directors provided a letter of support for the project. NCQA staff conducted follow-up telephone phone calls with states to confirm receipt of the outreach letter, identify the appropriate contact for follow up, and answer any questions about the project. Members of the advisory committee were instrumental in encouraging participation from their state Medicaid agency colleagues.

\_

<sup>&</sup>lt;sup>9</sup> Centers for Medicare and Medicaid Services, Center for Medicaid and State Operations, The Medicaid/CHIP Quality Initiative. July 2006.

#### **METHODOLOGY**

To conduct this analysis, NCQA implemented a strategy to collect performance data from state Medicaid agencies to fill in the gaps in its own Quality Compass database. The methodology included: determining which states collected MCO performance data that is compatible with HEDIS requirements; collecting the data; and calculating national and regional benchmarks.

#### **National Scan for Supplemental Data**

To begin, NCQA ran a query of Medicaid health plans by state of operation with data in the NCQA HEDIS Warehouse for reporting years 2006, 2007 and 2008 (measurement years 2005, 2006 and 2007). To better understand which plans data were missing from the HEDIS Warehouse, NCQA used the CMS Medicaid Enrollment report, which lists Medicaid plans operating in each state. It was determined that NCQA had HEDIS data for all existing health plans for all study years for at least eleven states and majority of health plan data for six states. <sup>10</sup>

#### Health Plan Verification

The 17 states with all or the most of their health plan data in the HEDIS warehouse received a Health Plan Verification Form to confirm the names of the Medicaid health plans and the project years that the plans provided services to beneficiaries. After reviewing the Health Plan Verification forms, NCQA conducted follow-up calls to states where all health plan data was not in its existing HEDIS database to determine if the state had additional compatible data for inclusion in this project. States were requested to submit HEDIS-compatible Medicaid MCO performance data for any plans with missing data. See Appendix C for the Health Plan Verification form.

#### The Criteria Survey

Using the list of health plans provided by CMS, there were 17 states for which NCQA did not have complete HEDIS data and three states where NCQA had no HEDIS data. These are states that had contracted with Medicaid MCOs for the project years. Since existing HEDIS data submitted to NCQA has both been collected using NCQA's HEDIS specifications and undergone a certified HEDIS Compliance Audit, NCQA sent Criteria Surveys to states that had potentially collected additional data to determine if the data would be comparable with HEDIS data. The Criteria Surveys (Appendix D) sought to:

- Confirm the names of the Medicaid health plans and the project years that the plans provided services to beneficiaries
- Determine if the state had HEDIS data for the project years
- Determine if the data contained CHIP enrollees
- Identify if any alterations were made to the HEDIS specification or data collection processes
- Determine if the data had been validated and how

\_

<sup>&</sup>lt;sup>10</sup> The following states did not respond to NCQA's request to verify health plan names; therefore completeness of data could not be verified: Illinois, Indiana, Pennsylvania, Rhode Island, Vermont, West Virginia and Puerto Rico.

• Identify other performance measurement activities in the Medicaid program (i.e. use of state-developed measures, using HEDIS for FFS or PCCM)

#### **Excluded Medicaid Programs**

This project focused on performance information on managed care organizations. Therefore the 17 Medicaid programs without Medicaid MCO contracts were excluded from this study; this includes PCCM, FFS and PHIPs.

Table 2: Medicaid Programs and HEDIS					
	Counts	States			
States WITHOUT Medicaid managed care plans (excluded from study)	17	Alabama, Alaska, Arkansas, Guam, Idaho, Iowa, Louisiana, Maine, Mississippi, Montana, New Hampshire, North Carolina, North Dakota, Oklahoma, South Dakota, Virgin Islands and Wyoming.			
States where all health plans submitted HEDIS data to NCQA	11	California, Colorado, District of Columbia, Kentucky, Maryland, Michigan, Nebraska, New Mexico, Tennessee, Virginia and Washington			
States where some health plans submitted HEDIS data to NCQA	23	Indiana, Minnesota, New Jersey, Pennsylvania, Puerto Rico, Rhode Island and West Virginia.			
States where no health plans submitted HEDIS data to NCQA	3	Oregon, South Carolina, Vermont			
Total Medicaid Programs	54*				

<sup>\*</sup>Includes the District of Columbia, Puerto Rico, Guam and the Virgin Islands

# **Criteria Survey Findings**

The primary purpose of the criteria survey was to identify which states had collected or calculated performance measurement data that might be comparable to HEDIS data and suitable for use as supplemental data for the project's analysis. The Criteria Survey sought to identify what HEDIS measures states collected or calculated, where states had made alterations to the HEDIS specifications or the audit protocol, and additional populations states may be using HEDIS to measure quality for. Criteria surveys were sent to 20 states; three states with no health plan data in the HEDIS database and 17 states where only some of the health plans in the state submitted data. Fourteen states returned completed criteria surveys that yielded additional information on state performance measurement activities.

#### **HEDIS** Measures Collected

States collect a variety of HEDIS measures. Of the states that collected HEDIS measures during the project measurement years, the number of measures collected ranged from one to 42. States collected an average of 16 measures in 2005 and 2006 and an average of 19 measures in 2007 (See Table 3). Nine of the 14 responding states increased the number of measures collected

between measurement years 2006 and 2007. Over the project years, five states chose to decrease the number of measures collected. A few states reported that they decreased the number of measures collected in order to increase the number of measures validated.

Most commonly used HEDIS measures are those related to care delivered to children or those that measure chronic illness (See Table 4). Least commonly used HEDIS measures are listed in Table 5.

Table 3: Number of HEDIS Measures Collected					
State	MY 2005	MY 2006	MY 2007		
Arizona	10	11	14		
Florida	6	10	19		
Georgia	n/a	n/a	2		
Hawaii	34	33	31		
Kansas	16	1	14		
Massachusetts	17	19	10		
Missouri	14	14	13		
Nevada	20	11	15		
New York	31	42	37		
Ohio	14	14	20		
Oregon	1	1	1		
South Carolina	0	0	42		
Texas	23	22	23		
Wisconsin	20	25	26		

n/a= This state did not operate Medicaid MCOs during measurement year (MY).

#### Table 4: Most Commonly Used HEDIS Measures (10 or more states)

#### Pediatric/Adolescent

- Well-Child Visits in the First 15 Months
- Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life
- Adolescent Well-Care Visits
- Childhood Immunization Status

#### Women

- Cervical Cancer Screening
- Prenatal and Postpartum Care

#### **Chronic Care**

- Use of Appropriate Medications for People With Asthma
- Comprehensive Diabetes Care (CDC) -HbA1c Testing
- CDC Eye Exam (Retinal) Performed
- CDC LDL-C Screening

#### **Mental Health**

 Follow-Up After Hospitalization for Mental Illness

#### Table 5: Least Commonly Used HEDIS measures (2 or fewer states)

#### **Effectiveness of Care**

- Adolescent Immunization Status
- Avoidance of Antibiotic Treatment in Adults With Acute Bronchitis
- Beta-Blocker Treatment After a Heart Attack
- Disease Modifying Anti-Rheumatic Drug Therapy for Rheumatoid Arthritis
- Use of Imaging Studies for Low Back Pain
- Medical Assistance With Smoking Cessation

#### **Use of Services**

- Discharges and ALOS-Maternity Care
- Births and ALOS, Newborns
- Antibiotic Utilization

#### **Access to Care**

- Call Abandonment
- Call Answer Timeliness

#### **Health Plan Descriptive Information**

- Board Certification
- Enrollment by Product Line
- Enrollment by State
- Language Diversity of Membership
- Race/Ethnicity Diversity of Membership

#### **Health Plan Stability**

• Years in Business/Total Membership

#### Non-HEDIS Measures

Eight states reported using non-HEDIS measures to assess their Medicaid managed care population. A list of these measures can be found in Appendix E. Many states used measures to assess pediatric/adolescent well care that were very similar to HEDIS but followed specifications that met the federal Early and Periodic Screening and Diagnostic Treatment (EPSDT) program annual reporting requirements.

#### Modifications to HEDIS Specifications

Six states indicated that they made modifications to the HEDIS specifications in collecting or calculating rates. These modifications apply to some or all of the measures collected or calculated.

Table 6: Number of States Reporting Modifications to HEDIS Specifications				
Changes to the measurement year (HEDIS uses the calendar year)	4			
Changes to the continuous enrollment periods	5			
Requiring/using administrative data collection method when HEDIS allows for the hybrid method or requiring hybrid when HEDIS requires only the administrative method	2			
Changes to the measure numerator	1			

#### Changes to HEDIS measurement year

States adjusted the measurement year to coincide with state fiscal years and state contracting periods. This prevents having measurement years where plans would cover a member for only part of the year.

#### Changes to Continuous Enrollment Periods

NCQA specifies the minimum amount of time that a beneficiary must be enrolled in the health plan before becoming eligible for each measure. This period is typically 12 months, with an allowance for one gap in enrollment for 45 days. This continuous enrollment criteria ensures that health plans are given sufficient time to provide the services being measured for the measurement year. In Medicaid, state enrollment procedures, laws and regulations can cause lapses in coverage and reduce the length of time many beneficiaries are continuously enrolled in a Medicaid Plan. This instability in enrollment has prompted some states to reduce the continuous enrollment requirements that are in the technical specifications for many HEDIS measures.

#### Changes to Numerator Requirements

Changes in numerator requirements included variations in the age bands for some measures. Because of these variations, some numerators included ages not included in HEDIS specifications.

#### Hybrid versus Administrative Data Collection

For each measure, NCQA specifies if the data is to be collected using only administrative data or if the hybrid method is allowed. Administrative method refers to calculating measure rates based on administrative data, such as claims and encounters. The hybrid method allows plans to supplement administrative data with medical record review. In general, performance rates tend to

\_

<sup>&</sup>lt;sup>11</sup> Hybrid method requires organizations to look for numerator compliance in both administrative and medical records data. The hybrid method allows for the accurate calculation of performance rates in situations where administrative is incomplete or does not capture a service.

the measure more resource intensive than when a measure is calculated with just administrative data

#### Modifications to the Data Collection Process

Four states (Arizona, New York, Ohio and Wisconsin) reported that some or all of the performance rates have been calculated by the state or vendor rather than by the health plans. This varies with NCQA's process for HEDIS data collection that takes the calculated rates directly from health plans after it has been reviewed by NCQA-Certified HEDIS Compliance Auditors.

#### Data Validation Process

The HEDIS Compliance Audit ensures that the systems used to capture the data components are doing so accurately and that the health plan is correctly following the HEDIS technical specifications. Thirteen states reported that their data was validated. Two states changed their validation method over the course of the study period. Twelve states reported using a HEDIS Compliance Audit, the CMS protocol, or both. Although states collected multiple HEDIS measures, many only chose to validate a few of the measures collected. Some states chose not to validate measures where they had made changes from the HEDIS specifications. For instance, one state requires some of its measures to be collected using medical record review, while HEDIS requires administrative data collection only. This state chose not to validate these measures. While the additional measures collected may be consistent with HEDIS specifications, the lack of validation makes the data incompatible for comparisons with, or combining with HEDIS data.

Table 7: Number of Measures Collected vs. Validated						
	MY 2005		MY 2006		MY 2007	
State	Collected	Validated	Collected	Validated	Collected	Validated
Arizona	10	10	11	11	14	14
Florida	6	6	10	10	19	19
Georgia	n/a		n/a		2	0
Hawaii	34	2	33	2	31	3
Kansas	16	15	1	0	14	13
Massachusetts	17	3	19	3	10	3
Missouri	14	3	14	3	13	3
Nevada	20	20	11	10	15	10
New York	31	26	42	38	37	35
Ohio	14	1	14	1	20	1
Oregon	1	0	1	0	1	0
South Carolina	0	0	0	0	42	0
Texas	23	23	22	22	23	23
Wisconsin	20	18	25	18	26	19

n/a= This state did not operate Medicaid MCOs during measurement year.

#### **CHIP**

States have taken varying approaches to implementing CHIP. Depending on the state, CHIP members can be enrolled in Medicaid health plans, commercial health plans, or in some cases in a product line separate from both the Medicaid and commercial. In states where CHIP members are enrolled in Medicaid health plans, NCQA specifies that Medicaid health plans should follow state directions on whether to include CHIP members in their Medicaid HEDIS submission or to report them separately. This has yielded a database of Medicaid managed care performance data that contains CHIP data from some states/plans. NCQA included questions about CHIP performance measure data collection in the Criteria Survey to get a sense of how much CHIP data are in the supplemental data collected for this project.

On the Criteria Surveys, six states (Hawaii, Massachusetts, Missouri, Ohio, Oregon, and Wisconsin) indicated that their Medicaid managed care performance measurement data contained data for the CHIP population. Since NCQA's Medicaid HEDIS data contains the CHIP where states or plans have opted to include it, NCQA decided to allow these data in the study.

The Children's Health Insurance Program Reauthorization Act (CHIPRA) of 2009 provides renewed focus and momentum for the use of standardized performance reporting in Medicaid and CHIP. Title IV of CHIPRA 2009 encourages voluntary, standardized reporting of a core set of child health quality measures for children enrolled in Medicaid and CHIP. Since CMS has identified this core set of performance measures, it will be important to understand how states are using the measures and the extent to which quality measurement and improvement efforts are coordinated with those for Medicaid.

#### Fee-for-Service and Primary Care Case Management Programs

As displayed in Table 8, of the 13 states with FFS programs, three reported collecting or calculating measures for that population. Nationwide 29 states operate PCCM programs in Medicaid. <sup>12</sup> Of seven states that reported operating PCCM programs on the Criteria Survey, four reported collecting or calculating measures for that population. These are populations that are currently excluded from Medicaid managed care HEDIS submissions to NCQA.

\_

<sup>&</sup>lt;sup>12</sup> Kaiser State Health Facts. http://www.statehealthfacts.org/comparetable.jsp?ind=218&cat=4. Medicaid Managed Care Penetration Rates by State as of June 30, 2008, Centers for Medicare and Medicaid Services, U.S. Department of Health and Human Services, special data request, August, 2009.

**Table 8: Measures Collected for Other Medicaid Programs** 

		Fee-for-Service			PCCM		
	HEDIS data include CHIP	Operating FFS	Some HEDIS Measures	Other non- HEDIS Measures	Operating PCCM	Some HEDIS Measures	Other non- HEDIS Measures
Arizona							
Florida		X			Х		
Georgia		X			Х		
Hawaii	Χ	X					
Kansas		X			Х		X
Massachusetts	Χ	X			Х	X*	
Missouri	X	X					
Nevada		X					
New York		X		X			
Ohio	X	X	X				
Oregon	Х	X	X		Х	X	
South Carolina		X			Х		
Texas		X			Х	X	
Wisconsin	X	X					

<sup>\*</sup>Massachusetts reported using all HEDIS measures for the PCCM program

#### Criteria Survey Conclusions

#### Medicaid Programs Use HEDIS

There seems to be the most consistency across states with using HEDIS (either requiring submission to NCQA, using HEDIS specifications and Audit, or using HEDIS as a starting point for creating state-specific measures). Based on NCQA's existing HEDIS data and information reported on the Health Plan Verification Forms and Criteria Surveys, 36 of the 37 Medicaid programs with managed care plans either had all plans submitting HEDIS data to NCQA and/or reported collecting HEDIS for their health plans. <sup>13</sup> These findings are consistent with the HMA report that found that 90 percent of Medicaid programs and 100 percent of CHIP programs use HEDIS. 14

#### Collected Measures

According to the Criteria Survey, Medicaid programs tend to utilize measures in diabetes, asthma, and pediatric care. This is consistent with the NACH/HMA survey that showed that pediatric and chronic care HEDIS measures are some of the most commonly collected by Medicaid and CHIP programs. 15

<sup>&</sup>lt;sup>13</sup> Vermont is the only state that did not respond to NCQA for this study and does not have any Medicaid performance data in NCQA's existing HEDIS database; therefore NCQA is unable to confirm if and how Medicaid plans in Vermont use HEDIS specifications.

14 Smith, V, Edwards, J., et al. "Medicaid and CHIP Strategies for Improving Child Health" Health Management

Associates, May 2009.

Duchon, L and Smith V. "Quality Performance Measurement in Medicaid and CHIP: Results of a 2006 National Survey of State Officials" Health Management Associates. August, 2006.

#### in How Medicaid Programs Modify and Collect HEDIS

While there is consistent use of HEDIS across Medicaid programs, there is notable variation in the scope of measurement activities and the methodology utilized. In all states completing the Criteria Survey, the set of measures collected or calculated changed at least once over the three project years. Furthermore, some states made modifications to the HEDIS specifications. While not all of these modifications prevented these states from submitting supplemental data to this study, it presents potential challenges to collecting a more robust set of data in the future.

#### Validation Methods are Consistent, Number of Validated Measures Varies

Most states have used an audit protocol consistent with the CMS Audit Protocol to validate measures. However, some states do not validate the full set of measures collected or calculated. While this may be adequate for state measurement activities, this poses a challenge to using these data for future national benchmarking efforts.

#### **Implications**

Medicaid programs have been required to collect performance measures for their managed care populations. In addition to these federally mandated activities, states have implemented a variety of quality improvement programs and performance measurement activities to meet state-specific needs. For years, NCQA has been publishing national averages for quality measures based on Medicaid HEDIS submissions it receives. Despite all of these activities, NCQA does not have data to allow comparisons across all states on the quality of care provided to Medicaid beneficiaries, all of whom are vulnerable due to their economic or health status.

With passage of the Affordable Care Act, it has been projected that another 16 million people will be eligible for Medicaid by 2019. New provisions such as efficiency based payment reform and the introduction of health insurance exchanges increase the urgency for states and CMS to have comparable data to assess quality across states.

The widespread acceptance of HEDIS as the standard for performance measurement among Medicaid programs provides a starting point for the identification of a core set of performance measures for Medicaid programs to report, and the collection of a robust or comprehensive set of data to assess the quality of care for this population. Other surveys have focused on the types of measures collected by states; however the need for comparable data across states is crucial for national quality analyses and state-to-state comparisons. This study indicates that states are collecting potentially comparable data. Future surveys and analyses can help identify and address challenges to collecting comparable data.

#### Recommendations for Future Surveys

While the primary purpose of the Criteria Survey was to identify state Medicaid programs with comparable supplemental data for this analysis project, it identified valuable information on the scope and use of performance measures by Medicaid programs. There was not adequate time to field the Criteria Survey to all Medicaid agencies or to obtain responses from all Medicaid programs with managed care plans. Of the 20 Criteria surveys sent to state Medicaid agencies, eight states were contacted but chose not to complete the survey. Budget constraints and limited staff were reasons given to NCQA staff.

<sup>&</sup>lt;sup>16</sup> Medicaid A Primer 2010, Kaiser Commission on Medicaid and the Uninsured.

A comprehensive survey should consider a broader array of issues related to Medicaid managed care quality improvement activities such as:

- How are states implementing measures
- Use of patient surveys
- How states are measuring quality across the Medicaid program (including FFS, PCCM, and CHIP)
- More information on how states are modifying HEDIS measures and a description of the details behind the non-HEDIS and HEDIS-like measures that states are collecting and reporting
- Differences seen in measures between states with immunization and diabetes registries and those without
- How many states are collecting Race/ Ethnicity/ Language data and how they collect it

### **Creating the Project Database**

The project database consists of NCQA's existing HEDIS data ("HEDIS Data") supplemented with comparable data that states or EQROs had collected from health plans or calculated themselves to meet federal and/or state requirements ("supplemental data").



NCQA implemented the following procedures to collect data to create the project database:

- 1. Using the supplemental data criteria, NCQA identified states with potentially compatible data that could be merged with existing HEDIS data for the Project Database.
- 2. States submitted supplemental data to NCQA based on format guidelines provided by NCQA.
- 3. NCQA reviewed the supplemental data to ensure compatibility with existing HEDIS data; corrections were made where necessary.
- 4. NCQA extracted existing HEDIS data from its Data Warehouse and moved it into the Project Database.
- 5. Supplemental data was merged with existing HEDIS data in the Project Database for data analysis.

# **Supplemental Database**

### Supplemental Data Criteria

After reviewing the results of the criteria survey and the health plan verification forms, NCQA worked with the Advisory Committee to identify the criteria for data inclusion. Based on input from the Advisory Committee, the data that met the following criteria were deemed compatible for inclusion in the Project Database:

- Data validated through a process that meets the CMS protocol
- Data that was collected/ calculated using only administrative data when the HEDIS measure is specified for the hybrid method
- Data that was collected/calculated using the hybrid method or medical record review when the HEDIS measure is specified for administrative data only
- Data with the measurement periods aligned with the fiscal year rather than the calendar year
- Data that included the CHIP population

• Rates calculated by state or vendor rather than by health plan

It was determined that data with the following criteria would be **excluded** from the Project Database:

- Data that has not been validated
- Data with changes to the HEDIS numerator or denominator specification requirements, except for the changes listed above

#### Supplemental Data Collection

The review of the **14** Criteria Surveys received showed that **3 states** (Georgia, Oregon, and South Carolina) had performance measurement data that would not be compatible with existing HEDIS data for use in this project. Data was deemed incompatible if it has not gone through an audit process or if the there were substantive changes to the HEDIS specifications. The remaining **11 states** were deemed to have data comparable for inclusion in the project database, plus an additional **2 states** that completed the health plan verification form and was determined that the health plan data was not fully represented in the HEDIS database and would be compatible for inclusion.

To ease the burden on states, NCQA and the Advisory Committee opted to provide states with formatting guidelines for submitting data and allow states to submit data in the format in which the state stores the data (ex. Excel file, SAS file, etc.). In order to maintain confidentiality, NCQA only collected aggregate/summary level data that contained no protected health information (PHI). NCQA cleaned the submitted data, selecting the useful aspects of the data as required by this project. See Appendix F for the data submission instructions.

Of the **13 states** with compatible data, NCQA received supplemental data from **9 states**. The 4 remaining states with eligible data were unable to submit the supplemental data in the timeframe to be included in the analysis.

There were 97, 93 and 88 supplemental data submissions for reporting years 2006, 2007 and 88 2008 respectively.

#### Preparation of Supplemental Database

All supplemental data submissions were checked for completeness, data element appropriateness, range of values and missing data patterns. States were asked to resend corrected data if problems were identified. Two states, Texas and Wisconsin, submitted in separate files SSI and TANF population rates. These files were combined together to form one data set for each state.

NCQA recalculated the rates for some of the states that used member years (denominator; per 1,000) for the use of services measures (e.g., frequency of ongoing prenatal care) compared to those using member months. NCQA divided the member year by 12, making the rates consistent with the HEDIS measure specifications.

The number of supplemental measures varied from each state. The foremost restriction for collecting more measures was the lack of measure validation. See Appendix G for the data source for each state and Appendix H for the number of measures and plans supplemented by each state.

.

### **Existing HEDIS Database**

The existing HEDIS database for this project includes data for measurement years 2005, 2006 and 2007; which correspond to HEDIS reporting years 2006, 2007 and 2008. More than 170 health plans from 32 states submitted Medicaid HEDIS data to NCQA over the measurement years. This includes 62 health plans that submitted data but chose not to have their rates publicly reported at the plan level. These rates are used in calculating NCQA's benchmarks and averages. As this study will not publish plan-level results, these submissions were used in the study. See Appendix I for the number of states represented for each HEDIS measure in NCQA's existing database.

# Merging Supplemental Data with Existing HEDIS Data

The supplemented or project database was created by merging the state submitted data with the corresponding HEDIS data retrieved from the Quality Compass HEDIS data warehouse. Before the merging took place, NCQA cross-walked the state submitted health plan data against the NCQA HEDIS plan data. Plan name and organization ID for supplemental data were matched against the HEDIS plan name, organization ID and state of operation. If the plan names, organization IDs and state of operation matched, the HEDIS data from Quality Compass was used and the state submitted data was omitted. This was done to avoid duplication of data.

To ensure that the rate key, or measure name, and the year corresponded with the measure names states provided, NCQA cross walked all three years of state submitted measures against the NCQA HEDIS rate key list. Submitted measures flagged as not validated were not included. Also plans with measure indicators that did not have comparable measure specification (e.g., the age bands of supplemental data on Chlamydia, and Breast Cancer screening, annual dental visits did not match the age categories of HEDIS) were omitted.

Once cleaning of the supplemental database and HEDIS database was complete, NCQA merged both databases to create the Project Database.

# **Project Database**

The project database consists of plan level data that were sorted by state of operation and then aggregated to the state level. The state level data was then sorted by project regions for further analysis.

#### **Project Regions**

States were assigned to project regions to support the calculation and reporting of robust benchmarks. The original goal was to use the 10 U.S. Department of Health and Human Services (HHS) state regional assignments (See Table 9). However, gaps in the states without MCOs precluded some of the states from being included in the study. Additionally, some states with valid data have small numbers of MCOs operating in the state. In order to meet the minimum number of plans required to conduct the appropriate statistical analysis, NCQA used the HHS regions as the foundation for forming five project regions (See Table 10). HHS regions were merged into project regions based on geographical location. Project regions consist of the following HHS Regions:

• North East: HHS Regions 1 and 2

• *Mid-Atlantic*: HHS Region 3

• South: HHS Regions 4 and 6

• *Mid-West*: HHS Regions 5, 7 and 8

• West: HHS Regions 9 and 10

States with no Medicaid managed care plans represented in the project database are not included in the project regions.

Table 9: HF	IS Regions
Region 1	Connecticut, Massachusetts, Maine*, New Hampshire*, Rhode Island, Vermont
Region 2	New Jersey, New York, Puerto Rico, Virgin Islands*
Region 3	Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia
Region 4	Alabama*, Florida, Georgia, Kentucky, Mississippi*, North Carolina*, South Carolina, Tennessee
Region 5	Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin
Region 6	Arkansas*, Louisiana*, New Mexico, Oklahoma*, Texas
Region 7	Iowa*, Kansas, Missouri, Nebraska
Region 8	Colorado, Montana*, North Dakota*, South Dakota*, Utah, Wyoming*
Region 9	Arizona, California, Guam*, Hawaii, Nevada
Region 10	Alaska*, Idaho*, Oregon, Washington

<sup>\*</sup>States that do not have Medicaid managed care health plans and therefore excluded from the study

Table 10: Project Regions					
North East	Connecticut, Massachusetts, Rhode Island, Vermont, New Jersey, New York, Puerto Rico				
Mid-Atlantic	Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia				
South	Florida, Georgia, Kentucky, South Carolina, Tennessee, New Mexico, Texas				
Mid-West	Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin, Kansas, Missouri, Nebraska, Colorado, Utah				
West	Arizona, California, Hawaii, Nevada, Washington				

#### Rules for Reporting Regional Rate: The 50-20 Threshold

In this report, regional rates are only displayed for regions where at least 50% of the states that make up that region contributed to the regional rate **AND** at least 20 plans from that region are represented. To see how this rule was applied to each region See Table 11.

Table 11: 50-20 Threshold						
Region	Region States					
North East	Connecticut, Massachusetts, Rhode Island, Vermont, New Jersey, New York, Puerto Rico	4				
Mid-Atlantic	Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia	3				
South	Florida, Georgia, Kentucky, South Carolina, Tennessee, New Mexico, Texas	4				
Mid-West	Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin, Kansas, Missouri, Nebraska, Colorado, Utah	6				
West	Arizona, California, Hawaii, Nevada, Washington	3				

Additionally, NCQA only examined measures for which there were at least 20 plans reporting nationally. Any measures with less than 20 plans, reporting nationally in a given year, were excluded from analysis for that year.

### **Statistical Analysis**

To assess the quality of care provided by Medicaid managed care organizations, NCQA calculated the following on the data in the Project Database:

- Performance benchmarks national and regional means for individual performance measures
- Trend means of national, regional performance over the project study years for measures with consistent specifications
- Comparisons by regions and by measures

#### Calculation of Means, Variances, and Standard Deviations

The national and regional means were calculated across all public and non-publicly reporting health plans for each HEDIS measure. The means were derived from plans' valid values; "missing values" were not included. These represent the national measures of central tendency and dispersion.

The *mean* or *absolute rate* is calculated by summing up all the valid values (p<sub>i</sub>) for each measure and dividing them by the number of health plans (N) while excluding those plans with missing values. The formula for national means is:

$$\overline{p} = \frac{1}{N} \left( \sum_{i=1}^{N} p_i \right) = \frac{1}{N} (p_1 + \dots + p_n)$$

#### Absolute Rate Relative to National Calculations

The three columns titled "Relative to National" show how each region performed in relation to the other regions, or the nation, during that year.

To determine the statistical significance of differences between two values, an analysis of variance test (ANOVA) was conducted with a statistical probability of .05. The tables in this report use the following symbols to denote relative comparisons.

- = This region's performance rate is significantly higher than the national average
- **O**= This region's performance rate is equivalent to the national average
- ○= This region's performance rate is significantly less than the national average

### Calculations of Changes in Rate From 2006-2008

Comparison over time provides an assessment of the direction of performance. The tables contain a column titled "Change 2006-2008," which indicates the region's percentage point change over time, whether a change was statistically significant and if so, the direction of the

change. It is an indicator of the region's performance over time rather than its performance in relation to other regions. A T-test was performed to test statistical significance.

The tables use the following symbols.

 $\uparrow$  = Regional or national rate increased significantly from 2006-2008

⇔= Regional or national rate did not change significantly from 2006-2008

**Ψ**= Regional or national rate decreased significantly from 2006-2008

Because this indicator shows whether a region or the nation's actual rate improved over time, it is independent of the region's relative rating to the nation. To illustrate how this indicator differs from the relative rate, consider a region where a rate may have changed from 65 to 70 percent over the three project years. The change in score may be considered as a significant increase in rate, denoted by the "\nabla" symbol; however, it is possible for the regions relative rate to go from average denoted by the "\nabla" symbol in 2006 to below, denoted by the "\nabla" symbol in 2008. In this example, the regions rate may have been average in 2006 and but below average in 2008 because of the upward shift in the rate of the remaining regions in the nation. Over time the region showed a statistically significant increase in its performance, but it increased less significantly than the national average over the same time period.

### **Considerations for Interpreting Results**

#### Data Completeness

Medicaid plans may not have complete data on all of the services rendered to its members for reasons described below.

- State Medicaid programs have the option of providing some Medicaid services to their
  enrollees in the form of "carve-out" programs. Carve-out services are typically provided
  by specialty organizations or health plans such as Managed Behavioral Health
  Organizations. The data from these carve out services may or may not be captured by the
  Medicaid managed care health plans, therefore some rates for measures that are covered
  by carve out services (i.e. behavioral health care measures) may not reflect the services
  provided to all Medicaid beneficiaries.
- Because of the nature of contracting between states and health plans, it is not uncommon
  for a health plan to be contracted to provide services to Medicaid enrollees for one
  measurement year and not the next. In the same regard, new health plans may sign
  contracts with the state; therefore not all health plans are represented for all three project
  years.
- States do not always require health plans to submit performance data on the same measures from year to year. In the same regard, health plans do not always submit the same measure results or valid rates to NCQA from year to year; therefore the number of plans (N) contributing to a rate for a specific measure may vary across project years.
- For the Quality Compass database, NCQA allows health plans to submit their data
  according to state regulations for how CHIP data should be reported. Therefore there are
  some plans in the Quality Compass database that include CHIP data and some without.
  The same rule was followed for this project, therefore some of the supplemental data
  contains CHIP data and some does not.

#### Non- Available Data, Non-Reportable and Non Trendable Data

For each measure, regional rates are only reported for those regions that met the 50-20 threshold as described above. For regions with less than 50% of the states contributing to the rate OR less than 20 plans in the region reporting, regional rates are not presented and are noted with a "NA" in the appropriate columns. If a region did not pass the 50-20 threshold for regional reporting, the regional data is still included in the national "N" and rate for that measure.

For one measure, Follow-Up Care for Children Prescribed ADHD Medication Management – Continuation, NCQA determined that the HEDIS 2006 and HEDIS 2007 specifications misstated the denominator. Therefore, these rates are not reported and are denoted with an "NR" in the result table.

To ensure that measure specifications remain relevant and feasible, NCQA re-evaluates and updates measure specifications as needed. In cases where measure specifications have been changed from one year to the next, performance rates may not be trendable to prior years'. In this report, rates are reported in years of specification changes but readers are cautioned against

trending or comparing the rates across the years. Trend cautions are noted by a "TC" in the "Change 2006-2008" column.

For the 2008 Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis measure NCQA inverted the 2008 rate so that a higher rate is better. In order to compare the 2008 rate with 2006 and 2007 rates (where lower the rate was better). NCQA inverted the later rates to make them comparable. It should be noted that this change is only a change in calculation of the rate and not a change in measure specification.

#### Table Legends

For each of the measures the report contains a page with a measure description and tables showing the national and regional averages and changes over the study period. The following legends should be used for interpreting results.

- This region's performance rate is significantly higher than the national average
- **O**= This region's performance rate is equivalent to the national average
- O= This region's performance rate is significantly less than the national average
- $\uparrow$  = Regional or national rate increased significantly from 2006-2008
- ⇔= Regional or national rate did not change significantly from 2006-2008
- **Ψ**= Regional or national rate decreased significantly from 2006-2008

# Comparing Data

There is wide variability by state and regions in Medicaid populations, eligibility requirements and benefits offered to enrollees; therefore the reader should be careful when comparing differences in regional performance. The primary purpose of this project is to develop benchmarks to set goals for quality improvement.

#### RESULTS

The data were analyzed for reporting years 2006, 2007, and 2008 (measurement years 2005, 2006 and 2007). The national and regional means (i.e., sum of plan rates divided by the total number of plans) of these measure rates were calculated for those three years when data were available. Simple trend analysis was performed by calculating the national and regional mean differences and testing for statistical significance across all the measures for 2006 and 2008. See Appendix J for a summary table of national rates.

Additionally, the weighted means for measures collected using just administrative data (claims based measures) were also calculated (See Appendix K for results). In this analysis, plans contribute to the mean proportionally to the size of its eligible population for a measure, which we based on the denominator size of measures that were calculated using the HEDIS administrative data collection method.

# **National Benchmarks-Absolute Rates and Change Rates**

#### Effectiveness of Care

Of the 31 measures and indicators within the Effectiveness of Care domain for which valid national mean change were available, 24 recorded an increase in the 2008 rate compared to the 2006 national mean rate. Eleven of these change rates were statistically significant.

Within the prevention and screening sub—domain, three measures had significant change. All *Childhood Immunization Status* measures, except for the two non reportable measures, recorded rates increases from 2006 to 2008. Two of them- the IPV rate and the VZV rate- increased significantly (3.4% and 2.9% respectively). All the *Chlamydia Screening* measure indicators also increased with the screening for women 21-25 years showing a significant rate increase of 3.6%. Seven out of eight Respiratory Conditions measures had rate increases. *Appropriate Testing for Children with Pharyngitis* had a significant increase of 7.8%. All four Asthma measures increased significantly in 2008 with *Use of Appropriate Medications for People with Asthma (5-9 Years)* increasing the highest at 5.0%. *Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis* had significant decrease of 6.2%.

Trend data for one out of four cardiovascular condition measures was reportable. The rate for *Persistence of Beta Blocker After A Heart Attack* went down by 3.6% in 2008. However, this change was not statistically significant.

Four out of eight indicators of the *Comprehensive Diabetes Care* measure have reportable trend data. The rates for *HbA1c testing*, and *Eye Exam* increased but only the former was statistically significant with a change rate of 3.3%.

The national rate for the *Disease Modifying Anti-Rheumatic Drug Therapy for Rheumatoid Arthritis* increased by 4.2%, while the *Use of Imaging Studies for Low Back Pain* decreased by 1.1%; these changes were not significant.

National rates for *Follow-up Care for Children Prescribed ADHD Medication Management-Initiation* and *Follow-up After Hospitalization for Mental Illness - 30 Days* displayed significant increases (3.9% and 10.2% respectively). The remaining changes under Behavioral Health measures were not significant.

#### Access/Availability of Care

All the measures, except for the two indicators of the Annual *Dental Visits* (19-21 Years, and Total), had rate increases between 2008. However, only four of these changes rates were significant. The significant changes were observed in all the indicators of the *Children and Adolescents' Access to Primary Care Practitioners* measure. Rates ranged from 3% (*Children and Adolescents' Access to Primary Care Practitioners* 12-24 Months) to 3.8% (*Children and Adolescents' Access to Primary Care Practitioners* 7-11 Years).

#### Use of Services

Four measures under the Use of Services domain were selected for this study analysis. There was a significant decrease (5.4%) in the change rate for *Frequency of Ongoing Prenatal Care* (<21 Percent of Expected Visits Rate). Significant decreases were also observed for Well-Child Visits in the First 15 Months of Life-Two, Three, Four and Five Visits rates. However, the Six or More visits, and Third, Fourth, Fifth, and Sixth Years of Life Visits were both up significantly by 6.5% and 4.3% respectively. Adolescent Well-care Visits also increased significantly by 2.8%.

#### Health Plan Descriptive Information

Because of measure specification changes, the national average change for the *Board Certification* measure and its indicators cannot be reported. However, the *Weeks of Pregnancy at Time of Enrollment* - Total All Pregnancy Unknown Percent went up by 1.5%. This change was significant.

It should be noted that due to non-reportable data for either 2006 or 2008, no national average change could be calculated for 18 of the measures and indicators. There were no missing national change rates under the Access/Availability of Care domain. However, there were 11 measures or indicators that had non-reportable national change in rates within the Effectiveness of Care Domain. They include the following: *Childhood Immunization Status (Combination 3 & pneumococcal conjugate), Controlling High Blood Pressure (18-85 Years Total), Comprehensive Diabetes Care (Good HbA1c Control, Blood Pressure Control <130/80, Blood Pressure Control <140/90), Annual Monitoring for Patients on Persistent Medications (ACE inhibitors or ABSs, Digoxin, Diuretics, Anticonvulsants, and Total).* All seven indicator national change rates under the *Board Certification* measure within the Health Plan Descriptive Information are non reportable.

Additionally, because of HEDIS specification changes during the reporting years, national change rates for seven measures are not reported. Measures and or indicators include the following: Breast Cancer Screening (42-69 Years), Cervical Cancer Screening, Cholesterol Management for Patients with Cardiovascular Conditions (LDL-C Screening, and <100 LDL-C Level), Controlling High Blood Pressure and Comprehensive Diabetes Care (LDL-C Screening, Monitoring Diabetic Nephropathy). Readers are advised to use caution when trending such measures (the mean change is replaced with TC in the tables).

### **Relative to National Regional Performance**

The five regional rates for all the valid measures for all three years were compared against the national benchmark for that measure. Each table displays the relative regional performance by indicating whether the rates were significantly above, below or indicated no difference. This section highlights the significant differences (high or low) in the regional rates relative to the national rate for 2008.

#### Effectiveness of Care

Significant differences (high or low) between regional and national rates were mostly observed in the North East and South. Overall, the regional rates for Mid-Atlantic, Mid-West and the West were not significantly different from the national average.

The North East region performed lower than the national rate in all the *Childhood Immunization Status* measure indicators but performed consistently higher for all the *Follow-Up Care for Children Prescribed ADHD Medication Management* and the *Follow-Up after Hospitalization for Mental Illness* measures. The North East region also performed above the national average in *Breast Cancer Screening, Appropriate Testing for Children With Pharyngitis, Use of Spirometry Testing in the Assessment and Diagnosis of COPD, Disease Modifying Anti-Rheumatic Drug Therapy for Rheumatoid Arthritis and Use of Imaging Studies for Low Back Pain.* 

The North East Region performed significantly below the national averages for the three out of four indicators in the *Use of Appropriate Medications for People with Asthma* while, the other regions were not significantly different from the national average except for the South Region; which was significantly higher in the *Use of Appropriate Medications for People With Asthma* (5-9 Years) indicator.

Five of the eight Comprehensive Diabetes Care measure indicator rates for the South region were significantly lower than the national average except for the *Comprehensive Diabetes Care (LDL-C Screening)* which performed higher. The others were not significantly different from the national average. South Region also performed lower than the national average in *Breast Cancer Screening, Cervical Cancer Screening, Appropriate Treatment for Children with Upper Respiratory Infection, Controlling High Blood Pressure, Use of Imaging Studies for Low Back Pain, Follow-up After Hospitalization for Mental Illness - 7 Days and Follow-up After Hospitalization for Mental Illness - 30 Days.* 

There was no significant difference in any of regional rates for Antidepressant Medication Management, Annual Monitoring for Patients on Persistent Medications measure indicators, Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis and Cholesterol Management for Patients With Cardiovascular Conditions.

#### Access/Availability of Care

The only region that performed significantly different than the national average for the *Children* and *Adolescents' Access to Primary Care Practitioners* measure indicators was the North East

Region; performing below in the *Children and Adolescents Access to Primary Care Practitioners* (12-24 Months).

Region South performed below the national average in two out of the three *Adults' Access to Preventive/Ambulatory Health Services* measure indicators.

Of the *Annual Dental Visits* measure indicators, *Annual Dental Visits* (19-21 Years) was the only one with a region (North East) performing significantly higher than the national rate.

No region performed significantly higher than the national rates for the *Prenatal and Postpartum Care* indicators. The South Region performed below the national average for both indicators.

#### Use of Services

North East performed above the national average in the Well-Child Visits in the First 15 Months of Life (Zero Visits and One Visit). South Region performed above the national average in four of the Well-Child Visits in the First 15 Months of Life indicators (Two, Three, Four and Five Visits). Mid Atlantic performed above the national average in Well-Child Visits in the First 15 Months of Life (Six or More Visits), Well Child Visits in the Third, Fourth, Fifth and Sixth Years of Life and the Adolescent Well-Care Visits measures.

No region performed significantly different from the national average for the *Frequency of Ongoing Prenatal Care* measure indicators.

#### Health Plan Descriptive Information

For the regions with reportable data in the Health Plan Descriptive Information, none of them performed significantly different from the national average on the *Board Certification* measure. North East Region performed below the national average in *Weeks of Pregnancy at Time of Enrollment (Unknown)* while South is the only region that performed significantly higher in the *Weeks of Pregnancy at Time of Enrollment (First 12 Weeks of Pregnancy)* indicator.

# **Additional Analysis**

#### Plan vs. State Calculated Rates

In the Criteria Survey, several states indicated that either their state Medicaid agency or EQRO vendor calculated the performance rates rather than the health plans, as specified in HEDIS. For these states, NCQA conducted an analysis of the state submitted supplemental data (rates calculated by the state or vendor) versus the same states health plan data (rates calculated by the health plan) in the existing HEDIS database. Because NCQA could only analyze the supplemented state/ vendor calculated rates against plans that were in the existing HEDIS database, there were a very limited number of plans and states for which this analysis could be conducted. With the limitations of this analysis in mind, there seems to be an indication that plan calculated rates are generally higher than the state or vendor calculated rates. In one state, 10 measures were analyzed and with the exception of three measures, health plan calculated rates were higher than state or vendor calculated rates. In another state, we analyzed 14 measures and in six cases state or vendor calculated rates were higher than the health plan calculated rates. The difference in rates may be due to health plans access to more data sources than the state or

vendor, which may avail health plans in capturing more numerator events. Because state level reporting is not included in this report, rates for these measures are not displayed.

#### Hybrid vs. Administrative Calculations

The hybrid data collection methodology allows for health plans to use both claims and medical record data as sources for measure results. This methodology typically allows for a more precise measure of performance, while also allowing the plans to use a sample rather than the entire eligible population as is required by the administrative methodology. Some state Medicaid agencies require that their health plans use the administrative methodology for measures which NCQA allows the Hybrid methodology. Using a limited data set, NCQA assessed the difference in rates calculated by the two different methodologies, comparing the supplemental data for which states required the administrative method, against HEDIS data where the hybrid methodology was used. For most measures, the rates calculated using the Hybrid methodology here higher than rates using the administrative methodology. See Appendix L for results.

Medicaid Benchmarking Final Report

# MEDICAID PERFORMANCE BENCHMARKS

#### **Effectiveness of Care**

This section includes health plan performance results for measures in the Effectiveness of Care domain. These measures indicated the percentage of people who received clinically recommended and needed services. Higher rates indicate better performance.

The Effectiveness of Care domain is further broken down into six sub-domains. The following measures are included in this section:

#### Prevention and Screening

- Childhood Immunization Status
- Lead Screening in Children
- Breast Cancer Screening
- Cervical Cancer Screening
- Chlamydia Screening in Women

#### **Respiratory Conditions**

- Appropriate Testing for Children with Pharyngitis
- Appropriate Treatment for Children with Upper Respiratory Infection
- Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis
- Use of Spirometry Testing in the Assessment and Diagnosis of COPD
- Use of Appropriate Medications for People With Asthma

#### Cardiovascular Conditions

- Cholesterol Management for Patients With Cardiovascular Conditions
- Controlling High Blood Pressure
- Persistence of Beta-Blocker Treatment After a Heart Attach

#### Comprehensive Diabetes Care

#### Musculoskeletal Conditions

- Disease Modifying Anti-Rheumatic Drug Therapy for Rheumatoid Arthritis
- Use of Imaging Studies for Low Back Pain

#### **Medication Management**

- Antidepressant Medication Management
- Follow-Up Care for Children Prescribed ADHD Medication
- Follow-Up After Hospitalization for Mental Illness
- Annual Monitoring for Patients on Persistent Medications

#### Childhood Immunization Status

The percentage of children two years of age who had four diphtheria, tetanus and acellular pertussis (DTaP), three polio (IPV), one measles, mumps and rubella (MMR), three H influenza type B (HiB), three hepatitis B, one chicken pox (VZV) and four pneumococcal conjugate vaccines by their second birthday. The measure calculates a rate for each vaccine and two separate combination rates.

#### **Numerators**

- **DTaP** Four DTaP vaccinations, with different dates of service on or before the child's second birthday. Do not count any vaccination administered prior to 42 days after birth.
  - IPV At least three IPV vaccinations, with different dates of service on or before the child's second birthday. IPV administered prior to 42 days after birth cannot be counted.
- **MMR** At least one MMR vaccination, with a date of service falling on or before the child's second birthday.
  - *HiB* Three HiB vaccinations, with different dates of service on or before the child's second birthday. HiB administered prior to 42 days after birth cannot be counted.

**Note:** Because one particular type of HiB vaccine requires only three doses, the HEDIS measure requires the organization to meet the minimum possible standard of three doses, rather than the recommended four doses.

- **Hepatitis B** Three hepatitis B vaccinations, with different dates of service on or before the child's second birthday.
  - **VZV** At least one VZV vaccination, with a date of service falling on or before the child's second birthday.

**Pneumococcal** At least four pneumococcal conjugate vaccinations, with different dates of service conjugate on or before the child's second birthday.

Combination 2 Children who received four DTaP; three IPV; one MMR; three HiB; three hepatitis (DTaP, IPV, MMR, HiB, hepatitis B, VZV)

Combination 3
(DTaP, IPV, MMR,
HiB, hepatitis B,
VZV,
pneumococcal
conjugate)

Children who received all antigens listed in Combination 2 and four pneumococcal
conjugate vaccinations on or before the child's second birthday.

		Childho	ood Imn	nunizatio	on Statu	ıs - DTal	P/DT Ra	ite			
				Absolut	te Rate				Relati	ve to Na	tional
	2006 N									2007	2008
National Rate	169	76.6	148	78.5	162	78.1	1.4				
North East	46	78.6	23	77.1	29	72.7	-5.9	\$	0	0	0
Mid Atlantic	23	79.7	27	79.4	26	79.8	0.1	\$	0	0	0
South	20	68.2	NA	NA	23	76.3	8.2	\$	0	NA	0
Mid-West	51	74.1	44	77.4	47	78.8	4.6	\$	0	0	0
West	29	81.2	37	79.8	37	81.1	-0.1	\$	0	0	0

		Childl	hood Im	ımuniza	tion Sta	tus - MI	MR Rate	e			
					Relative to National						
	2006 N									2007	2008
National Rate	170	89.1	148	90.4	162	90.5	1.5	⇔			
North East	46	90.4	23	89.7	29	87.8	-2.6	\$	0	0	0
Mid Atlantic	24	89.5	27	90.9	26	90.3	0.8	\$	0	0	0
South	20	87.9	NA	NA	23	90.3	2.4	\$	0	NA	0
Mid-West	51	86.4	44	88.2	47	90.8	4.4	\$	0	0	0
West	29	92.0	37	92.4	37	92.6	0.6	\$	0	0	0

		Child	dhood II	mmuniz	ation St	atus - IF	V Rate				
					Relative to Nation						
	2006 N									2007	2008
National Rate	168	84.1	148	87.2	162	87.5	3.4	<b>^</b>			
North East	46	85.3	23	85.3	29	82.0	-3.3	\$	0	0	0
Mid Atlantic	23	87.6	27	87.4	26	89.4	1.8	\$	0	0	0
South	NA	NA	NA	NA	23	85.5	NA	<b></b>	NA	NA	0
Mid-West	51	82.6	44	85.8	47	89.0	6.4	\$	0	0	0
West	29	89.2	37	88.9	37	89.9	0.7	<b>\$</b>	0	0	0

		Child	dhood Ir	nmuniz	ation St	atus - H	IB Rate				
					Relative to National						
	2006 N									2007	2008
National Rate	170	86.1	148	88.3	162	87.9	1.7	⇔			
North East	46	85.9	23	85.9	29	80.5	-5.3	⇔	0	0	0
Mid Atlantic	24	87.0	27	89.1	26	90.2	3.2	⇔	0	0	0
South	20	81.7	NA	NA	23	87.9	6.2	⇔	0	NA	0
Mid-West	51	84.8	44	85.9	47	88.4	3.6	⇔	0	0	0
West	29	91.0	37	91	37	91.2	0.2	⇔	0	0	0

	(	Childho	od Imm	unizatio	n Status	- Hepa	titis B R	ate			
					Relative to Nation						
	2006 N									2007	2008
National Rate	169	84.9	148	87.6	162	87.4	2.5	⇔			
North East	46	86.3	23	86.1	29	81.2	-5.1	\$	0	0	0
Mid Atlantic	23	86.7	27	87.2	26	88.6	1.9	\$	0	0	0
South	20	75.7	NA	NA	23	85.0	9.4	\$	0	NA	0
Mid-West	51	84.0	44	86.6	47	89.4	5.3	\$	0	0	0
West	29	89.0	37	89	37	90.4	1.4	\$	0	0	0

	Childhood Immunization Status - VZV Rate										
					Relative to National						
	2006 N	2006 Rate	2007 N	2006	2007	2008					
National Rate	170	86.0	148	88.2	162	88.9	2.9	<b>^</b>			
North East	46	87.2	23	87	29	85.9	-1.3	\$	0	0	0
Mid Atlantic	24	88.0	27	89.1	26	89.4	1.4	\$	0	0	0
South	20	84.9	NA	NA	23	89.3	4.3	\$	0	NA	0
Mid-West	51	83.0	44	85.8	47	88.7	5.7	\$	0	0	0
West	29	88.6	37	90.1	37	91.0	2.4	\$	0	0	0

	Childhood Im	munization Sta	tus - Pneumoco	ccal Conjugate F	Rate							
		Absolute Rate Relative to Natio										
	2007 N	2007 N 2007 Rate 2008 N 2008 Rate 2007 200										
National Rate	148	67.4	162	74.2								
North East	23	59.7	29	70.0	0	0						
Mid Atlantic	27	68.6	26	75.3	0	0						
South	NA	NA	23	72.0	NA	0						
Mid-West	44	66.5	47	74.3	0	0						
West	37	71.7	37	77.9	0	0						

Childhood Immunization Status - Combo 2 Rate												
	Absolute Rate									Relative to National		
	2006 N								2006	2007	2008	
National Rate	166	70.0	149	72.5	162	72.5	2.5	⇔				
North East	46	71.0	23	69.8	29	65.9	-5.2	⇔	0	0	0	
Mid Atlantic	23	72.4	27	73.2	26	73.3	0.9	⇔	0	0	0	
South	NA	NA	NA	NA	23	68.6	NA		NA	NA	0	
Mid-West	51	66.3	44	71.5	47	74.1	7.9	⇔	0	0	0	
West	30	73.4	38	74.3	37	77.3	3.9	⇔	0	0	0	

	Childho	od Immunizatio	n Status - Con	nbo 3 Rate							
		Absolute Rate Relative to Nation									
	2007 N	2007 Rate	2008 N	2008 Rate	2007	2008					
National Rate	149	59.7	162	65.8							
North East	23	52.5	29	60.2	0	0					
Mid Atlantic	27	61.1	26	66.8	0	0					
South	NA	NA	23	61.0	NA	0					
Mid-West	44	59.4	47	66.8	0	0					
West	38	63.3	37	71.1	0	0					

#### Note:

- In HEDIS 2008, changes related to numerator evidence were made to the *Childhood Immunization* specifications; trending performance with prior years' data should be considered with caution.
- The *Childhood Immunization Pneumococcal Conjugate and Combo 3* indicators were new for public reporting in HEDIS 2007; therefore no prior year data are available.

- = This region's performance rate is significantly higher than the national average
- **O**= This region's performance rate is equivalent to the national average
- O= This region's performance rate is significantly less than the national average
- $\uparrow$  = Regional or national rate increased significantly from 2006-2008
- ⇔= Regional or national rate did not change significantly from 2006-2008
- **Ψ**= Regional or national rate decreased significantly from 2006-2008

# Lead Screening in Children

The percentage of children two years of age who had one or more capillary or venous lead blood tests for lead poisoning by their second birthday.

Lead Scree	ning in Chil	ldren	
	Absol	ute Rate	Relative to National
	2008 N	2008 Rate	
National Rate	107	61.3	
North East	NA	NA	NA
Mid Atlantic	22	62.6	0
South	23	48.3	0
Mid-West	36	58.8	0
West	NA	NA	NA

#### Note:

• This measure was new measure for public reporting in HEDIS 2008; therefore no prior year data are available.

# **Breast Cancer Screening**

The percentage of women 42–69 years of age who had a mammogram to screen for breast cancer.

			Br	east Ca	ncer Scr	eening							
		Absolute Rate								Relative to National			
	2006 N	006 2006 2007 2007 2008 2008 Change								2007	2008		
National Rate	127	53.2	166	49.8	164	51.2	TC						
North East	26	57.7	42	57.1	42	58.7	TC		•	•	•		
Mid Atlantic	20	53.2	24	44.7	25	46.4	TC		0	0	0		
South	22	48.6	22	45.5	20	41.0	TC		0	0	0		
Mid-West	36	50.4	48	47.0	46	50.0	TC		0	0	0		
West	23	57.0	30	51.1	31	53.2	TC		0	0	0		

#### Note:

• Due to measure specification changes in HEDIS 2007, this measure cannot be trended to prior years'.

- This region's performance rate is significantly higher than the national average
- **O**= This region's performance rate is equivalent to the national average
- O= This region's performance rate is significantly less than the national average

# Cervical Cancer Screening

The percentage of women 21–64 years of age who received one or more Pap tests to screen for cervical cancer during the measurement year or the two years prior to the measurement year.

			C	ervical C	ancer So	reening					
				Absolu	ute Rate				Relativ	ve to Na	tional
	2006 N	2006   2006   2007   2007   2008   2008   Change							2006	2007	2008
National Rate	175	62.2	198	63.5	185	62.7	TC				
North East	24	65.9	42	69.6	29	66.1	TC		0	•	0
Mid Atlantic	24	61.6	26	63.5	25	64.9	TC		0	0	0
South	36	52.4	41	53.2	38	48.1	TC		0	0	0
Mid-West	59	65.8	52	66.5	56	66.8	TC		0	0	0
West	32	64.3	37	64.0	37	67.4	TC		0	0	0

#### Note:

• For HEDIS 2007, the lower age limit was raised to 21 years of age; trending performance over time should be considered with caution.

- = This region's performance rate is significantly higher than the national average
- **O**= This region's performance rate is equivalent to the national average
- O= This region's performance rate is significantly less than the national average

# Chlamydia Screening in Women

The percentage of women 16–25 years of age who were identified as sexually active and who had at least one test for chlamydia during the measurement year.

- 16-20 years
- 21–25 years
- Total

	Chlamydia Screening in Women 16-20 Years													
				Absolu	te Rate				Relat	ive to Na	tional			
	2006 N	2006 Rate	2007 N	nge -2008	2006	2007	2008							
National Rate	143	47.8	152	49.9	⇔									
North East	21	45.0	23	45.3	43	48.3	3.3	\$	0	0	0			
Mid Atlantic	NA	NA	25	50.6	26	50.6	NA		NA	0	0			
South	29	46.9	28	48.4	32	46.0	-0.9	⇔	0	0	0			
Mid-West	47	47.1	41	50.8	42	50.8	3.7	\$	0	0	0			
West	29	51.2	35	52.6	NA	NA	NA		0	0	NA			

	Chlamydia Screening in Women 21-25 Years													
				Absolu	te Rate				Relat	ive to Na	tional			
	2006 N	2006 Rate	2007 N	ange -2008	2006	2007	2008							
National Rate	142	51	151	54.6	<b>1</b>									
North East	21	46.0	23	50.0	43	53.1	7.1	⇔	0	0	0			
Mid Atlantic	NA	NA	25	55.5	26	55.5	NA		NA	0	0			
South	29	53.0	28	55.5	30	53.9	1.4	⇔	0	0	0			
Mid-West	47	51.0	41	55.3	42	56.4	5.7	⇔	0	0	0			
West	28	53.9	34	55.3	NA	NA	NA		0	0	NA			

	Chlamydia Screening in Women Total													
			A	bsolute	Rate				Relat	ive to Nat	tional			
	2006 N	2006 Rate	2007 N	2007 Rate	nge 06- 08	2006	2007	2008						
National Rate	155	49.5	170	51.6	170	51.3	1.9	\$						
North East	21	45.3	23	47.7	43	50.7	5.4	<b>(</b>	0	0	0			
Mid Atlantic	NA	NA	25	52.5	26	52.7	NA		NA	0	0			
South	29	49.1	29	50.8	32	49.2	0.2	<b>(</b>	0	0	0			
Mid-West	59	49.3	52	51.9	53	52.2	2.9	\$	0	0	0			
West	29	52.7	41	53.3	NA	NA	NA		0	0	NA			

- = This region's performance rate is significantly higher than the national average
- **O**= This region's performance rate is equivalent to the national average
- O= This region's performance rate is significantly less than the national average
- ↑ = Regional or national rate increased significantly from 2006-2008
- ⇔= Regional or national rate did not change significantly from 2006-2008
- **Ψ**= Regional or national rate decreased significantly from 2006-2008

## Appropriate Testing for Children With Pharyngitis

The percentage of children 2–18 years of age, who were diagnosed with pharyngitis, dispensed an antibiotic and received a group A streptococcus (strep) test for the episode. A higher rate represents better performance (i.e., appropriate testing).

	Appropriate Testing for Children With Pharyngitis													
				Absolu	te Rate	1			Relat	ive to No	ational			
	2006 N	2006 Rate	2007 N	nge -2008	2006	2007	2008							
National Rate	142	51.8	139	57.5	144	59.6	7.8	<b>1</b>						
North East	38	52.8	37	62.9	34	68.8	15.9	⇔	0	•	•			
Mid Atlantic	NA	NA	23	59.5	24	59.9	NA		NA	0	0			
South	30	51.1	21	56.9	31	56.1	4.95	⇔	0	0	0			
Mid-West	48	56.1	41	⇔	0	0	0							
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA			

- This region's performance rate is significantly higher than the national average
- **O**= This region's performance rate is equivalent to the national average
- O= This region's performance rate is significantly less than the national average
- ⇔= Regional or national rate did not change significantly from 2006-2008
- **Ψ**= Regional or national rate decreased significantly from 2006-2008

Appropriate Treatment for Children With Upper Respiratory Infection
The percentage of children 3 months—18 years of age who were given a diagnosis of upper respiratory infection (URI) and were not dispensed an antibiotic prescription.

The measure is reported as an inverted rate [1 – (numerator/eligible population)]. A higher rate indicates appropriate treatment of children with URI (i.e., the proportion for whom antibiotics were not prescribed).

	Appropriate Treatment for Children With Upper Respiratory Infection													
				Absol	ute Rate				Relati	ve to Na	tional			
	2006 N	2006 Rate	2007 N	ige 2008	2006	2007	2008							
National Rate	151	83.3	153	84.3	⇔									
North East	44	85.0	42	84.8	43	86.3	1.2	\$	0	0	0			
Mid Atlantic	NA	NA	23	84.6	24	86.5	NA		NA	0	0			
South	NA	NA	NA	NA	20	78.0	NA		NA	NA	0			
Mid-West	49	82.4	41	84.9	46	84.9	2.5	\$	0	0	0			
West	23	85.1	32	84.4	32	86.9	1.8	\$	0	0	0			

- This region's performance rate is significantly higher than the national average
- **O**= This region's performance rate is equivalent to the national average
- $\bigcirc$ = This region's performance rate is significantly less than the national average
- ↑ = Regional or national rate increased significantly from 2006-2008
- ⇔= Regional or national rate did not change significantly from 2006-2008
- **Ψ**= Regional or national rate decreased significantly from 2006-2008

#### Avoidance of Antibiotic Treatment in Adults With Acute Bronchitis

The percentage of adults 18–64 years of age with a diagnosis of acute bronchitis who were not dispensed an antibiotic prescription.

The measure is reported as an inverted rate [1 - (numerator/eligible population)]. A higher rate indicates appropriate treatment of adults with acute bronchitis (i.e., the proportion for whom antibiotics were not prescribed).

,	Avoidance of Antibiotic Treatment in Adults With Acute Bronchitis													
				Absolu	te Rate				Relativ	ve to Nat	tional			
	2006 N	2006 Rate	2007 N	nge 2008	2006	2007	2008							
National Rate	118	32.3	120	4										
North East	40	34.7	38	48.6	21	25.8	-8.9	⇔	0	•	0			
Mid Atlantic	NA	NA	NA	NA	20	25.1	NA		NA	NA	0			
South	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA			
Mid-West	28	30.5	24	29.5	28	26.1	-4.4	⇔	0	0	0			
West	21	33.4	28	30.1	30	27.8	-5.6	⇔	0	0	0			

- This region's performance rate is significantly higher than the national average
- **O**= This region's performance rate is equivalent to the national average
- O= This region's performance rate is significantly less than the national average
- ↑ = Regional or national rate increased significantly from 2006-2008
- ⇔= Regional or national rate did not change significantly from 2006-2008
- **Ψ**= Regional or national rate decreased significantly from 2006-2008

## Use of Spirometry Testing in the Assessment and Diagnosis of COPD

The percentage of members 40 years of age and older with a new diagnosis or newly active chronic obstructive pulmonary disease (COPD) who received appropriate spirometry testing to confirm the diagnosis.

U	Use of Spirometry Testing in the Assessment and Diagnosis of COPD													
				Absolu	te Rate				Relativ	e to Na	tional			
	2006 N	2006 Rate	2007 N	nge -2008	2006	2007	2008							
National Rate	78	26.6	81	28.6	⇔									
North East	29	28.8	31	33.1	28	35.4	6.6	⇔	0	•	•			
Mid Atlantic	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA			
South	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA			
Mid-West	21	27.0	NA	NA	24	29.0	2.0	⇔	0	NA	0			
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA			

- = This region's performance rate is significantly higher than the national average
- **O**= This region's performance rate is equivalent to the national average
- ○= This region's performance rate is significantly less than the national average
- ↑ = Regional or national rate increased significantly from 2006-2008
- ⇔= Regional or national rate did not change significantly from 2006-2008
- **Ψ**= Regional or national rate decreased significantly from 2006-2008

# Use of Appropriate Medications for People With Asthma

The percentage of members 5–56 years of age during the measurement year who were identified as having persistent asthma and who were appropriately prescribed medication during the measurement year.

Plans report three age stratifications and a total rate.

- 5–9 years
- 10–17 years
- 18–56 years
- Total

Use of Appropriate Medications for People With Asthma 5-9 Years													
			A	Absolute	e Rate				Relativ	ve to Nat	ional		
	2006 N	2006 Rate	2007 N	nge -2008	2006	2007	2008						
National Rate	162	84.67	157	<b>↑</b>									
North East	42	81.1	38	88.6	39	84.8	3.7	\$	0	0	0		
Mid Atlantic	20	90.9	20	89.2	22	91.4	0.5	\$	0	0	0		
South	37	80.2	32	92.2	24	93.8	13.6	\$	0	0	•		
Mid-West	38	87.5	36	88.5	34	90.7	3.1	\$	0	0	0		
West	25	87.9	31	90.4	29	90.4	2.4	\$	0	0	0		

Use of Appropriate Medications for People With Asthma 10-17 Years													
			-	Absolut	e Rate				Relativ	ve to Nat	ional		
	2006 N	2006 Rate	2007 N	2006	2007	2008							
National Rate	162	82.4	159	87.2	<b>↑</b>								
North East	42	79.8	38	87.0	39	84.2	4.4	\$	0	0	0		
Mid Atlantic	21	87.8	21	87.1	23	89.9	2.1	<b>↑</b>	0	0	0		
South	34	77.9	31	90.1	22	88.3	10.4	\$	0	0	0		
Mid-West	39	84.7	36	85.1	35	87.4	2.7	\$	0	0	0		
West	26	84.4	33	87.0	31	87.7	3.3	\$	0	0	0		

U	Use of Appropriate Medications for People With Asthma 18-56 Years													
				Absolut	te Rate				Relati	ve to Nat	tional			
	2006 N	2006 Rate	2007 N	ange -2008	2006	2007	2008							
National Rate	153	81.4	155	84.4	<b>^</b>									
North East	43	80.9	40	86.9	42	84.4	3.5	⇔	0	0	0			
Mid Atlantic	20	85.8	20	84.4	21	86.8	0.9	⇔	0	0	0			
South	26	77.9	23	83.8	23	86.4	8.6	⇔	0	0	0			
Mid-West	37	80.2	38	81.9	38	83.5	3.4	⇔	0	0	0			
West	27	84.1	34	84.7	32	85.3	1.2	<b>⇔</b>	0	0	0			

	se o	f Appro	priate I	Medicat	ions fo	r People	e With	Asthma	a Total		
			,	Absolut	e Rate				Relat	ive to Nat	ional
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	Cha 2006-	_	2006	2007	2008
National Rate	169	84.2	171	86.9	<b>↑</b>						
North East	43	81.2	41	87.9	42	84.9	3.7	\$	0	0	0
Mid Atlantic	21	87.9	21	86.9	23	89.4	1.4	\$	0	0	0
South	25	83.0	25	88.0	26	89.1	6.1	\$	0	0	0
Mid-West	53	85.3	50	85.5	50	86.6	1.4	\$	0	0	0
West	27	85.0	34	86.8	32	87.3	2.3	\$	0	0	0

- = This region's performance rate is significantly higher than the national average
- **O**= This region's performance rate is equivalent to the national average
- O= This region's performance rate is significantly less than the national average
- ⇔= Regional or national rate did not change significantly from 2006-2008
- **Ψ**= Regional or national rate decreased significantly from 2006-2008

## Cholesterol Management for Patients With Cardiovascular Conditions

The percentage of members 18–75 years of age who were discharged alive for acute myocardial infarction (AMI), coronary artery bypass graft (CABG) or percutaneous transluminal coronary angioplasty (PTCA) from January 1–November 1 of the year prior to the measurement year, or who had a diagnosis of ischemic vascular disease (IVD) during the measurement year and the year prior to measurement year, who had each of the following during the measurement year.

- LDL-C screening
- LDL-C control (<100 mg/dL)

Cholester	Cholesterol Management for Patients With Cardiovascular Conditions-LDL-C Screening													
			-	Absolute	Rate				Relativ	e to Nat	ional			
	2006 N	2006 Rate	2007 N	nge 2008	2006	2007	2008							
National Rate	105	64.2	96											
North East	40	67.7	33	80.7	37	78.4	TC		0	•	0			
Mid Atlantic	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA			
South	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA			
Mid-West	28	59.4	24	71.9	31	76.5	TC		0	0	0			
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA			

Cholesterol Management for Patients With Cardiovascular Conditions <100 LDL-C													
			Á	Absolute	Rate				Relativ	ve to Nat	rional		
	2006 N	2006 Rate	2007 N	ge :008	2006	2007	2008						
National Rate	101	31.1	94										
North East	39	33.2	33		•	•	0						
Mid Atlantic	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
South	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
Mid-West	26	33.1	23		0	0	0						
West	NA	NA	NA		NA	NA	NA						

#### Note:

• Due to measure specification changes in HEDIS 2007, this measure cannot be trended to prior years'.

- = This region's performance rate is significantly higher than the national average
- **O**= This region's performance rate is equivalent to the national average
- ○= This region's performance rate is significantly less than the national average

## Controlling High Blood Pressure

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

	Controlling High Blood Pressure													
				Absolut	e Rate				Relative	to Nati	onal			
	2006 N	2006 Rate	2007 N	nge 2008	2006	2007	2008							
National Rate	NA	NA	94	53.0										
North East	NA	NA	21	54.7	23	53.2	NA		NA	0	0			
Mid Atlantic	NA	NA	NA	NA	21	52.9	NA		NA	NA	0			
South	NA	NA	NA	NA	30	44.1	NA		NA	NA	0			
Mid-West	NA	NA	26	52.3		NA	0	0						
West	NA	NA	NA	NA		NA	NA	NA						

#### Note:

• Due to measure specification changes in HEDIS 2007 to expand the age band, define adequate control as <140/90, and determine representative blood pressure; results for this measure cannot be trended to prior years'.

- This region's performance rate is significantly higher than the national average
- **O**= This region's performance rate is equivalent to the national average
- O= This region's performance rate is significantly less than the national average

## Persistence of Beta-Blocker Treatment After a Heart Attack

The percentage of members 18 years of age and older during the measurement year who were hospitalized and discharged alive from July 1 of the year prior to the measurement year to June 30 of the measurement year with a diagnosis of acute myocardial infarction (AMI) and who received persistent beta-blocker treatment for six months after discharge.

Per	Persistence of Beta Blocker After A Heart Attack													
			ļ	Absolute	Rate									
	2006 N	N Rate N Rate N Rate 2006-2008												
National Rate	27	<b>7 65.58 27 68.1 39 62.0 -</b> 3.6 ⇔												
North East	NA	NA	NA	NA	NA	NA								
Mid Atlantic	NA	NA	NA	NA	NA	NA								
South	NA	NA	NA	NA	NA	NA								
Mid-West	NA	NA NA NA NA NA												
West	NA	NA	NA	NA	NA	NA								

#### Note:

• In HEDIS 2008, the lower age limit was decreased to 18; trending performance over time should be considered with caution.

#### Legend:

⇔= Regional or national rate did not change significantly from 2006-2008

**Ψ**= Regional or national rate decreased significantly from 2006-2008

# Comprehensive Diabetes Care (CDC)

The percentage of members 18–75 years of age with diabetes (type 1 and type 2) who had each of the following.

- Hemoglobin A1c (HbA1c) testing
- HbA1c poor control (>9.0%)
- Eye exam (retinal) performed
- LDL-C screening
- LDL-C control (<100 mg/dL)
- Medical attention for nephropathy
- Blood pressure control (<130/80 mm Hg)
- Blood pressure control (<140/90 mm Hg)

	Comprehensive Diabetes Care-HbA1c Testing													
	Absolute Rate													
	2006 N	2006 Rate	2007 N	ige 2008	2006	2007	2008							
National Rate	155	74.6	177	<b>↑</b>										
North East	24	67.1	42	79.3	42	74.8	7.7	\$	0	•	0			
Mid Atlantic	24	76.7	26	77.1	25	76.9	0.2	\$	0	0	0			
South	25	72.9	22	57.0	35	76.0	3.1	\$	0	0	0			
Mid-West	58	76.9	53	\$	0	0	0							
West	24	76.2	34	80.7	35	81.2	5.0	\$	0	0	0			

	Comprehensive Diabetes Care-Poor HbA1c Control												
				Absolut	e Rate				Relati	ve to No	itional		
	2006 N	2006 Rate	2007 N	nge 2008	2006	2007	2008						
National Rate	132	50.0	151	⇔									
North East	24	55.2	42	43.9	42	47.7	-7.5	⇔	0	•	0		
Mid Atlantic	23	45.4	26	48.4	25	48.5	3.1	⇔	0	0	0		
South	20	57.1	NA	NA	36	55.1	-1.9	⇔	0	NA	•		
Mid-West	49	46.5	42	⇔	0	0	0						
West	NA	NA	24		NA	0	0						

	Comprehensive Diabetes Care- Eye Exams												
	Absolute Rate												
	2006 N	2006 Rate	2007 N	ange 5-2008	2006	2007	2008						
National Rate	146	46.1	175	⇔									
North East	24	42.4	42	53.3	42	51.0	8.6	⇔	0	0	0		
Mid Atlantic	24	47.7	26	51.1	25	50.4	2.7	\$	0	0	0		
South	25	33.2	31	34.0	44	36.8	3.6	<b>⇔</b>	0	0	0		
Mid-West	49	49.2	42	\$	0	0	0						
West	24	54.9	34	<b>\$</b>	0	0	0						

	Comprehensive Diabetes Care- LDL-C Screening													
	Absolute Rate													
	2006 N	2006 Rate	2007 N	ange 5-2008	2006	2007	2008							
National Rate	155	77.8	187											
North East	24	73.3	42	76.1	42	71.5	TC		0	•	0			
Mid Atlantic	24	81.9	26	71.2	25	72.2	TC		0	0	0			
South	25	79.2	32	59.0	44	71.1	TC		0	0	0			
Mid-West	58	75.4	53		0	0	0							
West	24	82.6	34		0	0	0							

	Comprehensive Diabetes Care- Mon Diabetic Nephropathy												
				Absolut	e Rate				Relati	ve to Na	itional		
	2006 N	2006 Rate	2007 N	nge 2008	2006	2007	2008						
National Rate	146	47.2	176										
North East	24	42.4	42	76.7	42	75.0	TC		0	0	0		
Mid Atlantic	24	49.0	26	73.3	25	74.8	TC		0	0	0		
South	25	40.4	32	60.3	29	70.5	TC		0	0	0		
Mid-West	49	48.4	42		0	0	0						
West	24	54.5	34	79.0	35	78.0	TC		0	0	0		

	Comprehensive Diabetes Care < 100 LDL-C Level													
				Absolut	e Rate				Relati	ve to Na	tional			
	2006 N	2006 Rate	2007 N	nge -2008	2006	2007	2008							
National Rate	130	31.5	159	\$										
North East	24	26.8	41	33.5	41	32.3	5.5	\$	0	0	0			
Mid Atlantic	23	37.8	26	34.4	25	34.3	-3.5	\$	•	0	0			
South	NA	NA	27	26.0	45	22.0	NA		NA	0	0			
Mid-West	49	31.4	42	\$	0	0	0							
West	NA	NA	23		NA	0	0							

	Comprehensive Diabetes Care Blood Pressure Control <130/80													
		Absol	ute Rate		Relative to	o National								
	2007 N	2007 Rate	2008 N	2008 Rate	2007	2008								
National Rate	145	145 30.1 156 28.3												
North East	41	28.7	41	27.9	0	0								
Mid Atlantic	26	28.1	25	28.3	0	0								
South	NA	NA	29	18.0	NA	0								
Mid-West	41	32.1	36	34.4	0	0								
West	21	34.5	25	32.3	0	0								

	Compreher	nsive Diabetes	Care Blood P	ressure Contro	ol <140/90									
		Absol	ute Rate		Relative to I	National								
	2007 N	2007 Rate	2008 N	2008 Rate	2007	2008								
National Rate	145	145 57.3 156 53.4												
North East	41	59.3	41	56.4	0	0								
Mid Atlantic	26	54.2	25	53.0	0	0								
South	NA	NA	29	34.0	NA	0								
Mid-West	41	58.5	36	61.5	0	0								
West	21	60.4	25	59.5	0	0								

#### **Note:**

• CDC- Blood Pressure Control <130/80 mmHg and Blood Pressure Control <140/90 mm Hg indicators were new for public reporting in HEDIS 2007; therefore no prior year data are available.

- = This region's performance rate is significantly higher than the national average
- **O**= This region's performance rate is equivalent to the national average
- O= This region's performance rate is significantly less than the national average
- ⇔= Regional or national rate did not change significantly from 2006-2008
- **Ψ**= Regional or national rate decreased significantly from 2006-2008

*Disease Modifying Anti-Rheumatic Drug Therapy for Rheumatoid Arthritis*The percentage of members who were diagnosed with rheumatoid arthritis and who were dispensed at least one ambulatory prescription for a disease modifying anti-rheumatic drug (DMARD).

Disc	Disease Modifying Anti-Rheumatic Drug Therapy for Rheumatoid Arthritis													
				Absolu	te Rate				Relativ	e to Nati	ional			
	2006 N	N Rate N Rate N Rate 2006-2008								2007	2008			
National Rate	72	64.7	71	67.5	⇔									
North East	29									0	•			
Mid Atlantic	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA			
South	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA			
Mid-West	NA	NA	NA		NA	NA	NA							
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA			

- This region's performance rate is significantly higher than the national average
- **O**= This region's performance rate is equivalent to the national average
- O= This region's performance rate is significantly less than the national average
- ⇔= Regional or national rate did not change significantly from 2006-2008
- **Ψ**= Regional or N=national rate decreased significantly from 2006-2008

## Use of Imaging Studies for Low Back Pain

The percentage of members with a primary diagnosis of low back pain who did not have an imaging study (plain X-ray, MRI, and CT scan) within 28 days of the diagnosis.

The measure is reported as an inverted rate [1 - (numerator/eligible population)]. A higher score indicates appropriate treatment of low back pain (i.e., the proportion for whom imaging studies did not occur).

	Use of Imaging Studies for Low Back Pain												
			A	Relative to National									
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	Chan 200 200	6-	2006	2007	2008		
National Rate	112	78.64	108	77.9	118	77.5	-1.1	⇔					
North East	39	81.0	37	80.3	34	79.3	-1.7	\$	0	0	•		
Mid Atlantic	NA	NA	NA	NA	21	77.4	NA	\$	NA	NA	0		
South	NA	NA	NA	NA	20	74.5	NA	⇔	NA	NA	0		
Mid-West	32	75.95	27	74.8	31	77.1	1.2	⇔	0	0	0		
West	NA	NA	NA	NA	NA	NA	NA	⇔	NA	NA	NA		

- This region's performance rate is significantly higher than the national average
- **O**= This region's performance rate is equivalent to the national average
- O= This region's performance rate is significantly less than the national average
- ↑ = Regional or national rate increased significantly from 2006-2008
- ⇔= Regional or national rate did not change significantly from 2006-2008
- **Ψ**= Regional or national rate decreased significantly from 2006-2008

#### **Antidepressant Medication Management**

The following components of this measure assess different facets of the successful pharmacological management of major depression.

- Optimal Practitioner Contacts for Medication Management. The percentage of members 18 years of age and older as of April 30 of the measurement year who were diagnosed with a new episode of major 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 (12-week) Acute Treatment Phase. At least one of the three follow-up contacts must be with a prescribing practitioner.
- Effective Acute Phase Treatment. The percentage of members 18 years of age and older as of April 30 of the measurement year who were diagnosed with a new episode of major depression, were treated with antidepressant medication and remained on an antidepressant drug during the entire 84-day (12-week) Acute Treatment Phase.
- Effective Continuation Phase Treatment. The percentage of members 18 years of age and older as of April 30 of the measurement year who were diagnosed with a new episode of major depression and treated with anti-depressant medication and who remained on an antidepressant drug for at least 180 days.

Antide	Antidepressant Medication Management- Optimal Pract. Contacts for Med Mgt.												
			,	Relative	to Nati	onal							
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate		nge -2008	2006	2007	2008		
National Rate	53	24	53	23.4	59	24.2	0.2	\$					
North East	29	28.2	30	26.5	31	28.9	0.7	\$	•	•	0		
Mid Atlantic	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
South	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
Mid-West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		

Ant	Antidepressant Medication Management Effect. Acute Phase Treatment												
			,	Relativ	e to Nati	onal							
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate		nge -2008	2006	2007	2008		
National Rate	64	46	60	43.6	67	43.7	-2.4	\$					
North East	31	43.3	30	41.9	31	42.4	-0.9	\$	0	0	0		
Mid Atlantic	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
South	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
Mid-West	23	53.0	NA	NA	NA	NA	NA		0	NA	NA		
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		

Antide	Antidepressant Medication Management Effect. Continuation Phase Treatment												
			,	Relativ	e to Nati	onal							
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate		nge -2008	2006	2007	2008		
National Rate	64	29.2	60	27.6	67	26.8	-2.5	\$					
North East	31	27.2	30	27.1	31	27.0	-0.1	\$	0	0	0		
Mid Atlantic	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
South	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
Mid-West	23	34.7	NA	NA	NA	NA	NA		0	NA	NA		
West	NA	NA	NA	NA	NA		NA		NA	NA	NA		

- = This region's performance rate is significantly higher than the national average
- **O**= This region's performance rate is equivalent to the national average
- O= This region's performance rate is significantly less than the national average
- ⇔= Regional or national rate did not change significantly from 2006-2008
- **Ψ**= Regional or national rate decreased significantly from 2006-2008

## Follow-Up Care for Children Prescribed ADHD Medication

The percentage of children newly prescribed attention-deficit/hyperactivity disorder (ADHD) medications who have at least three follow-up care visits within a 10-month period, one of which is within 30 days of when the first ADHD medication was dispensed. Two rates are reported.

- 1. **Initiation Phase**. The percentage of members 6–12 years of age as of the Index Prescription Episode Start Date with an ambulatory prescription dispensed for ADHD medication, who had one follow-up visit with practitioner with prescribing authority during the 30-day Initiation Phase.
- 2. **Continuation and Maintenance (C&M) Phase.** The percentage of members 6–12 years of age as of the Index Prescription Episode Start Date with an ambulatory prescription dispensed for ADHD medication, who remained on the medication for at least 210 days and who, in addition to the visit in the Initiation Phase, had at least two follow-up visits with a practitioner within 270 days (9 months) after the Initiation Phase ended.

F	Follow-Up Care For Children Prescribed ADHD Management- Initiation												
	Absolute Rate									Relative to National			
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate		ange 5-2008	2006	2007	2008		
National Rate	87	32.4	97	32.7	106	36.4	3.9	<b>↑</b>					
North East	34	36.1	33	38.6	33	49.5	13.4	⇔	0	•	•		
Mid Atlantic	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
South	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
Mid-West	35	30.1	35	31.1	38	33.1	3.0	⇔	0	0	0		
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		

Follow-Up (	Follow-Up Care For Children Prescribed ADHD Management- Continuation											
	Ab	solute Rate	Relative to National									
	2008 N	2008 Rate	2008									
National Rate	86	41.9										
North East	25	58.8	•									
Mid Atlantic	NA	NA	NA									
South	NA	NA	NA									
Mid-West	32	38.8	0									
West	NA	NA	NA									

#### **Note:**

• This Follow-Up Care for Children Prescribed ADHD Management and Continuation Phase indicator was newly reported in HEDIS 2008; therefore no prior year data are available.

- = This region's performance rate is significantly higher than the national average
- **O**= This region's performance rate is equivalent to the national average
- O= This region's performance rate is significantly less than the national average

## Follow-Up After Hospitalization for Mental Illness

The percentage of discharges for members 6 years of age and older who were hospitalized for treatment of selected mental health disorders and who had an outpatient visit, an intensive outpatient encounter or partial hospitalization with a mental health practitioner. Two rates are reported.

- 1. The percentage of members who received follow-up within 7 days of discharge
- 2. The percentage of members who received follow-up within 30 days of discharge

	Follow-Up After Hospitalization for Mental Illness- 7 Days												
					Relativ	e to Na	tional						
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	Cha 2006-		2006	2007	2008		
National Rate	68	37.2	72	41.4	84	42.9	5.7	⇔					
North East	32	54.6	33	57.0	34	58.9	4.3	⇔	•	•	•		
Mid Atlantic	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
South	NA	NA	NA	NA	24	28.3	NA		NA	NA	0		
Mid-West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		

	Follow-Up After Hospitalization for Mental Illness- 30 Days												
					Relative to National								
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	Cha 2006-	_	2006	2007	2008		
National Rate	68	52	72	59.5	84	62.2	10.2	<b>^</b>					
North East	32	70.2	33	73.0	34	75.3	5.2	<b>\$</b>	•	•	•		
Mid Atlantic	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
South	NA	NA	NA	NA	24	49.0	NA		NA	NA	0		
Mid-West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		

- = This region's performance rate is significantly higher than the national average
- **O**= This region's performance rate is equivalent to the national average
- $\bigcirc$ = This region's performance rate is significantly less than the national average
- ↑ = Regional or national rate increased significantly from 2006-2008
- ⇔= Regional or national rate did not change significantly from 2006-2008
- **Ψ**= Regional or national rate decreased significantly from 2006-2008

# Annual Monitoring for Patients on Persistent Medications

The percentage of members 18 years of age and older who received at least a 180-days supply of ambulatory medication therapy for a select therapeutic agent during the measurement year and at least one therapeutic monitoring event for the therapeutic agent in the measurement year. Annual monitoring for members on angiotensin converting enzyme (ACE) inhibitors or angiotensin receptor blockers (ARB).

- Annual monitoring for members on digoxin
- Annual monitoring for members on diuretics
- Annual monitoring for members on anticonvulsants
- Total rate

Anı	Annual Monitoring for Patients on Persistent Medications - Ace Inhibitors											
		Absolut	Relative to	National								
	2007 N	2007 Rate	2008 N	2008 Rate	2007	2008						
National Rate	112	80.5	119	83.0								
North East	39	80.2	36	81.9	0	0						
Mid Atlantic	NA	NA	20	84.3	NA	0						
South	NA	NA	NA	NA	NA	NA						
Mid-West	32	77.8	36	81.6	0	0						
West	NA	NA	NA	NA	NA	NA						

	Annual Monitoring for Patients on Persistent Medications - Digoxin											
		Absolut	Relative to National									
	2007 N	2007 Rate	2007	2008								
National Rate	60	83.7	68	85.6								
North East	NA	NA	NA	NA	NA	NA						
Mid Atlantic	NA	NA	NA	NA	NA	NA						
South	NA	NA	NA	NA	NA	NA						
Mid-West	NA	NA	NA	NA	NA	NA						
West	NA	NA	NA	NA	NA	NA						

A	Annual Monitoring for Patients on Persistent Medications- Diuretics											
		Absolut	Relative to National									
	2007 N	2007 Rate	2008 N	2008 Rate	2007	2008						
National Rate	111	79.7	119	81.8								
North East	38	79	36	80.5	0	0						
Mid Atlantic	NA	NA	20	82.5	NA	0						
South	NA	NA	NA	NA	NA	NA						
Mid-West	32	77.3	36	80.7	0	0						
West	NA	NA	NA	NA	NA	NA						

Annı	Annual Monitoring for Patients on Persistent Medications- Anticonvulsants											
		Absolut	Relative to National									
	2007 N	2007 Rate	2008 N	2008 Rate	2007	2008						
National Rate	97	64.3	107	66.1								
North East	35	61.8	33	65.2	0	0						
Mid Atlantic	NA	NA	NA	NA	NA	NA						
South	NA	NA	NA	NA	NA	NA						
Mid-West	25	69.4	31	68.7	0	0						
West	NA	NA	NA	NA	NA	NA						

Annual Monitoring for Patients on Persistent Medications - Total										
		Relative to National								
	2007 N	2007	2008							
National Rate	29	76.6	130	78.9						
North East	18	78.5	36	80.4	0	0				
Mid Atlantic	NA	NA	20	81.1	NA	0				
South	NA	NA	NA	NA	NA	NA				
Mid-West	11	71.4	47	74.8	0	0				
West	NA	NA	NA	NA	NA	NA				

# **Note:**

• Annual Monitoring for Patients on Persistent Medications was a first year measure for public reporting in HEDIS 2007.

- = This region's performance rate is significantly higher than the national average
- **O**= This region's performance rate is equivalent to the national average
- $\bigcirc$ = This region's performance rate is significantly less than the national average

# Access and Availability of Care

This section presents results for measures in the Access and Availability of Care domain. These measures are designed to approximate the level of access that members have to their health care delivery systems. Measures included in this section include:

- Adults' Access to Preventive/ Ambulatory Health Services
- Children's and Adolescents' Access to Primary Care Practitioners
- Annual Dental Visit
- Prenatal and Postpartum Care

## Adults' Access to Preventive/ Ambulatory Health Services

The percentage of members 20 years and older who had an ambulatory or preventive care visit during the measurement year. Two age bands are reported.

- Ages 20-44
- Ages 45-64

Adults' Access to Preventive/ Ambulatory Health Services 20-44 Years													
	Absolute Rate									Relative to National			
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	Cha 2006-	•	2006	2007	2008		
National Rate	144	75.3	136	77.4	141	77.1	1.8	\$					
North East	44	74.7	41	77.6	41	75.8	1.1	\$	0	0	0		
Mid Atlantic	22	75.1	26	78.1	25	78.0	2.9	\$	0	0	0		
South	20	73.2	NA	NA	22	70.5	-2.8	\$	0	NA	0		
Mid-West	46	78.2	37	80.1	40	82.5	4.3	⇔	0	0	0		
West	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

Adults' Access to Preventive/ Ambulatory Health Services 45-64 Years													
	Absolute Rate									Relative to National			
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	Cha 2006-		2006	2007	2008		
National Rate	143	80.7	134	82.7	141	82.8	2.1	\$					
North East	44	81.3	41	84.0	41	82.9	1.6	⇔	0	0	0		
Mid Atlantic	22	81.7	25	84.2	25	83.9	2.2	\$	0	0	0		
South	NA	NA	NA	NA	22	77.8	NA	NA	NA	NA	0		
Mid-West	46	81.0	37	82.8	40	85.0	4.0	\$	0	0	0		
West	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

- This region's performance rate is significantly higher than the national average
- **O**= This region's performance rate is equivalent to the national average
- O= This region's performance rate is significantly less than the national average
- ↑ = Regional or national rate increased significantly from 2006-2008
- ⇔= Regional or national rate did not change significantly from 2006-2008
- **Ψ**= Regional or national rate decreased significantly from 2006-2008

# *Children's and Adolescents' Access to Primary Care Practitioners*The percentage of members 12 months—19 years of age who had a visit with a PCP.

Children and Adolescents' Access to Primary Care Practitioners 12-24 Months												
				Relative to National								
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	Change 2006-2008		2006	2007	2008	
National Rate	155	90.5	148	92.7	159	93.5	3.0	<b>↑</b>				
North East	44	88.5	42	91.4	43	90.7	2.2	⇔	0	0	0	
Mid Atlantic	23	92.1	26	94.8	26	94.4	2.4	⇔	0	0	0	
South	20	93.6	NA	NA	33	95.0	1.4	⇔	0	NA	0	
Mid-West	46	90.2	35	93.1	39	95.6	5.4	⇔	0	0	0	
West	22	90.8	28	90.7	NA	NA	NA		0	0	NA	

Children and Adolescents' Access to Primary Care Practitioners 25 Months- 6 Years											
				Relati	ve to Nat	ional					
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	Cha 2006-		2006	2007	2008
National Rate	157	81.6	148	84.1	160	84.8	3.2	<b>↑</b>			
North East	44	83.1	42	85.5	43	84.2	1.1	\$	0	0	0
Mid Atlantic	23	84.0	26	86.5	26	85.8	1.8	\$	0	0	0
South	20	82.1	NA	NA	34	86.0	3.9	\$	0	NA	0
Mid-West	48	79.7	35	82.5	39	85.1	5.4	\$	0	0	0
West	22	79.5	28	80.4	NA	NA	NA		0	0	NA

Child	Children and Adolescents' Access to Primary Care Practitioners 7-11 Years											
	Absolute Rate									Relative to National		
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	Change 2006-2008		2006	2007	2008	
National Rate	149	82.1	143	85.3	140	85.8	3.8	<b>↑</b>				
North East	41	85.2	42	88.1	42	87.4	2.2	♦	0	0	0	
Mid Atlantic	22	85.8	25	87.8	26	87.4	1.6	\$	0	0	0	
South	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	
Mid-West	45	78.2	34	82.8	37	85.7	7.5	\$	0	0	0	
West	22	79.7	25	80.2	NA	NA	NA		0	0	NA	

Children and Adolescents' Access to Primary Care Practitioners 12-19 Years													
		Absolute Rate									Relative to National		
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	Change 2006-2008		2006	2007	2008		
National Rate	138	79.1	143	82.7	141	82.8	3.7	<b>^</b>					
North East	29	79.0	42	84.0	42	82.5	3.4	\$	0	0	0		
Mid Atlantic	23	81.4	25	84.7	26	84.0	2.6	\$	0	0	0		
South	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
Mid-West	45	77.6	34	81.9	37	84.7	7.0	\$	0	0	0		
West	22	79.1	25	78.9	NA	NA	NA		0	0	NA		

- = This region's performance rate is significantly higher than the national average
- **O**= This region's performance rate is equivalent to the national average
- O= This region's performance rate is significantly less than the national average
- ⇔= Regional or national rate did not change significantly from 2006-2008
- **Ψ**= Regional or national rate decreased significantly from 2006-2008

#### Annual Dental Visit

The percentage of members 2–21 years of age who had at least one dental visit during the measurement year. This measure applies only if dental care is a covered benefit in the organization's Medicaid contract. Health plans report six age stratifications and a total rate.

- 2–3-years
- 4–6-years
- 7–10-years
- 11–14-years
- 15–18-years
- 19–21-years
- Total

Annual Dental Visits 2-3 Years													
				Absolu	te Rate				Relati	ve to Nat	ional		
	2006 N	2006 Rate	2007 N	nge 2008	2006	2007	2008						
National Rate	55	22.3	55	23.4	70	24.8	2.5	⇔					
North East	25	23.3	23	23.3	25	27.9	4.6	⇔	0	0	0		
Mid Atlantic	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
South	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
Mid-West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		

	Annual Dental Visits 4-6 Years														
				Absolu	te Rate				Relati	ve to Nat	ional				
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	Cha 2006-		2006	2007	2008				
National Rate	56	48.3	55	⇔											
North East	25	52.3	23	50.9	25	55.4	3.06	⇔	•	0	0				
Mid Atlantic	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA				
South	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA				
Mid-West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA				
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA				

Annual Dental Visits 7-10 Years													
			Abs	olute R	ate				Relativ	e to Nati	ional		
	2006 N	N Rate N Rate N Rate 2006-2008								2007	2008		
National Rate	56	50.4	55	⇔									
North East	25	54.6	23	53.7	25	55.9	1.3	⇔	•	0	0		
Mid Atlantic	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
South	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
Mid-West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		

Annual Dental Visits 11-14 Years													
			A	Absolut	e Rate				Relativ	ve to Nati	ional		
	2006 N	2006 Rate	2007 N	nge -2008	2006	2007	2008						
National Rate	56	45.2	55	⇔									
North East	25	48.6	23	47.9	25	49.7	1.2	⇔	•	0	0		
Mid Atlantic	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
South	NA									NA	NA		
Mid-West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		

	Annual Dental Visits 15-18 Years														
				Absolut	e Rate				Relativ	e to Nati	ional				
	2006     2006     2007     2007     2008     2008     Change       N     Rate     N     Rate     N     Rate     2006-2008       56     38.8     55     39.8     71     38.8     0.0     \rightarrow							2006	2007	2008					
National Rate	56	38.8	55	\$											
North East	25	41.9	23	41.7	25	43.0	1.11	\$	•	0	0				
Mid Atlantic	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA				
South	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA				
Mid-West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA				
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA				

	Annual Dental Visits 19-21 Years													
				Absolut	e Rate				Relativ	e to Nati	ional			
	2006 N	N Rate N Rate N Rate 2006-2008								2007	2008			
National Rate	61	32.0	60	\$										
North East	30	37.0	28	35.0	30	36.8	-0.2	\$	•	•	•			
Mid Atlantic	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA			
South	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA			
Mid-West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA			
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA			

Annual Dental Visits Total														
				Absolut	te Rate				Relativ	e to Nati	ional			
	2006 N	N Rate N Rate N Rate 2006-2008							2006	2007	2008			
National Rate	74	42.5	71	⇔										
North East	30	42.8	28	41.4	30	44.0	1.2	⇔	0	0	0			
Mid Atlantic	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA			
South	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA			
Mid-West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA			
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA			

- = This region's performance rate is significantly higher than the national average
- **O**= This region's performance rate is equivalent to the national average
- O= This region's performance rate is significantly less than the national average
- ⇔= Regional or national rate did not change significantly from 2006-2008
- **Ψ**= Regional or national rate decreased significantly from 2006-2008

#### Prenatal and Postpartum Care- Postpartum Care

The percentage of deliveries of live births between November 6 of the year prior to the measurement year and November 5 of the measurement year. For these women, the measure assesses the following facets of prenatal and postpartum care.

- **Timeliness of Prenatal Care**. The percentage of deliveries that received a prenatal care visit as a member of the organization in the first trimester or within 42 days of enrollment in the organization.
- **Postpartum Care**. The percentage of deliveries that had a postpartum visit on or between 21 and 56 days after delivery.

	Prenatal and Postpartum Care- Timeliness of Prenatal Care													
				Absolut	e Rate				Relativ	e to Nat	ional			
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	Char 2006-2	_	2006	2007	2008			
National Rate	157	78.2	183	79.5	174	79.7	1.5	\$						
North East	24	82.4	42	85.3	29	80.4	-2.1	\$	0	•	0			
Mid Atlantic	25	81.5	27	83.8	25	83.7	2.2	\$	0	0	0			
South	31	75.7	37	70.6	39	71.7	-4.0	\$	0	0	0			
Mid-West	47	73.8	41	78.7	45	81.9	8.1	♦	0	0	0			
West	30	81.4	36	79.4	36	82.1	0.7	\$	0	0	0			

	Prenatal and Postpartum Care- Postpartum Care														
			4	Absolut	e Rate				Relativ	e to Nat	ional				
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	Char 2006-2	•	2006	2007	2008				
National Rate	158	55.2	175	58.9	177	57.8	2.7	\$							
North East	24	49.9	42	61.4	29	50.2	0.2	\$	0	0	0				
Mid Atlantic	25	57.4	27	60.8	26	60.3	2.9	\$	0	0	0				
South	31	53.7	27	52.3	39	53.3	-0.4	\$	0	0	0				
Mid-West	48	55.4	42	59.7	45	63.4	8.0	\$	0	0	0				
West	30	58.8	37	58.5	38	60.1	1.3	\$	0	0	0				

- = This region's performance rate is significantly higher than the national average
- **O**= This region's performance rate is equivalent to the national average
- O= This region's performance rate is significantly less than the national average

- ↑ = Regional or national rate increased significantly from 2006-2008
- ⇔= Regional or national rate did not change significantly from 2006-2008
- **Ψ**= Regional or national rate decreased significantly from 2006-2008

#### **Use of Services**

This section presents results for measures in the Use of Services domain. These measures are designed to approximate the level at which recommended health services are used. Measures included in this section include:

- Frequency of Ongoing Prenatal Care
- Well-Child Visits in the First 15 Months of Life
- Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life
- Adolescent Well-Care Visits

## Frequency of Ongoing Prenatal Care

The percentage of Medicaid deliveries between November 6 of the year prior to the measurement year and November 5 of the measurement year that received the following number of expected prenatal visits.

- <21 percent of expected visits
- 21 percent–40 percent of expected visits
- 41 percent–60 percent of expected visits
- 61 percent–80 percent of expected visits
- ≥81 percent of expected visits

	Frequency of Ongoing Prenatal Care <21 Percent Rate													
				Absolut	e Rate				Relativ	e to Nat	ional			
	2006 N	2006 Rate	2007 N	nge 2008	2006	2007	2008							
National Rate	92	17.2	109	13.0	92	11.8	-5.4	Ψ						
North East	NA	NA	38	8.2	21	10.6	NA		NA	0	0			
Mid Atlantic	23	11.3	25	9.3	24	9.7	-1.6	\$	0	0	0			
South	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA			
Mid-West	33	17.7	26	14.0	25	7.8	-9.9	\$	0	0	0			
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA			

Frequency of Ongoing Prenatal Care 21-40 Percent Rate													
			,	Absolut	e Rate				Relativ	e to Nat	ional		
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	Cha 2006-		2006	2007	2008		
National Rate	92	5.9	109	5.5	92	6.6	0.7	⇔					
North East	NA	NA	38	4.3	21	5.6	NA		NA	0	0		
Mid Atlantic	23	6.2	25	5.7	24	5.7	-0.5	⇔	0	0	0		
South	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
Mid-West	33	6.0	26	6.3	25	5.0	-1.0	⇔	0	0	0		
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		

	Frequency of Ongoing Prenatal Care 41-60 Percent Rate													
				Absolut	te Rate				Relativ	e to Na	tional			
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate		nge -2008	2006	2007	2008			
National Rate	92	7.8	109	7.4	92	7.8	0.0	⇔						
North East	NA	NA	38	7.0	21	8.4	NA		NA	0	0			
Mid Atlantic	23	8.9	25	8.0	24	7.6	-1.3	⇔	0	0	0			
South	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA			
Mid-West	33	7.5	26	7.9	25	6.8	-0.7	⇔	0	0	0			
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA			

	Frequency of Ongoing Prenatal Care 61-80 Percent Rate													
				Absolut	te Rate				Relativ	e to Na	tional			
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate		nge -2008	2006	2007	2008			
National Rate	92	13.49	109	13.6	92	14.0	0.6	⇔						
North East	NA	NA	38	14.4	21	15.7	NA		NA	0	0			
Mid Atlantic	23	13.76	25	12.9	24	13.9	0.2	⇔	0	0	0			
South	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA			
Mid-West	33	12.65	26	13.3	25	12.6	-0.1	⇔	0	0	0			
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA			

	Frequency of Ongoing Prenatal Care 81+ Percent Rate													
				Absolut	te Rate				Relativ	e to Nat	tional			
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate		nge -2008	2006	2007	2008			
National Rate	92 54.57 109 59.7 93 59.9 5.3 <b>⇔</b>													
North East	NA	NA	38	66.1	21	59.6	NA		NA	•	0			
Mid Atlantic	23	59.89	25	64.5	24	63.0	3.1	\$	0	•	0			
South	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA			
Mid-West	33	53.3	26	54.8	26	68.1	14.8	⇔	0	0	0			
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA			

- This region's performance rate is significantly higher than the national average
- **O**= This region's performance rate is equivalent to the national average
- O= This region's performance rate is significantly less than the national average
- ⇔= Regional or national rate did not change significantly from 2006-2008
- **Ψ**= Regional or national rate decreased significantly from 2006-2008

## Well-Child Visits in the First 15 Months of Life

The percentage of members who turned 15 months old during the measurement year and who had the following number of well-child visits with a PCP during their first 15 months of life.

- No well-child visits
- One well-child visit
- Two well-child visits
- Three well-child visits
- Four well-child visits
- Five well-child visits
- Six or more well-child visits

	Well- Child Visits in the First 15 Months of Life- zero visits												
				Absolu	te Rate				Relativ	ve to Nat	tional		
	2006 N	2006 Rate	2007 N	nge ·2008	2006	2007	2008						
National Rate	158	5.694	140	3.81	183	5.3	-0.4	⇔					
North East	24	17.48	22	11.54	43	12.7	-4.8	⇔	•	•	•		
Mid Atlantic	24	3.675	26	2.614	25	2.2	-1.5	⇔	0	0	0		
South	35	4.209	21	2.864	38	5.0	0.81	⇔	0	0	0		
Mid-West	47	4.355	42	2.642	46	3.0	-1.3	⇔	0	0	0		
West	28	1.428	29	1.373	31	1.4	-0	⇔	0	0	0		

Well-Child Visits in the First 15 Months of Life-one visit												
				Absolu	te Rate				Relativ	ve to Nat	ional	
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	Cha 2006-	_	2006	2007	2008	
National Rate	158	3.981	140	2.62	183	3.2	-0.8	\$				
North East	24	7.988	22	4.502	43	5.4	-2.6	\$	•	•	•	
Mid Atlantic	24	3.227	26	1.357	25	1.7	-1.5	\$	0	0	0	
South	35	3.82	21	3.052	38	4.1	0.32	\$	0	0	0	
Mid-West	47	3.79	42	2.838	46	2.5	-1.3	⇔	0	0	0	
West	28	1.713	29	1.675	31	1.4	-0.3	⇔	0	0	0	

	Well-Child Visits in the First 15 Months of Life- two visits													
				Absolu	te Rate				Relativ	ve to Nat	ional			
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	Cha 2006-	_	2006	2007	2008			
National Rate	158	4.6	140	3.6	183	3.9	-0.7	Ψ						
North East	24	5.6	22	3.8	43	3.7	-1.9	⇔	0	0	0			
Mid Atlantic	24	3.8	26	2.8	25	2.7	-1.1	•	0	0	0			
South	35	5.1	21	4.4	38	5.6	0.44	⇔	0	0				
Mid-West	47	4.9	42	3.9	46	4.1	-0.8	⇔	0	0	0			
West	28	3.4	29	2.9	31	2.7	-0.7	\$	0	0	0			

	Well-Child Visits in the First 15 Months of Life-three visits Rate													
				Absolu	te Rate				Relativ	ve to Nat	tional			
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	Cha 2006-	_	2006	2007	2008			
National Rate	158	7.3	140	6.0	183	6.4	-0.9	Ψ						
North East	24	5.9	22	4.3	43	4.4	-1.5	⇔	0	0	0			
Mid Atlantic	24	6.2	26	5.3	25	5.4	-0.9	⇔	0	0	0			
South	35	9.0	21	7.9	38	9.5	0.54	⇔	•	•				
Mid-West	47	7.7	42	6.2	46	6.8	-0.9	⇔	0	0	0			
West	28	6.6	29	6.4	31	5.3	-1.3	⇔	0	0	0			

	Well-Child Visits in the First 15 Months of Life- four visits													
				Absolu	te Rate				Relativ	ve to Nat	ional			
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	Cha 2006-	_	2006	2007	2008			
National Rate	158	12.8	140	11.0	183	11.1	-1.7	Ψ						
North East	24	7.9	22	7.5	43	7.1	-0.8	⇔	0	0	0			
Mid Atlantic	24	12.4	26	9.4	25	9.9	-2.5	•	0	0	0			
South	35	16.1	21	14.4	38	15.8	-0.3	\$	•	•				
Mid-West	47	12.4	42	11.2	46	11.6	-0.8	⇔	0	0	0			
West	28	13.8	29	12.5	31	11.0	-2.9	\$	0	0	0			

	Well-Child Visits in the First 15 Months of Life - five visits													
				Absolu	te Rate				Relativ	ve to Nat	ional			
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	Cha 2006-	_	2006	2007	2008			
National Rate	158	18.8	140	17.5	183	17.2	-1.6	4						
North East	24	10.9	22	12.3	43	11.4	0.49	<b>\$</b>	0	0	0			
Mid Atlantic	24	18.4	26	16.6	25	17.7	-0.8	\$	0	0	0			
South	35	21.9	21	21.2	38	20.3	-1.6	⇔	•	•	•			
Mid-West	47	19.4	42	17.6	46	18.5	-0.9	⇔	0	0	0			
West	28	21.2	29	19.2	31	19.2	-2	⇔	0	0	0			

	Well-Child Visits in the First 15 Months of Life - Six or More visits													
				Absolu	te Rate				Relativ	ve to Nat	ional			
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	Cha 2006-		2006	2007	2008			
National Rate	166	46.5	146	54.8	189	53.0	6.5	<b>1</b>						
North East	24	44.2	22	56.0	43	55.5	11.2	⇔	0	0	0			
Mid Atlantic	24	52.2	26	62.0	25	60.4	8.3	<b>1</b>	0	•	•			
South	35	39.9	21	46.3	38	39.6	-0.2	⇔	0	0	0			
Mid-West	47	45.3	42	53.2	46	53.4	8.2	⇔	0	0	0			
West	36	52.3	35	55.9	37	58.4	6.1	⇔	0	0	0			

- = This region's performance rate is significantly higher than the national average
- **O**= This region's performance rate is equivalent to the national average
- O= This region's performance rate is significantly less than the national average
- ⇔= Regional or national rate did not change significantly from 2006-2008
- **Ψ**= Regional or national rate decreased significantly from 2006-2008

#### Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life

The percentage of members 3–6 years of age who received one or more well-child visits with a PCP during the measurement year.

	Well Child Visits in the Third, Fourth, Fifth and Sixth Years of Life													
			,	<b>Absolut</b>	e Rate				Relati	ve to Na	tional			
	2006 N	N Rate N Rate N Rate 2006-2008								2007	2008			
National Rate	174 62.1 152 65.5 209 66.4 4.3 ↑													
North East	24	58.9	22	66.9	43	66.8	8.0	\$	0	0	0			
Mid Atlantic	25	68.7	27	73.0	26	72.5	3.8	\$	•	•	•			
South	35	63.3	22	63.3	53	67.0	3.7	\$	0	0	0			
Mid-West	51	58.2	42	60.7	47	61.5	3.3	\$	0	0	0			
West	39	64.1	39	65.6	40	67.2	3.1	\$	0	0	0			

- = This region's performance rate is significantly higher than the national average
- **O**= This region's performance rate is equivalent to the national average
- O= This region's performance rate is significantly less than the national average
- ⇔= Regional or national rate did not change significantly from 2006-2008
- **Ψ**= Regional or national rate decreased significantly from 2006-2008

#### Adolescent Well-Care Visits

The percentage of enrolled members 12–21 years of age who had at least one comprehensive well-care visit with a PCP or an OB/GYN practitioner during the measurement year.

	Adolescent Well-Care Visits													
				Absolut	e Rate				Relativ	ve to Nat	ional			
	2006 N	2006 Rate	2007 N	nge 2008	2006	2007	2008							
National Rate	167	39.8	149	<b>↑</b>										
North East	167     39.8     149     42.8     199     42.7     2.8     ↑       NA     NA     NA     NA     43     46.4     NA								NA	NA	0			
Mid Atlantic	24	46.5	26	52.1	26	50.0	3.4	\$	•	•				
South	36	39.1	22	39.8	43	40.2	1.1	\$	0	0	0			
Mid-West	52	36.8	42	39.4	47	40.0	3.2	\$	0	0	0			
West	39	35.5	41	36.7	40	39.6	4.1	<b>(</b>	0	0	0			

- = This region's performance rate is significantly higher than the national average
- **O**= This region's performance rate is equivalent to the national average
- O= This region's performance rate is significantly less than the national average
- ⇔= Regional or national rate did not change significantly from 2006-2008
- **Ψ**= Regional or national rate decreased significantly from 2006-2008

## **Health Plan Descriptive Information**

The Health Plan Descriptive Information domain provides information on the organizational structure. Measures in this domain include:

- Board Certification
- Weeks of Pregnancy at Time of Enrollment

## **Board Certification**

The percentage of the following physicians whose board certification is active as of December 31 of the measurement year.

- Family medicine physicians
- Internal medicine physicians
- Pediatricians
- OB/GYN physicians
- Geriatricians
- Other physician specialists

	Board Certification - PCP Board Cert Pct													
				Absolu	te Rate				Relati	ve to Nati	ional			
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	Char 2006-2	_	2006	2007	2008			
National Rate	69	82.3	70	80.9	NA	NA	NA							
North East	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA			
Mid Atlantic	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA			
South	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA			
Mid-West	24	83.8	22	82.0	NA	NA	NA		0	0	NA			
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA			

Board Certification - OB/GYN Provs Board Cert Pct													
				Absolu	te Rate				Relativ	e to Nati	onal		
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate		nge -2008	2006	2007	2008		
National Rate	87 77.9 88 77.2 63 77.0 NA												
North East	33	76	33	76.9	NA	NA	NA		0	0	NA		
Mid Atlantic	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
South	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
Mid-West	24	79.2	22	78.8	23	77.9	NA		0	0	0		
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		

Board Certification - Pediatrician Board Cert Pct													
				Absolu	te Rate				Relativ	e to Nati	onal		
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	Char 2006-2	•	2006	2007	2008		
National Rate	88	78.2	88										
North East	33	75.8	33	74.8	NA	NA	NA		0	0	NA		
Mid Atlantic	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
South	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
Mid-West	24	24 82.8 22 81.8 23 83.6 NA							0	0	0		
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		

Board Certification - Geriatricians Board Cert Pct													
				Absolu	te Rate				Relativ	e to Nati	ional		
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	Char 2006-2	_	2006	2007	2008		
National Rate	74	81.7	77										
North East	23	79.7	24	76.7	NA	NA	NA		0	0	NA		
Mid Atlantic	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
South	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
Mid-West	23	23 87.9 22 80.1 22 84.4 NA							0	0	0		
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		

Board Certification - Other Specialists Board Cert Pct													
				Absolu	te Rate				Relativ	e to Nati	ional		
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate		nge -2008	2006	2007	2008		
National Rate	89	81.5	88	80	62	79.6	NA						
North East	34	81.2	33	80.8	NA	NA	NA		0	0	NA		
Mid Atlantic	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
South	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
Mid-West	24 84.3 22 81.8 23 81.8 NA								0	0	0		
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		

Board Certification - Family Medicine Board Cert Pct													
				Absolu	te Rate				Relat	tive to Na	itional		
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate		nge -2008	2006	2007	2008		
National Rate	NA	NA	NA	NA	61	79.4	NA						
North East	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
Mid Atlantic	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
South	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
Mid-West	NA	NA	NA	NA	23	81.3	NA		NA	NA	0		
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		

Board Certification - Internal Medicine Board Cert Pct													
				Absolu	te Rate				Relat	tive to Na	itional		
	2006 N	2006 Rate	2007 N	2006	2007	2008							
National Rate	NA	NA	NA	NA	63	79.9	NA						
North East	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
Mid Atlantic	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
South	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
Mid-West	NA	NA NA NA 23 83.4 NA								NA	0		
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		

- = This region's performance rate is significantly higher than the national average
- **O**= This region's performance rate is equivalent to the national average
- O= This region's performance rate is significantly less than the national average

### Weeks of Pregnancy at Time of Enrollment

The percentage of women who delivered a live birth during the measurement year by the weeks of pregnancy at the time of their enrollment in the organization, according to the following time periods.

- Prior to pregnancy (280 days or more prior to delivery)
- The first 12 weeks of pregnancy, including the end of the 12th week (279–196 days prior to delivery)
- The beginning of the 13th week through the end of the 27th week of pregnancy (195–91 days prior to delivery)
- The beginning of the 28th week of pregnancy or after (90 days or fewer prior to delivery)

Weeks of Pregnancy at Time of Enrollment - < 0 week Pct													
				Absolut	e Rate				Relativ	ve to Nat	ional		
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	Cha 2006-		2006	2007	2008		
National Rate	88	31.39	88	30.9	94	31.4	0.0	⇔					
North East	NA	NA	20	34.6	21	35.8	NA		NA	0	0		
Mid Atlantic	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
South	NA	NA	NA	NA	22	25.3	NA		NA	NA	0		
Mid-West	34	30.39	27	30.7	27	33.0	2.6	⇔	0	0	0		
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		

Weeks of Pregnancy at Time of Enrollment 1-12 weeks Pct													
				Absolut	e Rate				Relativ	ve to Nat	ional		
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	Cha 2006-	•	2006	2007	2008		
National Rate	88	10.22	88	10.1	94	10.2	0.0	<b>⇔</b>					
North East	NA	NA	20	9.84	21	9.9	NA		NA	0	0		
Mid Atlantic	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
South	NA	NA	NA	NA	22	15.3	NA		NA	NA	•		
Mid-West	34	8.684	27	7.84	27	7.8	-0.8	\$	0	0	0		
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		

Weeks of Pregnancy at Time of Enrollment 13-27 weeks Pct													
				Absolut	e Rate				Relativ	ve to Nat	ional		
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	Cha 2006-	_	2006	2007	2008		
National Rate	88	30.75	88	30.4	94	30.0	-0.7	\$					
North East	NA	NA	20	29.2	21	28.6	NA		NA	0	0		
Mid Atlantic	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
South	NA	NA	NA	NA	22	28.9	NA		NA	NA	0		
Mid-West	34	31.26	27	29	27	30.7	-0.6	\$	0	0	0		
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		

Weeks of Pregnancy at Time of Enrollment 28+ weeks Pct													
				Absolut	te Rate				Relativ	ve to Nat	ional		
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	Cha 2006-	•	2006	2007	2008		
National Rate	88	23.05	88	22.5	94	23.4	0.4	<b>⇔</b>					
North East	NA	NA	20	23.8	21	22.0	NA		NA	0	0		
Mid Atlantic	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
South	NA	NA	NA	NA	22	24.8	NA		NA	NA	0		
Mid-West	34	23.49	27	21.3	27	23.9	0.5	\$	0	0	0		
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		

Weeks of Pregnancy at Time of Enrollment Unknown Pct													
				Absolut	e Rate				Relativ	ve to Nat	ional		
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	Cha 2006-		2006	2007	2008		
National Rate	88	3.459	88	3.85	94	4.9	1.5	<b>↑</b>					
North East	NA	NA	20	2.61	21	3.7	NA		NA	0	0		
Mid Atlantic	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
South	NA	NA	NA	NA	22	5.7	NA		NA	NA	0		
Mid-West	34	3.27	27	3.87	27	4.5	1.3	\$	0	0	0		
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		

Weeks of Pregnancy at Time of Enrollment Tot all Pregs Pct													
			,	Absolut	te Rate				Relativ	ve to Nat	ional		
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	Cha 2006-	_	2006	2007	2008		
National Rate	88	98.88	88	97.8	94	100.0	1.1	⇔					
North East	NA	NA	20	100	21	100.0	NA		NA	0	0		
Mid Atlantic	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		
South	NA	NA	NA	NA	22	100.0	NA		NA	NA	0		
Mid-West	34	97.09	27	92.7	27	100.0	2.9	⇔	0	0	0		
West	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA		

- = This region's performance rate is significantly higher than the national average
- **O**= This region's performance rate is equivalent to the national average
- O= This region's performance rate is significantly less than the national average
- ⇔= Regional or national rate did not change significantly from 2006-2008
- **Ψ**= Regional or national rate decreased significantly from 2006-2008

#### **CONCLUSIONS**

This project was designed to test the feasibility of collecting Medicaid managed care performance data from state Medicaid agencies in order to produce robust Medicaid managed care performance benchmarks. By adding over 90 submissions into the existing HEDIS Medicaid database, NCQA was able to assess the quality of care provided to 20.3 million Medicaid beneficiaries.

#### **Reflections on Quality of Care**

Overall, quality over the three project years remained flat. The national rates for 19 of the 91 measures and their associated indicators increased significantly and 6 of the 91 measures decreased significantly over the project years. There was no significant change in 41 of the 66 measures with trendable data.

Most measures with high performance rates were related to health care services administered to children. Amongst the Effectiveness of Care measures, nationally Medicaid plans demonstrated high performance rates in the Childhood Immunization, Use of Appropriate Medications for People With Asthma and Appropriate Treatment for Children with Upper Respiratory Infection. For the Access and availability of care measures, nationally Medicaid plans demonstrated high performance on the Children's Access to Primary Care Practitioners measure and associated indicators. This measure is also the only one within this domain to show a significant rate increase over the project years.

## Supplemented Data and its Effect on National Benchmarks

By adding supplemental data to our HEDIS data certain appreciable changes were observed in the benchmark reporting. There were 15 instances were by adding supplemental data, we were able to report a rate under the 50-20 rule that would have not have been reported with HEDIS only data. However, more often than not these rates were not statistically significant. There were, however, eight instances where by adding supplemental data, the national change in rate from 2006 to 2008 went from not being significant to being a significant increase in rate. There was only one instance where the regional rate went from not significant to significant compared to the national average. In two instances the significant rates reversed direction from being significant to not significant.

## **Study Limitations**

By the very nature of how the Medicaid program is designed, this study was presented
with various limitations that precluded or limited certain types of analysis. Because states
have the flexibility to determine eligibility requirements and the benefit structure of their
Medicaid programs, there is wide variability in populations served by state. HEDIS
measures are not risk adjusted and therefore this study does not control for state
eligibility requirements or population differences.

- Furthermore, state enrollment criteria are based on state specific laws and regulations Some states require Medicaid beneficiaries to be un-enrolled for a period of time before resuming coverage, leading to gaps in continuous enrollment. HEDIS has specific rules for continuous enrollment, but due to the variation in state Medicaid enrollment policies, NCQA allowed states to submit performance data for this project that may not align with the continuous enrollment criteria as set forth in the HEDIS technical specifications.
- Largely based on state rules, some plans data include the CHIP population and some plans report CHIP data separately. This study did not separate out CHIP data if it was included in the plans performance data; CHIP data that was reported separately was not collected or used in the analysis for this study.
- States have the authority to decide which performance measures Medicaid health plans report. This leads to gaps in years for which there are data for measures. States do not collect the same measures consistently across project years.
- Many of the use of service measure (frequency of selected procedures, utilization, ALOS, antibiotic and drug use) are based on the population served which may lead to difficulties in making comparisons. NCQA has chosen to omit these measures from the report. These measure results can be accessed through NCQA's Quality Compass.
- Performance results were not included if it was not a part of the states validation process such as the CMS validation process or HEDIS Audit. This rule disqualified many measures that may have been collected by states but not validated.

#### **Future Analyses**

Future analysis would aim to include all Medicaid managed care plans delivering services to Medicaid beneficiaries and would include the analysis of additional Medicaid programs, such as FFS and PCCM, where HEDIS or HEDIS-like measures are used to assess quality.

Future analysis would also include an assessment of how Medicaid eligibility criteria may influence performance rates. By expanding the Criteria Survey to all states, NCQA would be able to make a more in-depth assessment of how state Medicaid agencies are using performance data and highlight the similarities and differences amongst such programs.

## **APPENDICES**

Α	States Using NCQA Accreditation for Medicaid Plans
В	Advisory Committee Members
С	Health Plan Verification Form
D	Criteria Survey
E	Other Performance Measures Collected by States
F	Data Submissions Instructions
G	Data Sources by State
Н	Number of Supplemented Measures and Plans by State
1	Number of States Reporting Valid Rates in HEDIS Database
J	National Benchmark Summary
K	Weighted Performance Benchmarks Tables
L	Hybrid versus Administrative Rates

## Appendix A - States Using NCQA Accreditation for Medicaid Plans

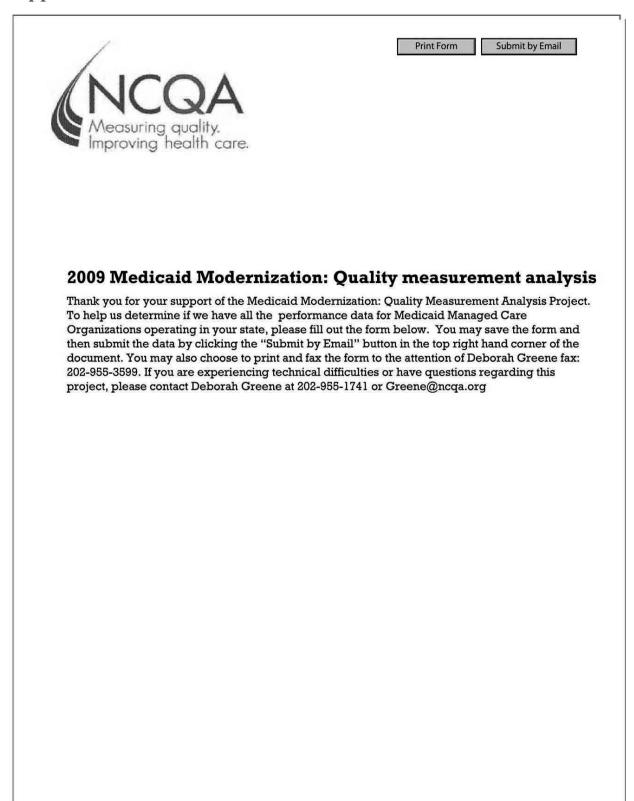
- 1. **Arizona**: The Arizona Health Care Cost Containment System recognizes providers credentialed by NCQA Accredited health plans as meeting state credentialing requirements (AHCCCS Medical Policy Manual, Chapter 900; <a href="http://www.azahcccs.gov/regulations/OSPPolicy/">http://www.azahcccs.gov/regulations/OSPPolicy/</a>).
- 2. **California**: NCQA Accreditation is deemed for meeting state credentialing requirements. Non-accredited plans contracting with NCQA certified physician organizations are also deemed compliant with state requirements. MMCD Policy Letter 02-03.
- 3. \*District of Columbia: DC's Medical Assistance Administration requires contracted managed care plans to hold NCQA Accreditation.
- 4. **Florida**: Accreditation is required for health plans serving the commercial market and health plans contracted with the Medicaid and state employee benefit programs (State Regulation 59A-12.0071). Accreditation is also required for credentialing verification organizations (CVOs). (State Law: 456.047). NCQA is an approved accrediting organization. Rules for approved accrediting organizations can be found under 59A-12.0072.
- 5. **Georgia**: Medicaid managed care plans are required to obtain private accreditation by 2009. Georgia Department of Community Health.
- 6. **Hawaii:** Accreditation is required for all health plans (State Law: 432E-11).
- 7. \*Indiana: Managed care organizations and managed behavioral health organizations in the Medicaid program must be NCQA Accredited by January 1, 2011 (SB 42).
- 8. **Iowa**: The Human Services Department accepts NCQA Accreditation for the state's accreditation requirement for Medicaid managed care plans. (State Regulation: 441-88.2).
- 9. \*Kentucky: Kentucky's Cabinet for Health and Family Services requires managed care plans to be NCQA Accredited as a condition of doing business.
- 10. **Maryland**: Health plans may submit accreditation reports to demonstrate compliance with state requirements. (State Law: 19-705.1).
- 11. **Massachusetts**: MassHealth plans can use evidence of NCQA accreditation to demonstrate compliance with several components of the EQRO review. Plans will also be required to obtain NCQA accreditation within two years of their contract start date (anticipated for mid-2009).
- 12. **Michigan**: Accreditation is required for Medicaid managed care plans per state contract requirements.

- 13. **Minnesota**: Minnesota Department of Human Services recognizes many NCQA accreditation standards under CFR 438.360. Specific standard categories that are recognized are under quality improvement, utilization management, credentialing and member rights and responsibilities.
- 14. **Missouri\***: Missouri's request for proposals for Medicaid managed care requires that plans obtain NCQA health plan accreditation within two years of the effective date of the contract. (REQ NO.: NR 886 25759006134 <a href="http://oa.mo.gov/bids/b3z09135.htm">http://oa.mo.gov/bids/b3z09135.htm</a>).
- 15. \*New Mexico: NCQA accreditation is required for Medicaid managed care plans. (State Regulation: 8.305.8.11).
- 16. **Oregon**: NCQA and other recognized private accrediting organizations standards have been deemed equivalent to quality improvement requirements for Medicaid managed care. (State Regulation: OAR 410-141-0200).
- 17. **Pennsylvania**: NCQA accreditation reports are used as part of the state's routine monitoring of Medicaid managed care plans. Pennsylvania Department of Public Welfare.
- 18. \*Rhode Island: NCQA accreditation is required for Medicaid managed care plans. See Rhode Island Strategy for Assessing and Improving the Quality of Managed Care Services Under Rite Care.
- 19. **South Carolina:** Accreditation is required for Medicaid managed care plans. South Carolina Department of Health and Human Services.
- 20. **Texas**: The Texas Department of Insurance mandates the use of NCQA's credentialing standards by all health care plans in the state. Plans must follow the most current version of NCQA's credentialing requirements from year to year.
- 21. \*Tennessee: All plans contracting with TennCare (Medicaid) must be NCQA Accredited.
- 22. **Utah**: NCQA Accreditation meets some of Utah's contractual requirements for Medicaid plans. Utah Department of Health.
- 23. \*Virginia: Medicaid managed care plans are required to maintain NCQA Accreditation.
- 24. **Washington**: Washington State Department of Social and Health Services, Health and Recovery Services Administration (DSHS-HRSA) recognizes NCQA accreditation for meeting state quality improvement requirements for plans serving Medicaid and CHIP.
- 25. **Wisconsin**: The Wisconsin Medicaid HMO Accreditation Incentive allows health plans to submit evidence of accreditation in lieu of providing documentation for performance improvement projects and undergoing onsite external quality reviews.
  - \* Requires NCQA Accreditation

# Appendix B – Advisory Committee Members

COMMITTEE MEMBER	ORGANIZATION
State Medica	aid Programs
Caroline Carney Doebbeling, MD, MSc.  Medicaid Quality Director	Indiana Family and Social Services Administration
Foster Gesten, MD  Medical Director	New York State Department of Health Office of Health Insurance Programs
Wendy Long, MD  Quality Director	Bureau of TennCare
Denise Runde Quality Director	Wisconsin Medicaid
Health	Plans
Mary Kay Holleran Director of Care Management	HighMark BlueCross Blue Shield
James Howatt, MD Chief Medical Director	Molina Healthcare
Michael Siegel, MD  VP for Utilization management and Quality Improvement	
Roberta Geller Director of Quality Improvement	Community Health Network of Connecticut
Lynn Childs Vice President	
EQRO	Vendor
Raj Shrestha Executive Director, Audits	Health Services Advisory Group
Expert Orç	panizations
Deborah Kilstein Director of Quality Management and Operational Support	Association of Community Affiliated Health Plans
Meg Murray Executive Director	
Nikki Highsmith Senior Vice President	Center for Health Care Strategies
Ann Kohler Director	National Association of State Medicaid Directors
Richard Fenton Deputy Director of Health Services	
Lee Partridge Senior Health Policy Advisor	National Partnership of Women and Families

# Appendix C – Health Plan Verification Form



ontact Information for Person Responsible	for form Completion	:	
ame:			
Title:			
Organization:			
mail:	Phone:		
ledicaid Managed Care Health Plans lease list the comprehensive/ full service dicate if they were available to beneficiar  Medicaid Managed Care Plan			your state;
Example: ABCD Health Plan	X	Х	x
The second section of the second section sec			
		_	
			旦
			П
		1_	

Medicaid Managed Care Plan	2005	2006	2007
Example: ABCD Health Plan	X	x	Х
		Г	
		口	
		П	П
		口	
		Г	

## **Appendix D – Criteria Survey**

NCQA
Measuring quality.

Print Form Submit by Email

2009 Medicaid Modernization: Quality measurement analysis

#### **Criteria Survey**

Thank you for agreeing to participate in the Medicaid Modernization: Quality Measurement Analysis Project. To help us determine the comparability of your data for use in the project, please complete the following survey. You may save the form and then submit the data by clicking the "Submit by Email" button in the top right hand corner of the document. You may also choose to print and fax the form to the attention of Deborah Greene fax: 202-955-3599. If you are experiencing technical difficulties or have questions regarding this project, please contact Deborah Greene at 202-955-1741 or Greene@ncqa.org

Piease idei	ntify State: Alabama			
Contact Inf	ormation for Person Responsible for Surve	ey Completion:		
Name:				
Title:				
Organizati	on:			
Email:	Phor	ne:		
Contents		,		
• S Section 1. 1.1 Please 1	ection 2: HEDIS Measures Collected ection 3: Other Performance or Quality  Medicaid Managed Care Health Plans list the comprehensive/ full service Medichey were available to beneficiaries in 200	caid Managed Ca	are Plans in	your state;
	Medicaid Managed Care Plan	2005	2006	2007
	Example: ABCD Health Plan	х	х	х
			П	
ļ				
			0	

- 11							
Ė				П			1
Γ					П		1
Γ							
T							1
							1
	ods?  a. Measurement Ye b. Measurement Ye c. Measurement Ye	ear 2005 (HED) ear 2006 (HED)	IS 2006):  IS 2007):	Yes	No No		
	If you answered No				skip to <u>Sec</u>	etion 3.	
	75 J 3 10 11 11 11 11 11 11 11 11 11 11 11 11		caid membe	rs only or o	does it cove	er Medicaid ar	nd
CH inde	Oo the HEDIS measure IP members? For the erstand that some Sat cate if SCHIP data is c	purpose of the purpos	HIP data in th	will be an eir perform	alyzing Me mance repo	orting. Please	
CH inde	Oo the HEDIS measure IP members? For the erstand that some Sat- cate if SCHIP data is c a. For Measuremer	e purpose of the es include SCI combined with the Year 2005 (F	HIP data in the your States I	e will be an eir perfori Medicaid p	alyzing Me mance repo	orting. Please	
SCH inde	Do the HEDIS measure IP members? For the erstand that some Sat- cate if SCHIP data is c a. For Measuremen Medicaid and SCH	e purpose of the es include SCI combined with the Year 2005 (FIP combined:	HIP data in the your States In HEDIS 2006):	will be an eir perform	alyzing Me mance repo	orting. Please	
CH inde	Do the HEDIS measure IP members? For the erstand that some Sat- cate if SCHIP data is c a. For Measuremer Medicaid and SCH b. For Measuremer	e purpose of the es include SCI combined with the Year 2005 (FIP combined: at Year 2006 (FIP combined: at Year 2006)	HIP data in the your States In HEDIS 2006):  Yes HEDIS 2007):	e will be an eir perform Medicaid p	alyzing Me mance repo	orting. Please	
SCH inde	Do the HEDIS measure IP members? For the erstand that some Sat- cate if SCHIP data is c a. For Measuremer Medicaid and SCH b. For Measuremer Medicaid and SCH	e purpose of the es include SCI combined with the Year 2005 (FIP combined: at Year 2006 (FIP combined: at Year 2006 (FIP combined: at Year 2006).	HIP data in the your States In HEDIS 2006):  Yes  HEDIS 2007):	e will be an eir perfori Medicaid p	alyzing Me mance repo	orting. Please	
SCH unde	Do the HEDIS measure IP members? For the erstand that some Sate cate if SCHIP data is c a. For Measuremer Medicaid and SCH b. For Measuremer Medicaid and SCH c. For Measuremer	e purpose of the es include SCI combined with the Year 2005 (File Combined: at Year 2006 (File Combined: at Year 2007 (File Combined	HIP data in the your States I HEDIS 2006):  Yes HEDIS 2007):  Yes HEDIS 2008):	e will be an eir perform Medicaid p	alyzing Me mance repo	orting. Please	
SCH unde	Do the HEDIS measure IP members? For the erstand that some Sat- cate if SCHIP data is c a. For Measuremer Medicaid and SCH b. For Measuremer Medicaid and SCH	e purpose of the es include SCI combined with the Year 2005 (File Combined: at Year 2006 (File Combined: at Year 2007 (File Combined	HIP data in the your States I HEDIS 2006):  Yes HEDIS 2007):  Yes HEDIS 2008):	e will be an eir perform Medicaid p	alyzing Me mance repo	orting. Please	
SCH unde	Do the HEDIS measure IP members? For the erstand that some Sate cate if SCHIP data is c a. For Measuremer Medicaid and SCH b. For Measuremer Medicaid and SCH c. For Measuremer	e purpose of the es include SCI combined with the Year 2005 (File Combined: at Year 2006 (File Combined: at Year 2007 (File Combined	HIP data in the your States I HEDIS 2006):  Yes HEDIS 2007):  Yes HEDIS 2008):	e will be an eir perform Medicaid p	alyzing Me mance repo	orting. Please	

	a. For Measurement Year 2005 (HEDIS 2006): TYes No
	b. For Measurement Year 2006 (HEDIS 2007): Tyes No
	c. For Measurement Year 2007 (HEDIS 2008): TYes No
th v	Was this data validated or audited? Under federal External Quality Review requirements, to must validate Medicaid managed care performance measures. Many states have relied of NCQA HEDIS Compliance Audit™ Program to meet this requirement. Other states have idated performance measures using a contractor that follows the CMS protocol for idating performance measures to be undertaken by an External Quality Review ganizations (EQRO).
Plea	check the process used to validate performance measures in the following years:
	rement Year 2005 (HEDIS 2006)
a. HI	IS Compliance Audit Name of Auditor:
b. C	S Protocol Name of Contractor:
c. Of	er   Please explain:
Meas	rement Year 2006 (HEDIS 2007)
d. HI	Name of Auditor:
e. C	Protocol Name of Contractor:
	Please explain:
Mea	urement Year 2007 (HEDIS 2008)
g. H	DIS Compliance Audit Name of Auditor:
h. C	S Protocol Name of Contractor:
i. O	er   Please explain:

2.5 If your state collected or calculated HEDIS measures from Medicaid health plans, please use the following table to indicate which HEDIS measures were collected for Measurement Years 2005, 2006 and 2007. If modifications were made to the HEDIS specification, please code in all of the appropriate modifications where indicated. If no modifications were made, please leave blank. If you need to provide further explanation on modifications, please use the space in Section 4. Also, please indicate if the HEDIS Compliance Audit or CMS Protocol was used to validate the measure. If a different validation method was used, do not check the CMS/ HEDIS audit box.

Modification Code Key: a= Used a measurement period other than Calendar Year

- **b=** Required use of administrative methodology for measures that allow for hybrid methodology
- c= Calculation of measure by Medicaid agency or a contractor rather than by Medicaid health plans
- d= Changes to measure continuous enrollment requirements
- e= Changes to measure denominator, other than the continuous enrollment requirement requirements
- **f=** Changes to measure numerator requirements
- g= If you have made any other modification to HEDIS technical specifications (e.g., exclusion criteria, age limits, etc.)

Effectiveness of Care	Measurement Year 2005 (HEDIS 2006)			Measurement Year 2006 (HEDIS 2007)			Measurement Year 2007 (HEDIS 2008)		
	Collected	Modification Code: a, b, c, d, e, f, g	CMS/ HEDIS Audit	Collected	Modification Code: a, b, c, d, e, f, g	CMS/ HEDIS Audit	Collected	Modification Code: a, b, c, d, e, f, g	CMS/ HEDIS Audit
Childhood Immunization Status	П			П					
Adolescent Immunization Status						П			
Lead Screening in Children									
Breast Cancer Screening	П								
Cervical Cancer Screening							П		
Chlamydia Screening in Women	П		П	П			П		П
Appropriate Testing for Children With Pharyngitis			П				П		П
Appropriate Treatment for Children With Upper Respiratory Infection			П				П		П
Avoidance of Antibiotic Treatment in Adults With Acute Bronchitis			П	П					
Use of Spirometry Testing in the Assessment and Diagnosis of COPD									
Pharmacotherapy of COPD Exacerbation	П			П					
Use of Appropriate Medications for People With Asthma									Π
Cholesterol Management for Patients With Cardiovascular Conditions									

Effectiveness of Care Continued	Measurement Year 2005 (HEDIS 2006)				Measurement Year 2006 (HEDIS 2007)			Measurement Year 2007 (HEDIS 2008)		
	Collected	Modification Code: a, b, c, d, e, f, g	CMS/ HEDIS Audit	Collected	Modification Code: a, b, c, d, e, f, g	CMS/ HEDIS Audit	Collected	Modification Code: a, b, c, d, e, f, g	CMS HEDI Audi	
Controlling High Blood Pressure			Г			П				
Beta-Blocker Treatment After a Heart Attack	П		П			П				
Persistence of Beta-Blocker Treatment After a Heart Attack Comprehensive Diabetes Care	Ī		П							
(CDC)	,									
CDC - HbA1c Testing										
CDC - HbA1c poor control (>9.0%)			П			П				
CDC - HbA1c good control (<7.0%)			П	Г		П			П	
CDC – Eye Exam (Retinal) Performed				С			П		П	
CDC – LDL-C Screening			П	П		П				
CDC - LDL-C Control (<100 mg/dL)	П		П	Г		П	П			
CDC – Medical Attention for Nephropathy	П		П	Г		П			П	
CDC - Blood Pressure Control (<130/80 mm Hg)	<u> </u>		П	П			П			
CDC – Blood Pressure Control (<140/90 mm Hg)	П			П			П			
Disease Modifying Anti-Rheumatic Drug Therapy for Rheumatoid Arthritis			Π				П			
Use of Imaging Studies for Low Back Pain			П	П			П			
Antidepressant Medication Management							П			
Follow-Up Care for Children Prescribed ADHD Medication			П			П	П			
Follow-Up After Hospitalization for Mental Illness							П			
Annual Monitoring for Patients on Persistent Medications							П			
Medical Assistance With Smoking Cessation										

Access/Availability of Care	Measureme	ent Year 2005 (H	EDIS 2006)	Measureme	nt Year 2006 (HI	EDIS 2007)	Measureme	ent Year 2007 (H)	EDIS 200
•	Collected		CMS/ HEDIS	Collected	Modification Code: a, b, c, d, e, f, g	CMS/ HEDIS	Collected		CMS. HEDI Audit
Adults' Access to Preventive/ Ambulatory Health Services									
Children's and Adolescents' Access to Primary Care Practitioners						П	П		
Annual Dental Visit				П		П	П		
Initiation and Engagement of Alcohol and Other Drug Dependence Treatment			П			П	П		
Prenatal and Postpartum Care			П	П			П		
Call Abandonment						П			
Call Answer Timeliness	П					П			П
Use of Services	Measurement Year 2005 (HEDIS 2006)		Measurement Year 2006 (HEDIS 2007)		2006	Measurement Year 2007 (HEDIS 2008)			
	Collected	Modification Code: a, b, c, d, e, f, g	CMS/ HEDIS Audit	Collected	Modification Code: a, b, c, d, e, f, g	CMS/ HEDIS Audit	Collected	Modification Code: a, b, c, d, e, f, g	CMS. HEDI Audi
Frequency of Ongoing Prenatal Care	П					П			
Well-Child Visits in the First 15 Months of Life	П		Γ.]			П	П		П
Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life			П			П	П		П
Adolescent Well-Care Visits			ī.	П		П			
Frequency of Selected Procedures	П		П	П		П			
Ambulatory Care	П			П					
Inpatient Utilization—General Hospital/ Acute Care	П		Г			П			П
Inpatient Utilization—Non-acute Care	П		П	П			П		
Discharges and ALOS—Maternity Care				П					ti.
Births and ALOS, Newborns						П			

Use of Services Continued	Measurement Year 2005 (HEDIS 2006)				Measurement Year 2006 (HEDIS 2007)			Measurement Year 2007 (HEDIS 2008)		
	Collected	Modification Code: a, b, c, d, e, f, g	CMS/ HEDIS Audit	Collected	Modification Code: a, b, c, d, e, f, g	CMS/ HEDIS Audit	Collected	Modification Code: a, b, c, d, e, f, g	CMS/ HEDIS Audit	
Identification of Alcohol and Other Drug Services	П		Е			П	П			
Chemical Dependency Utilization— Inpatient Discharges and ALOS	Д									
Mental Health Utilization—Inpatient Discharges and ALOS			П			П				
Mental Health Utilization	П		П		2		Г			
Antibiotic Utilization	П		П			П				
Outpatient Drug Utilization							П			
Health Plan Descriptive Information	Mea	surement Year 2 (HEDIS 2006)	005	Measurement Year 2006 (HEDIS 2007)		Measurement Year 2007 (HEDIS 2008)		007		
	Collected	Modification Code: a, b, c, d, e, f, g	CMS/ HEDIS Audit	Collected	Modification Code: a, b, c, d, e, f, g	CMS/ HEDIS Audit	Collected	Modification Code: a, b, c,d, e, f, g	CMS/ HEDIS Audit	
Board Certification										
Enrollment by Product Line	П		П			П				
Enrollment by State	П					П	П			
Language Diversity of Membership	П		П	П		П			П	
Race/Ethnicity Diversity of Membership	_		-	_		Г	П	$\overline{}$		
# IBI 5:						<u> </u>	<u> </u>			
Weeks of Pregnancy at Time of Enrollment						П				
Weeks of Pregnancy at Time of Enrollment	Meas	surement Year 2 (HEDIS 2006)	C005		surement Year 2 (HEDIS 2007)	2006		surement Year 2 (HEDIS 2008)	007	
Weeks of Pregnancy at Time of	Collected		CMS/ HEDIS Audit			CMS/ HEDIS			CMS/ HEDIS Audit	

3.1	Does your State have performance or quality measures that are not in HEDIS:
	a. For Measurement Year 2005: ☐ Yes ☐ No
	If $\underline{\text{Yes.}}$ please describe below (Please attach supporting documentation if available):
	b. For Measurement Year 2006: TYes No
	If <u>Yes</u> , please describe below (Please attach supporting documentation if available):
	c. For Measurement Year 2007: TYes No
	If $\underline{\text{Yes}}$ , please describe below (Please attach supporting documentation if available):

	!
3.2 Does your State operate a Fee For Service program?	
If Yes, please indicate which year(s) your State operated a FFS program:	
a. 🗆 2005	
b. 2006	
c. 2007	
Did your State collect performance measure for your FFS program? If $\underline{\text{Yes}}$ , how many of	
these measures were HEDIS measures?	
a. Measurement Year 2005: Tes No HEDIS: Some All None	
b. Measurement Year 2006: ☐ Yes ☐ No HEDIS: ☐ Some ☐ All ☐ None	
b. Measurement Year 2006: Tes Till No Till Dib. Till Dib.	
c. Measurement Year 2007:  Yes No HEDIS: Some All None	
3.3 Does your State have a PCCM Program? Tyes No	
If Yes, please indicate which year(s) your State operated a PCCM program:	
a.   2005	
ъ. □ 2006	
c.   2007	
J	
Did you collect performance measure for your Primary Care Case Management (PCCM)	
program? If Yes, how many of these measures were HEDIS measures?	
Measurement Veer 2006: Tyes The HEDIS: Some Tall Thone	
a. Weastrement rear 2006.   Tes   No Thebis.	
b. Measurement Year 2007: Tyes No HEDIS: Some All None	
c. Measurement Year 2007:	
	10
	2

If you would lil	ke to add any additional information to help us determine the degree of
compatibility of	of your data for use in this project, please do so below:
Next Steps	

# **Appendix E – Other Performance Measures Collected by States**

### Effectiveness of Care

- Reduction in influenza immunization refusals
- Use of beta agonist for enrollees participating in an asthma disease management program
- Rescue medicine for clients with asthma
- Appropriate asthma medications with three or more controller dispensing events
- Tobacco cessation
- Pharmacology for clients with persistent asthma

#### Pediatric/Adolescent/Prenatal Care

- CMS 416/ EPSDT reports
- Percent of children under age 21 who receive dental services
- Lead screening stratified by race and blood lead levels
- Preventive Services for Children
- Prenatal care measures
- Adolescent preventive care measures
- Childhood immunization (inclusive and steadily enrolled measures)
- Lead screening in children- one year olds and two year olds
- Preventive dental visits

#### Access to Care

- Visits to primary care
- No medical visits

### Hospital/ER Utilization

- Hospital utilization review contract and provider survey
- Hospitalization of ambulatory care sensitive condition hospitalizations
- Emergency department visits for asthma
- Follow-up visit to an ED Visit for asthma (within 30 days)
- ER visits with a primary diagnosis of dental
- Ratio of ER visits to primary care visits

#### Mental Health Utilization

- Mental health penetration (includes 19 indicators)
- Area-level pediatric quality indicators
- Outpatient mental health/ alcohol or drug abuse
- Follow-up after hospitalization for alcohol or drug abuse

#### **Older Patients**

- Lipid screening rate for enrollees 50-65
- Long term care performance measures
- Advance directives

#### Administrative/Descriptive

- Administrative services
- Enrollment by county

### Appendix F – Data Submission Instructions

# **2009 Medicaid Modernization: Quality Measurement Analysis Data Submission Instructions:**

- 1. States are requested to submit data in SAS, SPSS, MS ACCESS, or MS EXCEL; whichever is more suitable to the state. If data exists in text file, NCQA request that the data be converted to one of the aforementioned formats. Text files will be accepted if no other data is available.
- 2. Remove any protected health information from the dataset.
- 3. Please send a data file description/data dictionary that describes all variables. If the data are submitted as a flat file or raw text, the data dictionary should contain the location (column pointer) and format (character/length) of all variables so that the file can be imported into SAS correctly.
- 4. For states that have made modifications to measure, please also provide the measure specifications for all modified measures.
- 5. At a minimum, data sets should include the information outlined below in order to make this analysis possible.
- 6. Please submit data for measurement years 2005, 2006 and 2007 (HEDIS 2006, 2007 and 2008).

### Health plan information

- Health Plan Name/Organization Name
- Plan mailing address
- Name of the contact person
- Phone, Email
- State-specific plan submission, ID, or accession number
- Reporting product (HMO/PPO/POS)
- Plan enrollment by product line

### Measure information

- Measure name (e.g. Comprehensive Diabetes Care)
- Measure indicator name (e.g. Comprehensive Diabetes Care LDL Screening)
- Measurement year
- Eligible population for the measure (all denominator hits identified from administrative data)

- Reported measure rate
- Measure Numerator (number of numerator hits for the reported rate)
- Measure Denominator (number of eligible members included in the denominator) For admin-only rates, this would be the entire eligible population that is eligible for the measure. For hybrid rates, this number would be the number of individuals in the hybrid sample.
- Measure specification (text description of the measure specifications only needed for measures with modifications to HEDIS measure specification)
- Data collection methodology (hybrid vs. administrative)

# Appendix G – Data Sources by State

Medicaid Programs	STATES WITH ALL DATA in QC	STATES WITH PARTIAL DATA in	STATE WITH NO DATA in QC and	STATES PROVIDING
With MCOs for the study years		QC	UNUSABLE supplemental data	SUPPLEMENTAL DATA
37	11	23	3	9
Arizona		Χ		X
California	X			
Colorado	X			
Connecticut		X		
Delaware		Χ		
DC	Χ			
Florida		Χ		X
Georgia		Χ		
Hawaii		Χ		
Illinois*		Χ		
Indiana*		Χ		
Kansas		X		
Kentucky	Χ			
Maryland	Χ			
Massachusetts		X		X
Michigan	X			
Minnesota*		Х		
Missouri		Χ		X
Nebraska	Χ			
Nevada		Χ		X
New Jersey*		Х		
New Mexico	X			
New York		Х		X
Ohio		Χ		
Oregon			X	
Pennsylvania		Χ		
Rhode Island		Х		
South Carolina			X	
Tennessee	X			
Texas		Χ		X
Utah		Х		X
Vermont			Χ	
Virginia	X			
Washington	Χ			
West Virginia*		Χ		
Wisconsin		Χ		X
Puerto Rico*		Χ		

<sup>\*</sup> These states did not verify the health plan names; therefore some states may be fully represented in the Quality Compass and therefore the project database.

### **Appendix H – Number of Supplemented Measures and Plans by State**

	Measurement Year 2005				Measurement Year 2006				Measurement Year 2007			
State	Measures State Collected	Eligible for Inclusion	Submitted Measures	Number of Plans Included	Measures States Collected	Eligible for Inclusion	Submitted Measures	Number of Plans Included	Measures States Collected	Eligible for Inclusion	Submitted Measures	Number of Plans Included
Arizona	10	10	10	11	11	11	11	10**	14	14	14	10**
Florida	6	6	6	9**	10	10	10	10**	19	19	19	14**
Georgia	n/a				n/a			**	2	0	0	0**
Hawaii	34	2	0	0**	33	2	0	0**	31	3	0	0**
Kansas	16	15	0*	0*	1	0	0	0	14	13	0	0**
Massachusetts	17	3	3	2**	19	3	3	1**	10	3	0*	0*
Missouri	14	3	3	2**	14	3	3	3**	13	3	3	3**
Nevada	20	20	20	1**	11	10	10	1**	15	10	10	1**
New York	31	26	26	11**	42	38	38	11**	37	35	35	12**
Ohio	14	1	0	0**	14	1	0	0**	20	1	0	0**
Oregon	1	0	0	0	1	0	0	0	1	0	0	0
South Carolina	0	0	0	0	0	0	0	0	42	0	0	0
Texas	23	23	23	3**	22	22	22	14**	23	23	23	15**
Utah	11	11	11	1**	40	40	40	1**	29	29	0*	0*
Wisconsin	20	18	18	13	25	18	18	13**	26	19	18	13**

<sup>\*</sup> The existing HEDIS database contains all data for these states in the indicated year

<sup>\*\*</sup>The state's remaining health plan data will be extracted from the Quality Compass Database.

# $Appendix \ I-Number \ of \ States \ Reporting \ Valid \ Rates \ in \ HEDIS \ Database$

	HEDIS Data Collection Method (Administrative or Hybrid^)	Number of States Represented in HEDIS 2006	Number of States Represented in HEDIS 2007	Number of States Represented in HEDIS 2008
Effectiveness of Care				
Childhood Immunization Status	Administrative or Hybrid	32	32	32
Adolescent Immunization Status	Administrative Only	30	29	n/a
Lead Screening in Children	Administrative or Hybrid	n/a	n/a	30
Breast Cancer Screening	Administrative Only	26	29	28
Cervical Cancer Screening	Administrative or Hybrid	30	30	31
Chlamydia Screening in Women	Administrative Only	30	30	30
Appropriate Testing for Children With Pharyngitis	Administrative Only	26	26	28
Appropriate Treatment for Children With Upper Respiratory Infection	Administrative Only	26	26	28
Avoidance of Antibiotic Treatment in Adults With Acute Bronchitis	Administrative Only	24	26	25
Use of Spirometry Testing in the Assessment and Diagnosis of COPD	Administrative Only	20	21	25
Pharmacotherapy of COPD Exacerbation	Administrative Only	n/a	n/a	20

	HEDIS Data Collection Method (Administrative or Hybrid^)	Number of States Represented in HEDIS 2006	Number of States Represented in HEDIS 2007	Number of States Represented in HEDIS 2008
Use of Appropriate Medications for People With Asthma	Administrative Only	26	27	27
Cholesterol Management for Patients With Cardiovascular Conditions - LDL-C Screening	Administrative or Hybrid	24	22	24
Cholesterol Management for Patients With Cardiovascular Conditions - <100 LDL-C Level	Administrative or Hybrid	22	21	24
Controlling High Blood Pressure	Administrative or Hybrid	24	26	29
Beta-Blocker Treatment After a Heart Attack	Administrative Only	9	12	n/a
Persistence of Beta-Blocker Treatment After a Heart Attack	Administrative Only	9	10	12
Comprehensive Diabetes Care (CDC)				
CDC – HbA1c Testing	Administrative or Hybrid	30	30	31
CDC – HbA1c poor control (>9.0%)	Administrative or Hybrid	30	30	31
CDC - HbA1c good control (<7.0%)	Administrative or Hybrid	n/a	30	31
CDC – Eye Exam (Retinal) Performed	Administrative or Hybrid	30	30	31
CDC – LDL-C Screening	Administrative or Hybrid	30	30	31
CDC – LDL-C Control (<100 mg/dL)	Administrative or Hybrid	30	29	30

	HEDIS Data Collection Method (Administrative or Hybrid^)	Number of States Represented in HEDIS 2006	Number of States Represented in HEDIS 2007	Number of States Represented in HEDIS 2008
CDC – Medical Attention for Nephropathy	Administrative or Hybrid	30	30	31
CDC – Blood Pressure Control (<130/80 mm Hg)	Administrative or Hybrid	29	28	30
CDC – Blood Pressure Control (<140/90 mm Hg)	Administrative or Hybrid	n/a	28	30
Disease Modifying Anti-Rheumatic Drug Therapy for Rheumatoid Arthritis	Administrative Only	18	19	20
Use of Imaging Studies for Low Back Pain	Administrative Only	28	27	29
Antidepressant Medication Management	Administrative Only	13	13	14
Follow-Up Care for Children Prescribed ADHD Medication-Initiation	Administrative Only	24	24	25
Follow-Up Care for Children Prescribed ADHD Medication-Continuation	Administrative Only	16	23	24
Follow-Up After Hospitalization for Mental Illness	Administrative Only	14	15	17
Annual Monitoring for Patients on Persistent Medications	Administrative Only	25	26	27
Access/Availability of Care				
Adults' Access to Preventive/ Ambulatory Health Services (20-44)	Administrative Only	28	28	29
Adults' Access to Preventive/ Ambulatory Health Services (45-64)	Administrative Only	28	28	29

	HEDIS Data Collection Method (Administrative or Hybrid^)	Number of States Represented in HEDIS 2006	Number of States Represented in HEDIS 2007	Number of States Represented in HEDIS 2008
Children's and Adolescents' Access to Primary Care Practitioners	Administrative Only	31	30	30
Annual Dental Visit	Administrative Only	13	15	16
Initiation and Engagement of Alcohol and Other Drug Dependence Treatment	Administrative Only	15	14	17
Prenatal and Postpartum Care- Postpartum Care	Administrative or Hybrid	32	32	33
Prenatal and Postpartum Care- Timeliness of Prenatal Care	Administrative or Hybrid	32	32	33
Call Abandonment	Administrative Only	26	24	26
Call Answer Timeliness	Administrative Only	24	24	26
Use of Services				
Frequency of Ongoing Prenatal Care	Administrative or Hybrid	29	29	28
Well-Child Visits in the First 15 Months of Life	Administrative or Hybrid	31	30	32
Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life	Administrative or Hybrid	32	31	33
Adolescent Well-Care Visits	Administrative or Hybrid	31	30	33
Frequency of Selected Procedures	Administrative Only	28	28	32

	HEDIS Data Collection Method (Administrative or Hybrid^)	Number of States Represented in HEDIS 2006	Number of States Represented in HEDIS 2007	Number of States Represented in HEDIS 2008
Ambulatory Care	Administrative Only	31	30	33
Inpatient Utilization—General Hospital/ Acute Care	Administrative Only	30	29	21
Inpatient Utilization—Non-acute Care	Administrative Only	28	26	28
Discharges and ALOS—Maternity Care	Administrative Only	31	29	7
Births and ALOS, Newborns	Administrative Only	29	29	n/a
Identification of Alcohol and Other Drug Services	Administrative Only	16	13	18
Chemical Dependency Utilization—Inpatient Discharges and ALOS	Administrative Only	n/a	n/a	n/a
Mental Health Utilization—Inpatient Discharges and ALOS	Administrative Only	18	17	18
Mental Health Utilization	Administrative Only	18	17	18
Antibiotic Utilization	Administrative Only	25	25	25
Outpatient Drug Utilization	Administrative Only	27	24	24
Health Plan Descriptive Information				
Board Certification	Administrative Only	22	22	20

	HEDIS Data Collection Method (Administrative or Hybrid^)	Number of States Represented in HEDIS 2006	Number of States Represented in HEDIS 2007	Number of States Represented in HEDIS 2008
Enrollment by Product Line	Administrative Only	19	15	22
Enrollment by State	Administrative Only	28	28	29
Language Diversity of Membership	Administrative Only	18	20	27
Race/Ethnicity Diversity of Membership	Administrative Only	18	20	28
Weeks of Pregnancy at Time of Enrollment	Administrative or Hybrid	29	28	29
Health Plan Stability				
Years in Business/Total Membership	Administrative Only	26	27	27

n/a- Data not available

<sup>^</sup> Hybrid Method includes administrative data collection and medical record review

# **Appendix J- National Benchmarks Summary**

Measures	2008 N	2008 Rate	2007 N	2007 Rate	2006 N	2006 Rate		
Effectiveness of Care								
Prevention and Screening								
Childhood Immunization Status - DTaP/DT Rate <sup>1</sup>	162	78.1	148	78.5	169	76.6	1.4	⇔
Childhood Immunization Status - MMR Rate <sup>1</sup>	162	90.5	148	90.4	170	89.1	1.5	⇔
Childhood Immunization Status - IPV Rate <sup>1</sup>	162	87.5	148	87.2	168	84.1	3.4	<b>1</b>
Childhood Immunization Status - HIB Rate <sup>1</sup>	162	87.9	148	88.3	170	86.1	1.7	⇔
Childhood Immunization Status - Hepatitis B Rate <sup>1</sup>	162	87.4	148	87.6	169	84.9	2.5	⇔
Childhood Immunization Status - VZV Rate1	162	88.9	148	88.2	170	86.0	2.9	<b>↑</b>
Childhood Immunization Status - Combo 2 Rate <sup>1</sup>	162	72.5	149	72.5	166	70.0	2.5	⇔
Childhood Immunization Status - Combo 3 Rate <sup>1</sup>	162	65.8	149	59.7	NA	NA	NA	
Childhood Immunization Status - Pneumococcal Conjugate Rate <sup>1</sup>	162	74.2	148	67.4	NA	NA	NA	
Lead Screening in Children	107	61.3	NA	NA	NA	NA	NA	
Breast Cancer Screening 42-69 Years <sup>2</sup>	164	51.2	166	49.8	127	53.2	TC	
Cervical Cancer Screening <sup>3</sup>	185	62.7	198	63.5	175	62.2	TC	
Chlamydia Screening in Women 16-20 Years	153	49.1	152	49.9	143	47.8	1.3	\$
Chlamydia Screening in Women 21-25 Years	151	54.8	151	54.6	142	51.2	3.6	<b>↑</b>
Chlamydia Screening in Women Total	170	51.3	170	51.6	155	49.5	1.9	⇔
Resipratory Conditions								
Appropriate Testing for Children With Pharyngitis	144	59.6	139	57.5	142	51.8	7.8	<b>1</b>
Appropriate Treatment for Children With Upper Respiratory Infection	165	85.0	153	84.3	151	83.3	1.7	⇔
Avoidance of Antibiotic Treatment in Adults With Acute Bronchitis	116	26.1	120	35.3	118	32.3	-6.2	4
Use of Spirometry Testing in the Assessment and Diagnosis of COPD	85	29.5	81	28.6	78	26.6	2.9	⇔

Measures	2008 N	2008 Rate	2007 N	2007 Rate	2006 N	2006 Rate	Chan Ra 2006-	ite
Use of Appropriate Medications for People With Asthma 5-9 Years	148	89.7	157	89.7	162	84.7	5.0	<b>1</b>
Use of Appropriate Medications for People With Asthma 10-17 Years	150	87.1	159	87.2	162	82.4	4.8	<b>↑</b>
Use of Appropriate Medications for People With Asthma 18-56 Years	156	85.0	155	84.4	153	81.4	3.6	<b>↑</b>
Use of Appropriate Medications for People With Asthma Total	173	87.1	171	86.9	169	84.2	2.9	<b>1</b>
Cardiovascular Conditions								
Cholesteroal Management for Patients With Cardiovascular Conditions - LDL-C Screening 4	111	77.7	96	76.4	105	64.2	TC	
Cholesterol Management for Patients With Cardiovascular Conditions <100 LDL-C Level <sup>4</sup>	109	39.4	94	37.1	101	31.1	TC	
Controlling High Blood Pressure 18-85 Years Total <sup>5</sup>	122	52.2	94	53.0	92	61.4	TC	
Persistence of Beta Blocker After A Heart Attack <sup>6</sup>	39	62.0	27	68.1	27	65.6	-3.6	⇔
Comprehensive Diabetes Care								
CDC - HbA1c Testing	185	77.9	177	75.6	155	74.6	3.3	<b>^</b>
CDC - Poor HbA1c Control <sup>7</sup>	174	47.3	151	47.1	132	50.0	-2.7	⇔
CDC - Eye Exams	181	49.6	175	49.7	146	46.1	3.6	\$
CDC - LDL-C Screening	194	71.5	187	69.2	155	77.8	TC	
CDC - Rate - Mon Diabetic Neph. <sup>8</sup>	167	75.1	176	72.6	146	47.2	TC	
CDC - <100 LDL-C Level	180	30.5	159	31.0	130	31.5	-1.0	⇔
CDC -Blood Press Cont <130/80	156	28.3	145	30.1	NA	NA	NA	
CDC - Blood Press Cont <140/90	156	53.4	145	57.3	NA	NA	NA	
Musculoskeletal Conditions								
Disease- Modifying Anti-Rheumatic Drug Therapy for Rheumatoid Arthritis	70	68.9	71	67.5	72	64.7	4.2	⇔
Use of Imaging Studies for Low Back Pain	118	77.5	108	77.9	112	78.6	-1.1	⇔
Behavioral Health								
Antidepressant Medication Management - Optimal Pract. Contacts for Med Mgt.	59	24.2	53	23.4	53	24.0	0.2	⇔
Antidepressant Medication Management - Effect. Acute Phase Treatment		43.7	60	43.6	64	46.0	-2.4	⇔
Antidepressant Medication Management - Effect.Continuation Phase Treat.	67	26.8	60	27.6	64	29.2	-2.5	⇔
Follow-Up Care for Children Prescribed ADHD Medication Management- Initiation	106	36.4	97	32.7	87	32.4	3.9	<b>1</b>

Measures	2008 N	2008 Rate	2007 N	2007 Rate	2006 N	2006 Rate	Chan Ra 2006-	ite
Follow-Up Care for Children Prescribed ADHD Medication Management - Continuation 10	86	41.9	NR	NR	NR	NR	NA	
Follow-Up After Hospitalization for Mental Illness - 7 Days	84	42.9	72	41.4	68	37.2	5.7	⇔
Follow-Up After Hospitalization for Mental Illness - 30 Days	84	62.2	72	59.5	68	52.0	10.2	<b>1</b>
Medication Management								
Annual Monitoring for Patients on Persistent Medications- ACE inhibitors or ARBs	119	83.0	112	80.5	NA	NA	NA	
Annual Monitoring for Patients on Persistent Medications - Digoxin	68	85.6	60	83.7	NA	NA	NA	
Annual Monitoring for Patients on Persistent Medications - Diuretics	119	81.8	111	79.7	NA	NA	NA	
Annual Monitoring for Patients on Persistent Medications- Anticonvulsants	107	66.1	97	64.3	NA	NA	NA	
Annual Monitoring for Patients on Persistent Medications- Total	130	78.9	123	76.6	NA	NA	NA	
Access/Availability of Care								
Adults' Access to Preventive/ Ambulatory Health Services 20-44 Years	141	77.1	136	77.4	144	75.3	1.8	⇔
Adults' Access to Preventive/ Ambulatory Health Services 45-64 Years	141	82.8	134	82.7	143	80.7	2.1	⇔
Children and Adolescents' Access to Primary Care Practitioners 12-24 Months	159	93.5	148	92.7	155	90.5	3.0	<b>↑</b>
Children and Adolescents' Access to Primary Care Practitioners 25 Months-6 Years	160	84.8	148	84.1	157	81.6	3.2	<b>1</b>
Children and Adolescents' Access to Primary Care Practitioners 7-11 Years	140	85.8	143	85.3	149	82.1	3.8	<b>↑</b>
Children and Adolescents' Access to Primary Care Practitioners 12-19 Years	141	82.8	143	82.7	138	79.1	3.7	<b>↑</b>
Annual Dental Visits 2-3 Years	70	24.8	55	23.4	55	22.3	2.5	⇔
Annual Dental Visits 4-6 Years	71	49.6	55	49.6	56	48.3	1.4	⇔
Annual Dental Visits 7-10 Years	71	51.9	55	52.0	56	50.4	1.5	<b>\$</b>
Annual Dental Visits 11-14 Years	71	46.0	55	46.6	56	45.2	0.8	\$
Annual Dental Visits 15-18 Years	71	38.8	55	39.8	56	38.8	0.0	\$
Annual Dental Visits 19-21 Years	73	30.6	60	31.3	61	32.0	-1.4	⇔
Annual Dental Visits Total	90	41.8	71	42.8	74	42.5	-0.7	⇔
Prenatal and Pospartum Care- Timeliness of Prenatal Care	174	79.7	183	79.5	157	78.2	1.5	⇔
Prenatal and Postpartum Care- Postpartum Care		57.8	175	58.9	158	55.2	2.7	\$
Use of Services								
Frequency of Ongoing Prenatal Care <21 Percent Rate	92	11.8	109	13.0	92	17.2	-5.4	4

Measures	2008 N	2008 Rate	2007 N	2007 Rate	2006 N	2006 Rate	Chan Ra 2006-	ite
Frequency of Ongoing Prenatal Care 21-40 Percent Rate	92	6.6	109	5.5	92	5.9	0.7	⇔
Frequency of Ongoing Prenatal Care 41-60 Percent Rate	92	7.8	109	7.4	92	7.8	0.0	\$
Frequency of Ongoing Prenatal Care 61-80 Percent Rate	92	14.0	109	13.6	92	13.5	0.6	⇔
Frequency of Ongoing Prenatal Care81+ Percent Rate	93	59.9	109	59.7	92	54.6	5.3	⇔
Well- Child Visits in the First 15 Months of Life- zero visits	183	5.3	140	3.8	158	5.7	-0.4	⇔
Well-Child Visits in the First 15 Months of Life-one visit	183	3.2	140	2.6	158	4.0	-0.8	⇔
Well-Child Visits in the First 15 Months of Life- two visits	183	3.9	140	3.6	158	4.6	-0.7	Ψ
Well-Child Visits in the First 15 Months of Life-three visits Rate	183	6.4	140	6.0	158	7.3	-0.9	4
Well-Child Visits in the First 15 Months of Life- four visits	183	11.1	140	11.0	158	12.8	-1.7	4
Well-Child Visits in the First 15 Months of Life - five visits	183	17.2	140	17.5	158	18.8	-1.6	Ψ
Well-Child Visits in the First 15 Months of Life - Six or More visits	189	53.0	146	54.8	166	46.5	6.5	<b>1</b>
Well Child Visits in the Third, Fourth, Fifth and Sixth Years of Life	209	66.4	152	65.5	174	62.1	4.3	<b>↑</b>
Adolescent Well-Care Visits	199	42.7	149	42.8	167	39.8	2.8	<b>1</b>
Health Plan Descriptive Information								
Board Certification - PCP Board Cert Pct <sup>11</sup>	NA	NA	70	80.9	69	82.3	NA	
Board Certification - OB/GYN Provs Board Cert Pct	63	77.0	88	77.2	87	77.9	NA	
Board Certification - Pediatrician Board Cert Pct	63	81.0	88	76.5	88	78.2	NA	
Board Certification - Geriatricians Board Cert Pct	60	78.7	77	77.9	74	81.7	NA	
Board Certification - Oth Specialists Board Cert Pct	62	79.6	88	80.0	89	81.5	NA	
Board Certification - Family Medicine Board Cert Pct <sup>11</sup>	61	79.4	NA	NA	NA	NA	NA	
Board Certification - Internal Medicine Board Cert Pct <sup>11</sup>	63	79.9	NA	NA	NA	NA	NA	
Weeks of Pregnancy at Time of Enrollment - <0 week Pct	94	31.4	88	30.9	88	31.4	0.0	⇔
Weeks of Pregnancy at Time of Enrollment 1-12 weeks Pct	94	10.2	88	10.1	88	10.2	0.0	⇔
Weeks of Pregnancy at Time of Enrollment 13-27 weeks Pct	94	30.0	88	30.4	88	30.8	-0.7	⇔
Weeks of Pregnancy at Time of Enrollment 28+ weeks Pct	94	23.4	88	22.5	88	23.0	0.4	⇔
Weeks of Pregnancy at Time of Enrollment Unknown Pct	94	4.9	88	3.8	88	3.5	1.5	<b>↑</b>

Measures	2008 N	2008 Rate	2007 N	2007 Rate	2006 N	2006 Rate	Chang Rat 2006-2	te
Weeks of Pregnancy at Time of Enrollment Tot all Pregs Pct	94	100.0	88	97.8	88	98.9	1.1	⇔

<sup>\*</sup>Results include NCQA Quality Compass data supplemented with additional data collected directly from state Medicaid agencies

NA- Data for this measure is not available

**TC-** Due to measure specification changes during one or more of the project years, this measue should be trended with caution.

NR- Due to measure specification changes, the rate for this measure is not reportable.

<sup>1</sup>In HEDIS 2008, changes related to numerator evidence were made to the specifications, trending performance with prior years' data should be considered with caution.

<sup>2</sup>Due to measure specification changes in HEDIS 2007, this measure cannot be trended to prior years'.

<sup>3</sup>Due to measure specification changes in HEDIS 2007, this measure cannot be trended to prioer years'.

<sup>4</sup>Due to measure specification changes in HEDIS 2007, this measure cannot be trended to prior years'.

<sup>5</sup>Due to measure specification changes in HEDIS 2006, this measure cannot be trended to prior years'.

<sup>6</sup>In 2008, the lower age limit was lowered to 18 years of age, so trending performance over time should be considered with caution.

<sup>7</sup>Lower rates are better for this measure

<sup>8</sup>Due to measure specification changes in HEDIS 2007, this measure cannot be trended to prior years results

<sup>9</sup>Due to measures specification changes in HEDIS 2008, this measure was not reported publicly.

<sup>10</sup>The HEDIS 2006 and HEDIS 2007 specifications for this measure misstated the denominator and are not publicly reported.

<sup>11</sup>Primary Care Physicians category was replaced with Family Medicine and Internal Medicine categories in HEDIS 2008.

# **Appendix K- Weighted Performance Benchmark Tables**

### Effectiveness of Care

Childhood Immunization Status

Childhood I	Childhood Immunization Status - DTaP/DT Rate										
	Weighted Absolute Rate										
	2006	2006   2006   2007   2007   2008   20									
	N	Rate	N	Rate	N	Rate					
National Rate	169	72.0	148	78.3	162	73.2					
North East	46	79.1	23	74.6	29	72.8					
Mid Atlantic	23	79.7	27	79.8	26	77.6					
South	20	53.4	NA	NA	23	59.1					
Mid-West	51	73.9	44	77.1	47	78.8					
West	29	81.4	37	80.2	37	81.4					

Childhood	l Immu	nizatio	า Status	s - MM	R Rate					
	Weighted Absolute Rate									
	2006	2006	2007	2007	2008	2008				
	N	Rate	N	Rate	N	Rate				
National Rate	170	87.9	148	90.3	162	89.8				
North East	46	90.8	23	88.7	29	87.9				
Mid Atlantic	24	80.8	27	91	26	90.0				
South	20	88.8	NA	NA	23	87.4				
Mid-West	51	86.7	44	88.2	47	91.1				
West	29	91.9	37	92.6	37	92.7				

Childhoo	Childhood Immunization Status - IPV Rate										
	Weighted Absolute Rate										
	2006	2006	2007	2007	2008	2008					
	N	Rate	N	Rate	N	Rate					
National Rate	168	75.0	148	87.1	162	83.0					
North East	46	85.8	23	83.1	29	82.1					
Mid Atlantic	23	87.6	27	88.1	26	87.6					
South	NA	NA	NA	NA	23	69.1					
Mid-West	51	82.9	44	86.1	47	89.5					
West	29	89.1	37	89	37	90.1					

Childhoo	Childhood Immunization Status - HIB Rate										
		Weighted Absolute Rate									
	2006	2006   2006   2007   2007   2008   200									
	N	Rate	N	Rate	Ν	Rate					
National Rate	170	81.8	148	88.5	162	86.0					
North East	46	86.2	23	84	29	80.6					
Mid Atlantic	24	72.5	27	90	26	88.5					
South	20	73.5	NA	NA	23	80.9					
Mid-West	51	85.0	44	86.3	47	88.7					
West	29	91.0	37	91.3	37	91.3					

Childhood In	Childhood Immunization Status - Hepatitis B Rate										
	Weighted Absolute Rate										
	2006	2006	2007	2007	2008	2008					
	N	Rate	N	Rate	N	Rate					
National Rate	169	79.2	148	87.5	162	80.9					
North East	46	86.6	23	83.3	29	81.2					
Mid Atlantic	23	86.7	27	87.7	26	86.4					
South	20	55.9	NA	NA	23	60.9					
Mid-West	51	84.5	44	87.3	47	90.3					
West	29	88.9	37	88.9	37	90.4					

Childhoo	Childhood Immunization Status - VZV Rate										
	Weighted Absolute Rate										
	2006	2006	2007	2007	2008	2008					
	N	Rate	N	Rate	N	Rate					
National Rate	170	84.6	148	88.2	162	87.9					
North East	46	87.6	23	85.8	29	86.1					
Mid Atlantic	24	79.3	27	88.5	26	88.9					
South	20	84.3	NA	NA	23	84.6					
Mid-West	51	83.3	44	85.9	47	89.1					
West	29	88.5	37	90.7	37	91.1					

Childhood Immunization Status - Combo 2 Rate						
		Weig	hted Al	bsolute	Rate	
	2006	2006	2007	2007	2008	2008
	N	Rate	N	Rate	N	Rate
National Rate	166	69.7	149	72.1	162	65.5
North East	46	71.4	23	66.3	29	65.7
Mid Atlantic	23	72.0	27	72.9	26	70.8
South	NA	NA	NA	NA	23	44.7
Mid-West	51	66.2	44	71.4	47	74.4
West	30	73.0	38	74.8	37	77.3

Childhood Immunization Status - Combo 3 Rate							
		Weighted Absolute Rate					
	2006	2006	2007	2007	2008	2008	
	N	Rate	N	Rate	N	Rate	
National Rate	NA	NA	149	58.4	162	59.3	
North East	NA	NA	23	49.5	29	59.9	
Mid Atlantic	NA	NA	27	60.8	26	64.2	
South	NA	NA	NA	NA	23	39.7	
Mid-West	NA	NA	44	56.2	47	66.7	
West	NA	NA	38	62.9	37	71.1	

Childhood Immunization Status - Pneumococcal Conjugate Rate						
		Weig	hted A	bsolute	Rate	
	2006	2006	2007	2007	2008	2008
	N	Rate	N	Rate	N	Rate
National Rate	NA	NA	148	65.8	162	70.2
North East	NA	NA	23	57.5	29	69.9
Mid Atlantic	NA	NA	27	68.8	26	73.7
South	NA	NA	NA	NA	23	58.7
Mid-West	NA	NA	44	62.5	47	73.9
West	NA	NA	37	70.7	37	78.0

Lead Screening in Children

Lead Screening in Children							
		Weighted Absolute Rate					
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	
National Rate	NA	NA	NA	NA	107	53.7	
North East	NA	NA	NA	NA	NA	NA	
Mid Atlantic	NA	NA	NA	NA	22	57.2	
South	NA	NA	NA	NA	23	41.9	
Mid-West	NA	NA	NA	NA	36	54.2	
West	NA	NA	NA	NA	NA	NA	

### Breast Cancer Screening 42-69 years

Breast Cancer Screening								
		Weighted Absolute Rate						
	2006	2006   2006   2007   2007   2008   20						
	N	Rate	N	Rate	N	Rate		
National	127	51.7	166	51.1	164	53.1		
Rate	127	51.7	100	51.1	104	55.1		
North East	26	49.5	42	58.4	42	58.2		
Mid Atlantic	20	54.4	24	46.5	25	48.2		
South	22	50.1	22	45	20	41.7		
Mid-West	36	54.2	48	45.1	46	51.7		
West	23	55.1	30	48.4	31	51.4		

# Cervical Cancer Screening

Cervical Cancer Screening								
		Weighted Absolute Rate						
	2006	2006	2007	2007	2008	2008		
	N	Rate	N	Rate	N	Rate		
National	175	62.9	198	60.1	185	60.2		
Rate	173	02.5	150	00.1	103	00.2		
North East	24	63.8	42	54.4	29	57.4		
Mid Atlantic	24	51.3	26	59.2	25	63.4		
South	36	62.8	41	57.5	38	54.3		
Mid-West	59	68.6	52	66.0	56	64.6		
West	32	59.2	37	61.6	37	64.9		

Chlamydia Screening in Women

Chlamydia Screening in Women 16-20 Years							
		Weighted Absolute Rate					
	2006	2006	2007	2007	2008	2008	
	N	Rate	N	Rate	N	Rate	
National Rate	143	45.6	152	49.0	153	48.6	
North East	21	35.8	23	46.1	43	48.3	
Mid Atlantic	NA	NA	25	47.9	26	47.4	
South	29	49.4	28	49.8	32	47.6	
Mid-West	47	50.0	41	53.6	42	50.8	
West	29	45.6	35	48.0	NA	NA	

Chlamydia Screening in Women 21-25 Years							
		Weig	hted A	bsolute	Rate		
	2006	2006	2007	2007	2008	2008	
	N	Rate	N	Rate	Ν	Rate	
National Rate	142	47.6	151	52.5	151	54.0	
North East	21	36.7	23	49.7	43	52.0	
Mid Atlantic	NA	NA	25	49.6	26	52.1	
South	29	53.6	28	54.8	30	55.1	
Mid-West	47	52.7	41	57.8	42	58.5	
West	28	50.1	34	51.7	NA	NA	

Chlamydia Screening in Women Total								
		Weighted Absolute Rate						
	2006	2006	2007	2007	2008	2008		
	N	Rate	N	Rate	N	Rate		
National Rate	155	47.0	170	50.8	170	51.1		
North East	21	36.3	23	48.1	43	50.3		
Mid Atlantic	NA	NA	25	48.7	26	49.5		
South	29	51.4	29	52.1	32	50.8		
Mid-West	59	52.1	52	55.5	53	53.9		
West	29	47.9	41	49.8	NA	NA		

Appropriate Testing for Children with Pharyngitis

Appropriate Testing for Children With Pharyngitis									
		Weig	hted Al	solute	Rate				
	2006 N								
National Rate	142.0	45.5	139.0	51.2	144.0	55.0			
North East	38.0	49.1	37.0	61.0	34.0	66.2			
Mid Atlantic	NA	NA	23.0	61.5	24.0	64.3			
South	30.0	51.6	21.0	59.3	31.0	61.2			
Mid-West	48.0	49.2	41.0	55.0	40.0	58.5			
West	NA	NA	NA	NA	NA	NA			

Appropriate Treatment for Children with Upper Respiratory Infection

Appropriate Treatment for Children With Upper Respiratory Infection						
		Weig	hted A	bsolute	Rate	
	2006	2006	2007	2007	2008	2008
	N	Rate	N	Rate	N	Rate
National Rate	151	81.1	153	81.5	165	82.6
North East	44	82.6	42	82.7	43	84.5
Mid Atlantic	NA	NA	23	82.8	24	85.5
South	NA	NA	NA	NA	20	78.1
Mid-West	49	81.8	41	83.2	46	81.8
West	23	81.1	32	79.2	32	82.7

Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis

Avoidance of A	Avoidance of Antibiotic Treatment in Adults With Acute						
		Brono	hitis				
		Weig	hted A	bsolute	Rate		
	2006	2006	2007	2007	2008	2008	
	N	Rate	N	Rate	N	Rate	
National	118	31.4	120	34.6	116	26.6	
Rate	110	31.4	120	34.0	110	20.0	
North East	40	34.9	38	48.1	21	28.7	
Mid Atlantic	NA	NA	NA	NA	20	25.7	
South	NA	NA	NA	NA	NA	NA	
Mid-West	28	27.8	24	28.4	28	23.7	
West	21	34.0	28	28.7	30	28.0	

Use of Spirometry Testing in the Assessment of COPD

Use of Spirometry Testing in the Assessment and Diagnosis of COPD								
		Weighted Absolute Rate						
	2006	2006	2007	2007	2008	2008		
	N	Rate	N	Rate	N	Rate		
National Rate	78	23.9	81	27.6	85	28.7		
North East	29	18.7	31	32.6	28	37.9		
Mid Atlantic	NA	NA	NA	NA	NA	NA		
South	NA	NA	NA	NA	NA	NA		
Mid-West	21	25.7	NA	NA	24	29.6		
West	NA	NA	NA	NA	NA	NA		

Use of Appropriate Medications for People with Asthma

Use of Appropriate Medications for People With Asthma 5-9 Years						
		Weig	hted Al	solute	Rate	
	2006	2006	2007	2007	2008	2008
	N	Rate	N	Rate	N	Rate
National Rate	162	83.44	157	90.9	148	91.2
North East	42	77.2	38	91.1	39	89.1
Mid Atlantic	20	90.6	20	90.8	22	91.9
South	37	81.6	32	91.9	24	94.6
Mid-West	38	88.4	36	89.4	34	90.7
West	25	86.6	31	90.7	29	91.5

Use of Appropriate Medications for People With Asthma 10-17 Years						
		Weig	hted A	bsolute	Rate	
	2006	2006	2007	2007	2008	2008
	N	Rate	N	Rate	N	Rate
National Rate	162	83.0	159	88.5	150	89.1
North East	42	77.8	38	89.2	39	88.2
Mid Atlantic	21	88.8	21	89.3	23	90.3
South	34	81.0	31	89.9	22	90.4
Mid-West	39	86.3	36	87.0	35	88.2
West	26	84.8	33	87.4	31	89.0

Use of Appropriate Medications for People With Asthma 18-56 Years							
		Weig	hted A	bsolute	Rate		
	2006	2006	2007	2007	2008	2008	
	N	Rate	N	Rate	N	Rate	
National	153	79.8	155	85.2	156	85.4	
Rate	133	75.0	133	05.2	150	05.4	
North East	43	72.4	40	86.7	42	84.6	
Mid Atlantic	20	85.1	20	85.9	21	87.2	
South	26	82.8	23	84.8	23	85.4	
Mid-West	37	82.6	38	84.6	38	85.4	
West	27	83.0	34	83.4	32	85.0	

Use of Appropriate Medications for People With Asthma Total							
		Weig	hted A	bsolute	Rate		
	2006	2006	2007	2007	2008	2008	
	N	Rate	N	Rate	N	Rate	
National Rate	169	82.4	171	87.8	173	88.2	
North East	43	75.0	41	88.7	42	86.8	
Mid Atlantic	21	87.3	21	88.3	23	89.5	
South	25	85.5	25	88.4	26	89.8	
Mid-West	53	85.6	50	86.6	50	87.8	
West	27	84.6	34	86.7	32	88.1	

Cholesterol Management for Patients with Cardiovascular Conditions

Cholesterol Management for Patients With Cardiovascular Conditions-LDL-C Screening									
		Weighted Absolute Rate							
	2006	2006	2007	2007	2008	2008			
	N	Rate	N	Rate	N	Rate			
National Rate	105	63.9	96	76.7	111	78.4			
North East	40	65.3	33	79.0	37	77.3			
Mid Atlantic	NA	NA	NA	NA	NA	NA			
South	NA	NA	NA	NA	NA	NA			
Mid-West	28	60.9	24	73.4	31	78.8			
West	NA	NA	NA	NA	NA	NA			

Cholesterol Management for Patients With Cardiovascular Conditions <100 LDL-C										
		Weighted Absolute Rate								
	2006	2006	2007	2007	2008	2008				
	N	Rate	N	Rate	N	Rate				
National Rate	101	30.4	94	36.2	109	39.0				
North East	39	31.1	33	39.6	36	37.2				
Mid Atlantic	NA	NA	NA	NA	NA	NA				
South	NA	NA	NA	NA	NA	NA				
Mid-West	26	32.6	23	37.3	31	42.1				
West	NA	NA	NA	NA	NA	NA				

# Controlling High Blood Pressure 18-85 years Total

Controlling High Blood Pressure									
	Weighted Absolute Rate								
	2006	2006 2006 2007 2007 2008 2008							
	N	Rate	N	Rate	N	Rate			
National Rate	NA	NA	94	52.5	122	52.7			
North East	NA	NA	21	51.4	23	46.3			
Mid Atlantic	NA	NA	NA	NA	21	59.5			
South	NA	NA	NA	NA	30	50.6			
Mid-West	NA	NA	26	51.4	34	55.7			
West	NA	NA	NA	NA	NA	NA			

# Comprehensive Diabetes Care

Comprehensive Diabetes Care- LDL-C Screening								
		Weighted Absolute Rate						
	2006	2006   2006   2007   2007   2008   200						
	N	Rate	N	Rate	N	Rate		
National Rate	155	78.5	187	70.9	194	72.4		
North East	24	71.6	42	75.9	42	70.8		
Mid Atlantic	24	82.3	26	72.4	25	73.0		
South	25	80.2	32	64.8	44	72.1		
Mid-West	58	76.0	53	66.3	48	70.5		
West	24	83.9	34	74.4	35	76.5		

Comprehensive Diabetes Care- Mon Diabetic Neph								
		Weighted Absolute Rate						
	2006	2006   2006   2007   2007   2008   200						
	N	Rate	N	Rate	N	Rate		
National Rate	146	47.1	176	74.4	167	75.3		
North East	24	41.1	42	76.1	42	73.5		
Mid Atlantic	24	48.7	26	75.8	25	76.1		
South	25	41.0	32	66.4	29	72.2		
Mid-West	49	48.5	42	72.2	36	76.0		
West	24	54.7	34	79.6	35	78.6		

Comprehensive Diabetes Care < 100 LDL-C Level								
		Weighted Absolute Rate						
	2006	2006   2006   2007   2007   2008   200						
	N	Rate	N	Rate	N	Rate		
National Rate	130	32.2	159	31.6	180	31.6		
North East	24	25.4	41	33.1	41	31.8		
Mid Atlantic	23	39.6	26	35.8	25	35.2		
South	NA	NA	27	27.5	45	23.8		
Mid-West	49	32.6	42	29.6	36	33.3		
West	NA	NA	23	32.5	33	35.8		

Comprehensive Diabetes Care <130/80									
		Weighted Absolute Rate							
	2006	2006   2006   2007   2007   2008   200							
	N	Rate	N	Rate	N	Rate			
National	NA	NA	145	30.2	156	28.8			
Rate	IVA	IVA	145	30.2	156	20.0			
North East	NA	NA	41	28.5	41	27.4			
Mid Atlantic	NA	NA	26	28.8	25	27.9			
South	NA	NA	NA	NA	29	20.7			
Mid-West	NA	NA	41	32.33	36	34.1			
West	NA	NA	21	34.2	25	32.8			

Comprehensive Diabetes Care <140/90								
		Weighted Absolute Rate						
	2006	2006   2006   2007   2007   2008   2						
	N	Rate	N	Rate	N	Rate		
National Rate	NA	NA	145	57.1	156	54.3		
North East	NA	NA	41	58.8	41	55.7		
Mid Atlantic	NA	NA	26	55.3	25	52.7		
South	NA	NA	NA	NA	29	39.2		
Mid-West	NA	NA	41	58.2	36	61.6		
West	NA	NA	21	59.5	25	58.8		

Disease Modifying Anti-Rheumatic Drug Therapy for Rheumatoid Arthritis

Disease Modifying Anti-Rheumatic Drug Therapy for Rheumatoid Arthritis								
		Weig	hted A	bsolute	Rate			
	2006	2006	2007	2007	2008	2008		
	N	Rate	N	Rate	N	Rate		
National	72	62.4	71	67.3	70	68.4		
Rate	12	02.4	/1	67.3	70	00.4		
North East	29	55.1	24	70.8	23	71.4		
Mid Atlantic	NA	NA	NA	NA	NA	NA		
South	NA	NA	NA	NA	NA	NA		
Mid-West	NA	NA	NA	NA	NA	NA		
West	NA	NA	NA	NA	NA	NA		

Use of Imaging Studies for Low Back Pain

Use of Imaging Studies for Low Back Pain									
		Weighted Absolute Rate							
	2006	006   2006   2007   2007   2008   20							
	N	Rate	N	Rate	N	Rate			
National Rate	112	79.97	108	79.6	118	78.0			
North East	39	82.5	37	82.4	34	80.8			
Mid Atlantic	NA	NA	NA	NA	21	77.2			
South	NA	NA	NA	NA	20	73.3			
Mid-West	32	76.5	27	77.0	31	76.3			
West	NA	NA	NA	NA	NA	NA			

Antidepressant Medication Management

Antidepressant Medication Management- Optimal								
Practitioner	Practitioner Contacts for Medication Management							
		Weighted Absolute Rate						
	2006	2006   2006   2007   2007   2008   2008						
	N	Rate	N	Rate	N	Rate		
National	53	22.9	53	25.3	59	25.0		
Rate	33	22.9	33	25.5	39	25.0		
North East	29	26.6	30	27.9	31	30.1		
Mid Atlantic	NA	NA	NA	NA	NA	NA		
South	NA	NA	NA	NA	NA	NA		
Mid-West	NA	NA	NA	NA	NA	NA		
West	NA	NA	NA	NA	NA	NA		

Antidepressant Medication Management Effective								
	Acute	Phase	Treatm	nent				
		Weig	hted A	bsolute	Rate			
	2006	2006   2006   2007   2007   2008   2008						
	N	Rate	N	Rate	N	Rate		
National	64	46.9	60	42.5	67	42.6		
Rate	04	40.9	80	42.5	07	42.0		
North East	31	45	30	40.1	31	40.8		
Mid Atlantic	NA	NA	NA	NA	NA	NA		
South	NA	NA	NA	NA	NA	NA		
Mid-West	23	53.0	NA	NA	NA	NA		
West	NA	NA	NA	NA	NA	NA		

Antidepressant Medication Management Effective Continuation Phase Treatment								
	Jirciiiaa	Weighted Absolute Rate						
	2006	2006   2006   2007   2007   2008   2008						
	N	Rate	N	Rate	N	Rate		
National Rate	64	30	60	27.2	67	27.2		
North East	31	28.8	30	25.2	31	26.6		
Mid Atlantic	NA	NA	NA	NA	NA	NA		
South	NA	NA	NA	NA	NA	NA		
Mid-West	23	34.2	NA	NA	NA	NA		
West	NA	NA	NA	NA	NA	NA		

Follow-Up Care for Children Prescribed ADHD Medication Management

Follow-Up Care For Children Prescribed ADHD									
	Manag	gement	- Initiat	ion					
		Weighted Absolute Rate							
	2006	2006 2006 2007 2007 2008 2008							
	N	Rate	N	Rate	N	Rate			
National Rate	87	31.4	97	31.3	106	34.0			
North East	34	36.3	33	38.7	33	50.3			
Mid Atlantic	NA	NA	NA	NA	NA	NA			
South	NA	NA	NA	NA	NA	NA			
Mid-West	35 29.6 35 31.3 38 32.2								
West	NA	NA	NA	NA	NA	NA			

Follow-Up Care For Children Prescribed ADHD Management- Continuation									
IV	lanagei	ment- (	ontinu	ation					
		Weighted Absolute Rate							
	2006	2006   2006   2007   2007   2008   2008							
	N	Rate	N	Rate	N	Rate			
National Rate	NR	NR	NR	NR	86	37.9			
North East	NR	NR	NR	NR	25	54.2			
Mid Atlantic	NA	NA	NA	NA	NA	NA			
South	NA	NA	NA	NA	NA	NA			
Mid-West	NR	NR	NR	NR	32	37.8			
West	NA	NA	NA	NA	NA	NA			

Follow-Up After Hospitalization for Mental Illness

Follow-Up A	Follow-Up After Hospitalization for Mental Illness- 7							
		Da	ys					
		Weig	hted A	bsolute	Rate			
	2006	2006	2007	2007	2008	2008		
	N	Rate	N	Rate	N	Rate		
National Rate	68	34.5	72	41.1	84	44.1		
North East	32	53.8	33	59.0	34	59.2		
Mid Atlantic	NA	NA	NA	NA	NA	NA		
South	NA	NA	NA	NA	24	30.4		
Mid-West	NA	NA	NA	NA	NA	NA		
West	NA	NA	NA	NA	NA	NA		

Follow-Up After Hospitalization for Mental Illness- 30									
	l	Days Weighted Absolute Rate							
		weig	ntea A	psoiute	кате				
	2006	2006	2007	2007	2008	2008			
	N	Rate	N	Rate	N	Rate			
National	68	51.5	72	60.7	84	64.7			
Rate	08	51.5	/2	60.7	04	64.7			
North East	32	70	33	76.0	34	76.9			
Mid Atlantic	NA	NA	NA	NA	NA	NA			
South	NA	NA	NA	NA	24	50.4			
Mid-West	NA	NA	NA	NA	NA	NA			
West	NA	NA	NA	NA	NA	NA			

Annual Monitoring for Patients on Persistent Medications

Annual	Annual Monitoring for Patients on Persistent Medications - Digoxin									
		Weighted Absolute Rate								
	2006 N	006 N 2006 Rate 2007 N 2007 Rate 2008 N 2008 Rate								
National	NA	NA	60	81.0	68	83.3				
Rate	IVA	IVA	00	81.0	08	83.3				
North East	NA	NA	NA	NA	NA	NA				
Mid	NA	NA	NA	NA	NA	NA				
Atlantic	IVA	IVA	IVA	IVA	IVA	IVA				
South	NA	NA	NA	NA	NA	NA				
Mid-West	NA	NA	NA	NA	NA	NA				
West	NA	NA	NA	NA	NA	NA				

Annual Monitoring for Patients on Persistent Medications- Diuretics										
		Weighted Absolute Rate								
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate				
National	NA	NA	111	79.2	119	81.6				
Rate	IVA	IVA	111	79.2	119	01.0				
North East	NA	NA	38	77.5	36	78.7				
Mid Atlantic	NA	NA	NA	NA	20	81.9				
South	NA	NA	NA	NA	NA	NA				
Mid-West	NA	NA	32	79.4	36	81.2				
West	NA	NA	NA	NA	NA	NA				

Annual Monitoring for Patients on Persistent Medications- Anticonvulsants									
	Weighted Absolute Rate								
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate			
National	NA	NA	97	63.9	107	65.1			
Rate	IVA	IVA	37	03.9	107	05.1			
North East	NA	NA	35	58.3	33	58.7			
Mid Atlantic	NA	NA	NA	NA	NA	NA			
South	NA	NA	NA	NA	NA	NA			
Mid-West	NA	NA	25	69.9	31	68.0			
West	NA	NA	NA	NA	NA	NA			

Annual Monitoring for Patients on Persistent Medications - Total									
	Weighted Absolute Rate								
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate			
National	NA	NA	123	77.6	130	79.9			
Rate	IVA	IVA	125	77.0	130	73.3			
North East	NA	NA	39	77.2	36	77.7			
Mid Atlantic	NA	NA	NA	NA	20	79.9			
South	NA	NA	NA	NA	NA	NA			
Mid-West	NA	NA	43	77.4	47	79.2			
West	NA	NA	NA	NA	NA	NA			

# Access and Availability to Care

Adults' Access to Preventive/Ambulatory Health Services

Adults' Access to Preventive/ Ambulatory Health Services 20-44 Years									
		Weighted Absolute Rate							
	2006 N	2006 Rate     2007 Rate   2008 N   2008 Rate							
National Rate	144	72.5	136	75.6	141	74.2			
North East	44	68.8	41	73.8	41	69.5			
Mid Atlantic	22	78.4	26	80.3	25	79.8			
South	20	73.0	NA	NA	22	70.6			
Mid-West	46	77.1	37	81.4	40	81.9			
West	NA	NA	NA	NA	NA	NA			

Adults' Access to Preventive/ Ambulatory Health Services 45-64 Years										
		Weighted Absolute Rate								
	2006 N	2006 Rate     2007 Rate   2008 N   2008 Rate								
National Rate	143	77.1	134	81.4	141	79.4				
North East	44	74.2	41	79.8	41	77.1				
Mid Atlantic	22	84.9	25	86.8	25	86.4				
South	NA	NA	NA	NA	22	76.3				
Mid-West	46	77.3	37	84.5	40	80.5				
West	NA	NA	NA	NA	NA	NA				

Adults' Access to Preventive/ Ambulatory Health Services 65+ Years									
	Weighted Absolute Rate								
	2006 N	2006 Rate   2007 Rate   2008 N   2008 Rate							
National Rate	71	70.1	75	74.5	79	70.4			
North East	28	61.4	27	66.0	28	63.4			
Mid Atlantic	NA	NA	NA	NA	NA	NA			
South	NA	NA	NA	NA	NA	NA			
Mid-West	NA	NA	NA	NA	NA	NA			
West	NA	NA	NA	NA	NA	NA			

Children and Adolescents' Access to Primary Care Practitioners

Children and Adolescents' Access to Primary Care Practitioners 12-24 Months									
		Weighted Absolute Rate							
	2006 N	2007 N   2007 Rate   2008 N   2008 Rate							
National Rate	155	90.6	148	93.4	159	94.3			
North East	44	88.5	42	91.3	43	90.7			
Mid Atlantic	23	93.8	26	95.3	26	94.9			
South	20	94.6	NA	NA	33	95.7			
Mid-West	46	87.2	35	94.7	39	95.8			
West	22	90.6	28	92.0	NA	NA			

Children and Adolescents' Access to Primary Care Practitioners 25 Months - 6 Years										
		Weighted Absolute Rate								
	2006 N	2006 N 2006 Rate 2007 N 2007 Rate 2008 N 2008 Rate								
National Rate	157	81.5	148	85.0	160	85.8				
North East	44	82.8	42	85.8	43	84.1				
Mid Atlantic	23	84.5	26	86.3	26	85.9				
South	20	84.5	NA	NA	34	88.6				
Mid-West	48	76.8	35	83.6	39	85.2				
West	22	79.5	28	83.3	NA	NA				

Children and Adolescents' Access to Primary Care Practitioners 7-11 Years										
	Weighted Absolute Rate									
	2006 N	2007 N   2007 Rate   2008 N   2008 Rate								
National Rate	149	81.8	143	84.8	140	85.8				
North East	41	84.2	42	87.4	42	86.4				
Mid Atlantic	22	86.1	25	87.4	26	87.3				
South	NA	NA	NA	NA	NA	NA				
Mid-West	45	76.9	34	83.7	37	85.2				
West	22	76.7	25	80.2	NA	NA				

Children and Adolescents' Access to Primary Care Practitioners 12-19 Years									
	Weighted Absolute Rate								
	2006 N	2007 N   2007 Rate   2008 N   2008 Rate							
National Rate	138	77.4	143	80.9	141	81.6			
North East	29	74.5	42	82.0	42	79.9			
Mid Atlantic	23	82.6	25	84.4	26	83.9			
South	NA	NA	NA	NA	NA	NA			
Mid-West	45	76.9	34	82.4	37	83.4			
West	22	73.1	25	75.9	NA	NA			

### Annual Dental Visits

Annual Dental Visits 2-3 Years								
		W	eighted Abs	olute Rate				
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate		
National Rate	55	20.9	55	20.1	70	27.1		
North East	25	20.9	23	23.4	25	26.7		
Mid Atlantic	NA	NA	NA	NA	NA	NA		
South	NA	NA	NA	NA	NA	NA		
Mid-West	NA	NA	NA	NA	NA	NA		
West	NA	NA	NA	NA	NA	NA		

Annual Dental Visits 4-6 Years									
		Weighted Absolute Rate							
	2006 N	2006 N 2006 Rate 2007 N 2007 Rate 2008 N Rate							
National Rate	56	49.7	55	43.3	71	55.2			
North East	25	53.5	23	51.4	25	54.5			
Mid Atlantic	NA	NA	NA	NA	NA	NA			
South	NA	NA	NA	NA	NA	NA			
Mid-West	NA	NA	NA	NA	NA	NA			
West	NA	NA	NA	NA	NA	NA			

Annual Dental Visits 7-10 Years									
		Weighted Absolute Rate							
	2006 N	2006 N 2006 Rate 2007 N 2007 Rate 2008 N Rate							
National Rate	56	52.8	55	46.3	71	58.2			
North East	25	56.8	23	55.5	25	56.7			
Mid Atlantic	NA	NA	NA	NA	NA	NA			
South	NA	NA	NA	NA	NA	NA			
Mid-West	NA	NA	NA	NA	NA	NA			
West	NA	NA	NA	NA	NA	NA			

Annual Dental Visits 11-14 Years									
		Weighted Absolute Rate							
	2006 N	2006 N 2006 Rate 2007 N Rate 2008 N 2							
National Rate	56	47.5	55	41.4	71	52.0			
North East	25	50.6	23	49.8	25	50.8			
Mid Atlantic	NA	NA	NA	NA	NA	NA			
South	NA	NA	NA	NA	NA	NA			
Mid-West	NA	NA	NA	NA	NA	NA			
West	NA	NA	NA	NA	NA	NA			

Annual Dental Visits 15-18 Years									
		Weighted Absolute Rate							
	2006 N	2006 N 2006 Rate 2007 N Rate 2008 N Rate							
National Rate	56	41.3	55	35.7	71	43.6			
North East	25	44.0	23	42.8	25	43.8			
Mid Atlantic	NA	NA	NA	NA	NA	NA			
South	NA	NA	NA	NA	NA	NA			
Mid-West	NA	NA	NA	NA	NA	NA			
West	NA	NA	NA	NA	NA	NA			

Annual Dental Visits 19-21 Years									
		Weighted Absolute Rate							
	2006 N	2006 N 2006 Rate 2007 N 2007 Rate 2008 N Rate							
National Rate	61	36.3	60	31.0	73	36.0			
North East	30	39.7	28	38.4	30	39.7			
Mid Atlantic	NA	NA	NA	NA	NA	NA			
South	NA	NA	NA	NA	NA	NA			
Mid-West	NA	NA	NA	NA	NA	NA			
West	NA	NA	NA	NA	NA	NA			

Annual Dental Visits Total									
		Weighted Absolute Rate							
	2006 N	006 N 2006 Rate 2007 N 2007 Rate 2008 N Rate							
National Rate	74	44.6	71	38.7	90	46.6			
North East	30	46.7	28	45.6	30	47.3			
Mid Atlantic	NA	NA	NA	NA	NA	NA			
South	NA	NA	NA	NA	NA	NA			
Mid-West	NA	NA	NA	NA	NA	NA			
West	NA	NA	NA	NA	NA	NA			

Prenatal and Postpartum Care

Prenata	Prenatal and Postpartum Care- Timeliness of Prenatal Care								
		W	eighted /	Absolute	Rate				
	2006 N	2008 N							
National Rate	157	81.2	183	82.1	174	74.1			
North East	24	82.3	42	85.2	29	80.1			
Mid Atlantic	25	83.0	27	85.8	25	81.9			
South	31	86.2	37	83.2	39	67.9			
Mid-West	47	69.2	41	75.9	45	82.3			
West	30	81.3	36	80.7	36	82.1			

Pre	Prenatal and Postpartum Care- Postpartum Care								
		W	eighted /	Absolute	Rate				
	2006 N	2008 N							
National Rate	158	54.3	175	57.7	177	57.0			
North East	24	48.3	42	61.0	29	49.6			
Mid Atlantic	25	58.2	27	61.3	26	58.8			
South	31	55.2	27	54.7	39	55.6			
Mid-West	48	51.6	42	58.5	45	63.4			
West	30	58.3	37	57.8	38	59.9			

#### **Use of Services**

Frequency of Ongoing Prenatal Care

Frequency of Ongoing Prenatal Care <21 Percent Rate									
		Weighted Absolute Rate							
	2006 N	06 N 2006 2007 N 2007 Rate 2008 N Rate							
National Rate	92	22.7	109	18.7	92	22.3			
North East	NA	NA	38	11.0	21	17.2			
Mid Atlantic	23	24.0	25	17.5	24	24.1			
South	NA	NA	NA	NA	NA	NA			
Mid-West	33	21.9	26	28.7	25	15.7			
West	NA	NA	NA	NA	NA	NA			

Frequency of Ongoing Prenatal Care 21-40 Percent Rate									
		We	ighted Ab	solute Ro	ate				
	2006 N	2006 N 2006 Rate 2007 N 2007 Rate 2008 N Rate							
National Rate	92	7.0	109	6.2	92	10.2			
North East	NA	NA	38	5.3	21	9.2			
Mid Atlantic	23	9.8	25	7.7	24	9.4			
South	NA	NA	NA	NA	NA	NA			
Mid-West	33	8.3	26	11.8	25	10.3			
West	NA	NA	NA	NA	NA	NA			

Frequency of Ongoing Prenatal Care 41-60 Percent Rate									
		Weighted Absolute Rate							
	2006 N	2006 N 2006 Rate 2007 N 2007 Rate 2008 N Rate							
National Rate	92	7.9	109	7.8	92	8.9			
North East	NA	NA	38	8.1	21	9.8			
Mid Atlantic	23	10.4	25	8.4	24	8.1			
South	NA	NA	NA	NA	NA	NA			
Mid-West	33	8.0	26	8.2	25	8.8			
West	NA	NA	NA	NA	NA	NA			

Frequency of Ongoing Prenatal Care 61-80 Percent Rate									
		We	ighted Ab	solute Ro	ate				
	2006 N	2006 N 2006 Rate 2007 N Rate 2008 N Rate							
National Rate	92	14.04	109	14.8	92	14.2			
North East	NA	NA	38	17.0	21	15.5			
Mid Atlantic	23	11.68	25	9.7	24	13.1			
South	NA	NA	NA	NA	NA	NA			
Mid-West	33	12.14	26	10.8	25	12.7			
West	NA	NA	NA	NA	NA	NA			

Frequency of Ongoing Prenatal Care 81+ Percent Rate									
		Weighted Absolute Rate							
	2006 N	2006 N 2006 Rate 2007 N Rate 2008 N Rate							
National Rate	92	48.0	109	52.1	93	44.5			
North East	NA	NA	38	58.6	21	48.3			
Mid Atlantic	23	44.1	25	56.7	24	45.4			
South	NA	NA	NA	NA	NA	NA			
Mid-West	33	48.6	26	38.4	26	53.0			
West	NA	NA	NA	NA	NA	NA			

Well Child Visits in the first 15 Months of Life

Well-	Well- Child Visits in the First 15 Months of Life- zero visits							
		Weighted Absolute Rate						
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate		
National Rate	158	5.3	140	4.6	183	4.7		
North East	24	21.6	22	18.8	43	11.5		
Mid Atlantic	24	2.7	26	3.1	25	2.3		
South	35	4.0	21	3.5	38	3.5		
Mid-West	47	3.1	42	2.4	46	2.6		
West	28	1.6	29	1.4	31	1.2		

We	Well-Child Visits in the First 15 Months of Life-one visit								
		Weighted Absolute Rate							
	2006 N	006 N 2006 Rate 2007 N 2007 Rate 2008 N Rate							
National Rate	158	4.0	140	3.3	183	3.1			
North East	24	9.0	22	7.1	43	4.7			
Mid Atlantic	24	2.8	26	1.6	25	1.6			
South	35	4.1	21	3.6	38	3.6			
Mid-West	47	3.2	42	2.9	46	2.5			
West	28	2.1	29	1.8	31	1.5			

Well-Child Visits in the First 15 Months of Life- two visits								
		Weighted Absolute Rate						
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate		
National Rate	158	5.0	140	4.2	183	4.1		
North East	24	6.0	22	5.1	43	4.1		
Mid Atlantic	24	4.2	26	2.9	25	2.7		
South	35	5.5	21	4.9	38	5.2		
Mid-West	47	4.8	42	4.1	46	4.0		
West	28	3.7	29	3.0	31	2.5		

Well-Child Visits in the First 15 Months of Life-three visits Rate							
		Weighted Absolute Rate					
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	
National Rate	158	7.8	140	6.7	183	6.7	
North East	24	6.3	22	5.4	43	5.3	
Mid Atlantic	24	7.3	26	5.4	25	5.3	
South	35	8.5	21	7.9	38	8.4	
Mid-West	47	8.3	42	6.6	46	6.8	
West	28	6.6	29	6.3	31	5.3	

Well-Child Visits in the First 15 Months of Life- four visits								
		Weighted Absolute Rate						
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate		
National Rate	158	13.7	140	12.1	183	11.7		
North East	24	8.4	22	7.8	43	8.4		
Mid Atlantic	24	13.1	26	10.3	25	10.3		
South	35	15.2	21	14.2	38	15.0		
Mid-West	47	14.6	42	11.9	46	11.4		
West	28	12.7	29	12.2	31	10.9		

Well-Child Visits in the First 15 Months of Life - five visits								
		Weighted Absolute Rate						
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate		
National Rate	158	20.4	140	19.2	183	18.0		
North East	24	12.1	22	12.2	43	12.5		
Mid Atlantic	24	19.0	26	18.0	25	18.2		
South	35	21.8	21	21.3	38	20.6		
Mid-West	47	23.0	42	19.9	46	19.1		
West	28	20.8	29	19.1	31	18.6		

Well-Child Visits in the First 15 Months of Life - Six or More visits							
		Weighted Absolute Rate					
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	
National Rate	166	44.3	146	49.8	189	51.9	
North East	24	36.6	22	43.6	43	53.4	
Mid Atlantic	24	50.9	26	58.7	25	59.6	
South	35	40.9	21	44.5	38	43.8	
Mid-West	47	41.9	42	51.1	46	53.5	
West	36	53.2	35	56.5	37	59.4	

Well Child Visits in the Third, Fourth, Fifth and Sixth Years of Life

Well Child Visits in the Third, Fourth, Fifth and Sixth Years of Life									
		Weighted Absolute Rate							
	2006 N	2007 N   2008 N							
National Rate	174	Rate 58.2	152	Rate 61.0	209	Rate 64.2			
North East	24	49.4	22	55.4	43	60.5			
Mid Atlantic	25	62.7	27	67.9	26	70.7			
South	35	60.5	22	63.8	53	66.1			
Mid-West	51	53.2	42	54.0	47	60.6			
West	39	60.1	39	58.7	40	62.2			

#### Adolescent Well-Care Visits

	Adolescent Well-Care Visits									
		Weighted Absolute Rate								
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate				
National	167	37.0	149	39.0	199	37.7				
Rate	107	37.0	149	33.0	199	37.7				
North East	NA	NA	NA	NA	43	33.5				
Mid Atlantic	24	38.6	26	42.1	26	50.2				
South	36	37.1	22	38.7	43	41.3				
Mid-West	52	35.2	42	35.7	47	31.8				
West	39	31.4	41	33.2	40	37.0				

## **Health Plan Descriptive Information**

Board Certification

Board Certification - PCP Board Certified Pct									
		Weighted Absolute Rate							
	2006 N	2006 N 2006 Rate 2007 N Rate 2008 N Rate							
National Rate	69	NA	70	NA	NA	NA			
North East	NA	NA	NA	NA	NA	NA			
Mid Atlantic	NA	NA	NA	NA	NA	NA			
South	NA	NA	NA	NA	NA	NA			
Mid-West	24	NA	22	NA	NA	NA			
West	NA	NA	NA	NA	NA	NA			

Board Certification - OB/GYN Provs Board Certified Pct								
		Weighted Absolute Rate						
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate		
National Rate	87	73.5	88	77.0	63	NA		
North East	33	73.5	33	77.0	NA	NA		
Mid Atlantic	NA	NA	NA	NA	NA	NA		
South	NA	NA	NA	NA	NA	NA		
Mid-West	24	NA	22	NA	23	NA		
West	NA	NA	NA	NA	NA	NA		

В	Board Certification - Pediatrician Board Certified Pct							
		V	Veighted A	bsolute Ra	te			
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate		
National Rate	88	77.9	88	76.1	63	NA		
North East	33	77.9	33	76.1	NA	NA		
Mid Atlantic	NA	NA	NA	NA	NA	NA		
South	NA	NA	NA	NA	NA	NA		
Mid-West	24	NA	22	NA	23	NA		
West	NA	NA	NA	NA	NA	NA		

Board Certification - Geriatricians Board Certified Pct							
		V	Veighted A	bsolute Ra	te		
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	
National Rate	74	80.9	77	80.2	60	NA	
North East	23	80.9	24	80.2	NA	NA	
Mid Atlantic	NA	NA	NA	NA	NA	NA	
South	NA	NA	NA	NA	NA	NA	
Mid-West	23	NA	22	NA	22	NA	
West	NA	NA	NA	NA	NA	NA	

Board Certification - Other Specialists Board Certified Pct								
		Weighted Absolute Rate						
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate		
National Rate	89	81.2	88	81.9	62	NA		
North East	34	81.2	33	81.9	NA	NA		
Mid Atlantic	NA	NA	NA	NA	NA	NA		
South	NA	NA	NA	NA	NA	NA		
Mid-West	24	NA	22	NA	23	NA		
West	NA	NA	NA	NA	NA	NA		

Board Certification - Family Medicine Board Certified Pct							
		V	Veighted A	bsolute Ra	te		
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	
National Rate	NA	NA	NA	NA	61	NA	
North East	NA	NA	NA	NA	NA	NA	
Mid Atlantic	NA	NA	NA	NA	NA	NA	
South	NA	NA	NA	NA	NA	NA	
Mid-West	NA	NA	NA	NA	23	NA	
West	NA	NA	NA	NA	NA	NA	

Board Certification - Internal Medicine Board Certified Pct								
		Weighted Absolute Rate						
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate		
National Rate	NA	NA	NA	NA	63	NA		
North East	NA	NA	NA	NA	NA	NA		
Mid Atlantic	NA	NA	NA	NA	NA	NA		
South	NA	NA	NA	NA	NA	NA		
Mid-West	NA	NA	NA	NA	23	NA		
West	NA	NA	NA	NA	NA	NA		

Weeks of Pregnancy at Time of Enrollment

Weeks of Pregnancy at Time of Enrollment - < 0 week Pct							
		Weighted Absolute Rate					
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate	
National Rate	88	0.01	88	0.02	94	NA	
North East	NA	NA	20	NA	21	NA	
Mid Atlantic	NA	NA	NA	NA	NA	NA	
South	NA	NA	NA	NA	22	NA	
Mid-West	34	0.01	27	0.02	27	NA	
West	NA	NA	NA	NA	NA	NA	

Weeks of Pregnancy at Time of Enrollment 1-12 weeks Pct								
		Weighted Absolute Rate						
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate		
National Rate	88	0.07	88	0.06	94	NA		
North East	NA	NA	20	NA	21	NA		
Mid Atlantic	NA	NA	NA	NA	NA	NA		
South	NA	NA	NA	NA	22	NA		
Mid-West	34	0.07	27	0.06	27	NA		
West	NA	NA	NA	NA	NA	NA		

Weeks of Pregnancy at Time of Enrollment 13-27 weeks Pct								
		Weighted Absolute Rate						
	2006 N	2006 Rate	2007 N	2007 Rate	2008 N	2008 Rate		
National Rate	88	0.35	88	0.36	94	NA		
North East	NA	NA	20	NA	21	NA		
Mid Atlantic	NA	NA	NA	NA	NA	NA		
South	NA	NA	NA	NA	22	NA		
Mid-West	34	0.35	27	0.36	27	NA		
West	NA	NA	NA	NA	NA	NA		

Weeks of Pregnancy at Time of Enrollment 28+ weeks Pct								
		Weighted Absolute Rate						
	2006 N	2006 N 2006 Rate 2007 N 2007 Rate 2008 N Rate						
National Rate	88	0.56	88	0.49	94	NA		
North East	NA	NA	20	NA	21	NA		
Mid Atlantic	NA	NA	NA	NA	NA	NA		
South	NA	NA	NA	NA	22	NA		
Mid-West	34	0.56	27	0.49	27	NA		
West	NA	NA	NA	NA	NA	NA		

Weeks of Pregnancy at Time of Enrollment Unknown Pct							
		W	eighted Ab	solute Rate			
	2006 N	2006 N 2006 Rate 2007 N 2007 Rate 2008 N Rate					
National Rate	88	0	88	0.07	94	NA	
North East	NA	NA	20	NA	21	NA	
Mid Atlantic	NA	NA	NA	NA	NA	NA	
South	NA	NA	NA	NA	22	NA	
Mid-West	34	0	27	0.07	27	NA	
West	NA	NA	NA	NA	NA	NA	

Weeks of Pregnancy at Time of Enrollment Tot all Pregs Pct							
		Weighted Absolute Rate					
	2006 N	2006 Rate   2007 N     2008 N					
National Rate	88	1	88	1	94	NA	
North East	NA	NA	20	NA	21	NA	
Mid Atlantic	NA	NA	NA	NA	NA	NA	
South	NA	NA	NA	NA	22	NA	
Mid-West	34	1	27	1	27	NA	
West	NA	NA	NA	NA	NA	NA	

# **Appendix L- Hybrid versus Administrative Rates**

	Calculated Using Admin Methodology	Calculated Using Hybrid Methodology
Measure Name	Mean	Mean
Adolescent Well Care Visits- Reported Rate	37.7	45.0
Cervical Cancer Screening- Reported Rate	60.7	65.6
Comprehensive Diabetes Care- <100 LDL-C Level	26.7	31.6
Comprehensive Diabetes Care- Blood Press Cont <130/80	23.4	29.4
Comprehensive Diabetes Care- Eye Exams	37.8	50.7
Comprehensive Diabetes Care- Good HbA1c Control	26.6	31.6
Comprehensive Diabetes Care- HbA1c Testing	73.4	78.4
Comprehensive Diabetes Care- LDL-C Screening	63.3	72.5
Comprehensive Diabetes Care- Med Attention to Diabetic Nephropathy	69.2	75.5
Comprehensive Diabetes Care- Poor HbA1c Control	53.7	45.4
Childhood Immunization Status- Combo 2 Rate	66.0	72.8
Childhood Immunization Status- Combo 3 Rate	61.0	66.0
Childhood Immunization Status- DTaP/DT Rate	73.1	78.3
Childhood Immunization Status- HIB Rate	86.7	87.9
Childhood Immunization Status- Hepatitis B Rate	82.0	87.6
Childhood Immunization Status- IPV Rate	84.1	87.7
Childhood Immunization Status- MMR Rate	90.3	90.5
Childhood Immunization Status- Pneumococcal Conjugate Rate	72.5	74.2
Childhood Immunization Status- VZV Rate	88.6	88.9
Cholesterol Mgt Patients with Cardiovascular Conditions- LDL-C Screening	65.7	78.7
CMC Cholesterol Mgt Patients w Cardio Conditions- <100 LDL-C Level	19.4	41.1
Frequency of Prenatal Care- 21-40 Percent Rate	17.5	5.0
Frequency of Prenatal Care- 41-60 Percent Rate	9.9	7.5
Frequency of Prenatal Care- 61-80 Percent Rate	12.1	14.3
Frequency of Prenatal Care- 81+ Percent Rate	26.0	65.0
Frequency of Prenatal Care- <21 Percent Rate	34.5	8.4
Lead Screening in Children	52.0	63.8
Prenatal Postpartum Care- Postpartum Care	52.4	58.5
Prenatal Postpartum Care- Timeliness of Prenatal Care	67.5	81.4
Well Child Visits 1st 15 Months of Life- Six or more Visits Rate	45.5	55.7
Well Ch Visits in 3 <sup>rd</sup> 4 <sup>th</sup> 5 <sup>th</sup> and 6 <sup>th</sup> Yrs of Life	61.2	68.6