

# Outcomes of Care for South Carolina Medicaid Managed Care Enrollees

STATE FISCAL YEAR 2007

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Final Report to the South Carolina Department Health and Human Services  
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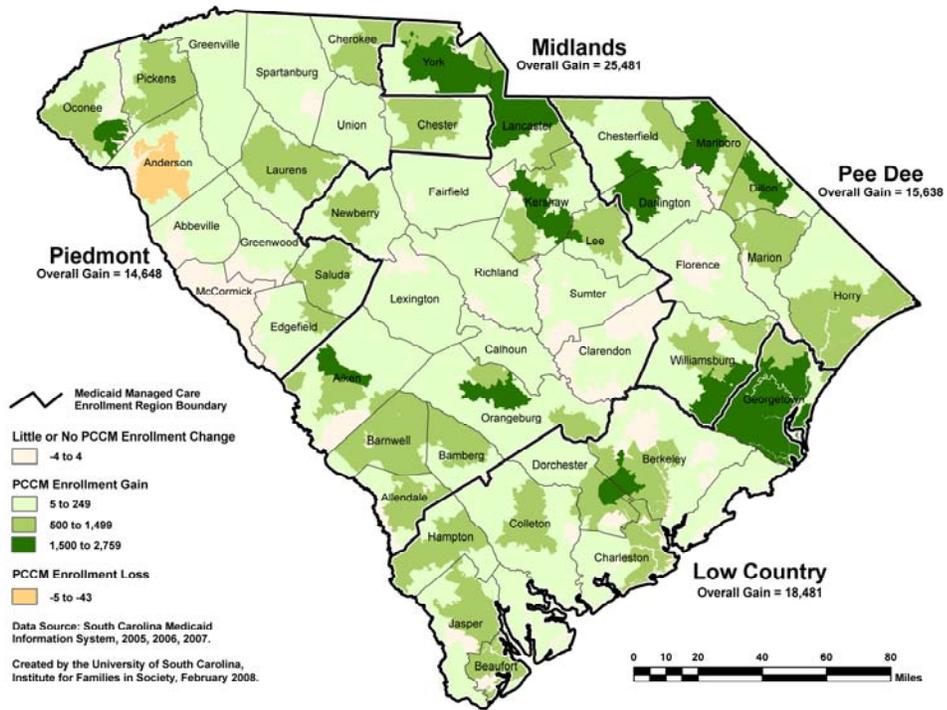
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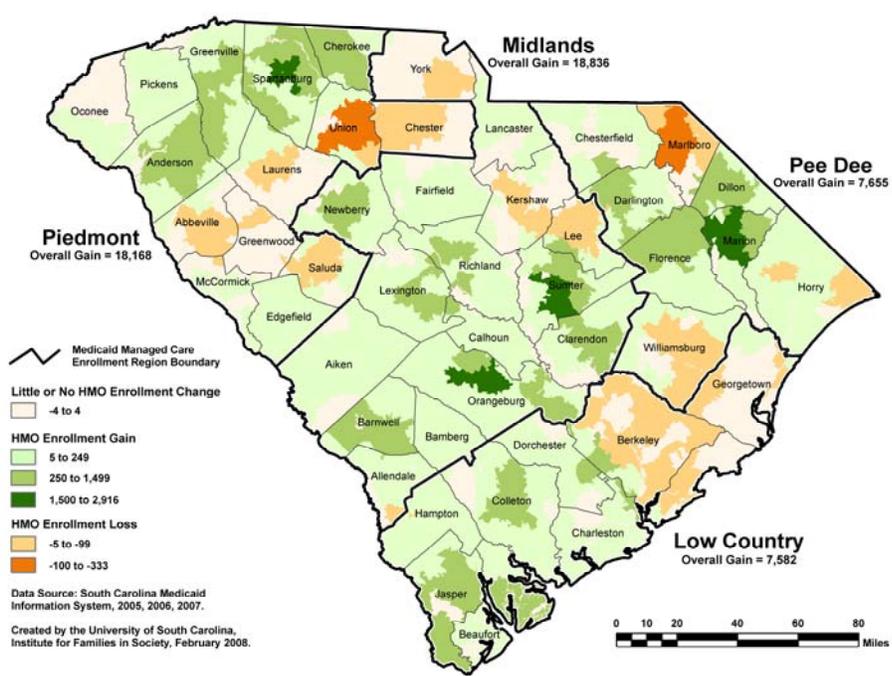
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**Total Change in PCCM Medicaid Managed Care Enrollment by ZCTA  
FY2006 to FY2007**



**Total Change in HMO Medicaid Managed Care Enrollment by ZCTA  
FY2006 to FY2007**



## EXECUTIVE SUMMARY

The SC Department of Health and Human Services funded this program evaluation, in response to the South Carolina legislative Proviso 8.41, “DHHS: Medicaid Cost and Quality Effectiveness.” Proviso 8.41 requires that the “Department of Health and Human Services (DHHS) shall establish a procedure to assess the various forms of managed care (Health Maintenance Organizations and Medical Home Networks, and any other forms authorized by the department) to measure cost effectiveness and quality.”

Several realities drive the need to evaluate the managed care initiatives. The early history of Medicaid and Medicaid managed care is as complex as the people it serves. Medicaid managed care creates unique challenges given its public nature and given the complexity of program models, state administrative expertise, and local health plan and market characteristics. Complexity, however, may mask the opportunities afforded by this shift from fee-for-service to managed care.

Since the early 1990s, when the federal government eased rules allowing state Medicaid programs to adopt managed care, almost all states have moved some or all of their Medicaid beneficiaries into Medicaid managed care (MMC). South Carolina has recently experienced a rapid growth in MMC. In a period of three years, enrollment in Medicaid managed care has increased from 8.3 to 27.4 percent of all Medicaid recipients. In a voluntary and competitive environment, this increase allows consumer choice between six providers delivering Medicaid managed care services and the traditional fee-for-service program. The most rapid growth has been among medical home entities serving recipients with medically complex conditions within less urban centers.

Consumers and providers have worried about quality of care in MMC since its inception and have argued vigorously for aggressive quality management and oversight by state Medicaid agencies. Proponents of managed care countered that state Medicaid agencies, as large-scale purchasers of care, would pursue “value-based purchasing” by selectively contracting with competing health plans and that this would lead to improved quality of care for beneficiaries. The goal of value-based purchasing is to restructure the market so that plans compete for contracts based on quality and cost. South Carolina is in the early stages of documenting the impact of value-based purchasing on quality and cost associated with MMC versus traditional fee-for-service Medicaid. Nationally, publicly financed managed care programs have emerged as the predominant health care delivery system for low-income populations and people with chronic illnesses and disabilities.

The Center for Medicaid and Medicare Services (CMS) has been actively promoting a quality management agenda for states. The federal government developed the Quality Improvement System for Managed Care (QISMC) program in 1996 as a guide to quality management oversight for federal and state health care purchasers. QISMC is required of

health plans participating in Medicare, and it served as a voluntary guide for state Medicaid programs. Subsequently, the Balanced Budget Act (BBA) of 1997 included a comprehensive revision of the federal statutes governing Medicaid managed care. The CMS issued a final rule in 2002 to implement BBA provisions that defined how quality measurement and performance improvement programs should be applied to MMC. These provisions espoused and updated the approach outlined in QISMC and specified that Medicaid programs develop and implement a comprehensive quality assessment and improvement process in both clinical and nonclinical areas and that states conduct an annual external quality review of MMC organizations. Thus, through these and other activities, federal policymakers have promoted the active involvement of state agencies in health plans' quality assurance and improvement activities, and a value-based purchasing agenda. Since the inception of MMC, the South Carolina Medicaid Program has worked to develop a system by which to evaluate quality and cost within the program. This effort includes requiring MMC providers to meet contractual quality standards, use of nationally certified measures, and input from recipients and providers within MMC and fee-for-service on satisfaction.

In addressing quality and costs, Proviso 8.41 further requires that SCDHHS collect all measures conducted by December 15 of each year. It states "in addition to the cost effectiveness calculations, HMOs and MHNs must conduct annual patient and provider satisfaction surveys equivalent to those sanctioned by nationally recognized managed care accrediting organizations. Cost effectiveness shall be determined in an actuarially sound manner and data must be aggregated in a manner to be determined by a third party actuary in order to adequately compare cost effectiveness of the different managed care programs. The program measures must use a case-mix adjustment that encourages the managed care organizations to enroll and manage all beneficiaries." Keeping with the spirit of the proviso, the SC Medicaid Program has exceeded these requirements by independently conducting analyses of consumers and providers using nationally certified instruments allowing for a future comparison with other MMC programs in the region and nationally. These efforts include the use of statistical sampling methods allowing for valid comparisons between MMC plans.

The American Academy of Actuaries is the public policy organization for actuaries practicing in all specialties within the United States. The cost analysis methods used for this evaluation are consistent with those recommended by the American Academy of Actuaries to certify MMC rates. Furthermore, an independent certified actuary completed this work for the evaluation report. The data used to examine quality measures and costs was the same for both activities with concurrent independent steps taken to validate the findings from each area. A final report documenting the quality, satisfaction, and costs measures will be available in March 2008. This next section of the report provides key findings and recommendations on next steps associated with evaluating the impact of MMC in South Carolina.

## Key Findings

**Use of Managed Care and Participation of Health Plans.** The MMC has grown rapidly in a voluntary and competitive environment. As such, the data on use and participation must take into consideration the variability between plans and the number of years in delivering managed care services in South Carolina. As an example, there is one plan with over ten years experience versus other plans with less than one year experience. Medical Home Networks account for the rapid growth of participation in FY 2007; however, this pattern is not statistically significant. Due to the voluntary nature of MMC operating within a value-driven environment, the use and participation of health care services has varied significantly with health plans entering and modifying their service delivery areas. As such, it is difficult to adequately measure use of managed care and participation within this fluctuating environment. In the upcoming years, the introduction of enrollment counselors with the stabilization of MMC plans will provide data from which to draw conclusions on the impact of MMC on use and participation.

Lastly, stabilization of provider networks should meet the specific needs of the different problems faced by patients within the system, thereby improving access to care and allowing for easier navigation of the system. In a rapid growth environment, issues associated with developing and maintaining adequate provider networks remain a challenge. Having a network in place also helps to reduce costs. Case managers can direct beneficiaries to appropriate care providers within the network, keeping patients out of the emergency room and containing costs.

**Collection of Performance Data and Use of Minimum Standards.** Data collection and reporting are essential in comparing the costs and quality of competing providers, a critical component of market competition. Preliminary analysis of quality indicators data shows that MMC accountability and emphasis on quality of care has promise in meeting the needs of Medicaid recipients. We can document the growing adoption of important quality-monitoring activities over time in patient satisfaction, access to care, clinical performance measurement, and related activities on the part of the state Medicaid agency. This information, in conjunction with the external quality reviews now mandated by CMS, can be an effective prompt for quality improvement. To be useful, however, this information must be used in such a way that health plans have incentives or requirements to respond aggressively to areas of deficiency. Additionally, MMC does not operate in isolation requiring the development of comparable performance data and quality assurance initiatives across fee-for-service programmatic areas. The implementation of an agency-wide quality improvement initiative will allow for a true comparison between MMC and the fee-for-service delivery systems within South Carolina. This type of effort holds the promise of improving care and containing costs across all areas of the Medicaid Program.

**Demographic Context and Medicaid Managed Care.** South Carolina is primarily a rural state with a high proportion of individuals with chronic and severe medical needs residing outside of urban centers. As such, the provision of MMC services within a voluntary and market-driven

competitive environment will require more time to establish plans that can leverage the provider networks while building their administrative infrastructure. Nationally, capitated programs appear more feasible in remote areas than many would expect, and the case studies show that commercial managed care networks in rural areas are not always a necessary precursor to implementing Medicaid managed care. Our findings indicate that extra time and effort are needed to implement managed care in rural areas, requiring an examination of the historical cost and utilization information specific to rural areas to help assess the impact of MMC these areas.

**Cost and Population Risk for Poor Health Outcomes.** In order to evaluate the cost to DHHS during State Fiscal Year 2007 for each of the delivery models employed by the Department, claims experience and enrollment/eligibility data for each of the participating entities was accumulated. In addition to the claims and enrollment data, premiums and kicker payments (both maternity and newborns) paid to the offered managed care organizations were gathered. The resulting database (claims and enrollment) was evaluated by the Adjusted Clinical Group (ACG) system from Johns-Hopkins University (Version 8.1, both diagnostic and pharmacy models) to calculate a risk score for each covered recipient. The ACG system produces a relative risk score where a risk score of 1.00 suggests average (relative to the ACG benchmark database) risk. A score of 1.10 represents risk that is 10 percent greater; .90 implies risk that is 10 percent more favorable.

The claims experience for the fee-for-service and medical home network populations was normalized to the benefits covered by Health Maintenance Organizations. Services not covered by HMOs were excluded from the cost calculations. Also, benefit limitations present in the HMO plan of benefits were also imposed on the fee-for-service and medical home network populations. The pharmacy rebate assumption made in developing HMO premiums also was applied to the fee-for-service and medical home network populations.

The following table summarizes the financial results of the analysis:

**Table 1.**

Delivery Model	State Fiscal Year 2007 Member Months	Normalized PMPM Cost	Risk Score	Risk Adjusted PMPM Cost
Fee for Service Medicaid	7,120,072	173.44	1.6596	104.51
Medical Homes Networks	668,436	138.94	1.2993	106.93
Health Maintenance Organizations	1,049,249	145.64	1.0600	137.40

In the above table, the normalized Per-Member-Per-Month (PMPM) cost represents the claim expense for the normalized benefits for the Fee-For-Service Medicaid (FFS) population. For the Medical Homes Network (MHN) population, the PMPM cost is comprised of the normalized benefits claims cost for the program and the administrative fees paid to the plans. For the Health Maintenance Organization (HMO) enrolled population, the PMPM cost is based

on the premiums and kicker payments paid. While the absolute cost to DHHS for the fee-for-service population was the highest, because of the level of risk present in the population, the risk-adjusted cost was the lowest. The risk-adjusted cost to DHHS for the MHN population was 2.3 percent higher than the risk adjusted FFS PMPM cost while the risk adjusted PMPM cost for the HMO population was 31.5 percent higher than the FFS benchmark.

**Consumer Experiences and Satisfaction.** Consumer satisfaction with both managed care and fee-for-service is generally positive, with more than 60 percent reporting positive experiences (i.e., no problems) on all but one of the measures. Consumer reports of positive experiences in managed care improved between 2006 and 2007, reflecting increased satisfaction in all aspects of health care.

Overall, survey respondents reported positive experiences with their doctors and other health care providers. The highest ratings in both managed care and fee-for-service relate to positive experiences with their health care providers. Respondents reported the most positive experiences with their doctor's communication and with the courteous and helpful staff in their doctor's office. Consumers reported less positive experience with the customer service of the health plan. The least positive experiences for both managed care and fee-for-service were reported in getting care quickly.

The increase in consumer satisfaction for all aspects of health care, demonstrated by the comparison between two years of data for managed care, is encouraging. These findings suggest an overall positive experience that is improving as managed care develops in South Carolina. Several changes are expected over the next few years including implementation of enrollment counselors, increased enrollment in managed care, decreased enrollment in fee-for-services and the shift in the types of managed care programs. In this changing Medicaid managed care environment, consumer reports of experiences will need to be monitored and balanced against costs benefits.

## Conclusions

The SC MMC initiative has the potential to make far-reaching changes in the quality and accessibility of health care for the state's poorest children and adults with disabilities and chronic health conditions. Although the data from the state's experiences thus far is promising, it is limited. The early stage of statewide implementation makes it impossible to predict with more than limited accuracy the impact on quality of care and costs. We believe that this evaluation provides a solid baseline from which to measure progress and documents the need for establishing an agency-wide quality improvement initiative. Implementation of this recommendation would allow for greater focus on crosscutting issues in the system while allowing for greater comparability across programs and their approaches. Furthermore, transparency in planning and reporting will be important to generating support for this effort. For this reason, consideration of phasing of reporting and careful attention to readiness may be as vital to the success of South Carolina's Medicaid managed care efforts as the standards themselves.

# CHAPTER 1

## Background

The SC Department of Health and Human Services commissioned this program evaluation, in response to the South Carolina legislative Proviso 8.41, “DHHS: Medicaid Cost and Quality Effectiveness.” Proviso 8.41 requires that the “Department of Health and Human Services (DHHS) shall establish a procedure to assess the various forms of managed care (Health Maintenance Organizations and Medical Home Networks, and any other forms authorized by the department) to measure cost effectiveness and quality.” This report summarizes program highlights of the SC managed care evaluation for State Fiscal Year 2007 (July 1, 2006 through June 30, 2007). It examines health care status of member population, access to and quality of health care, service utilization patterns, and costs in the context of the Medicaid health care delivery system.

Several realities drive the need to evaluate the managed care initiatives. The early history of Medicaid and Medicaid managed care is as complex as the people it serves. Medicaid managed care creates unique challenges given its public nature and given the complexity of program models, state administrative expertise, and local health plan and market characteristics. Complexity, however, may mask the opportunities afforded by this shift from fee-for-service to managed care. The Proviso requirements support the emphasis of the South Carolina Medicaid Program on ensuring the implementation of quality measures across all services.

## Medicaid Managed Care

Nationally, managed care has grown to be the dominant delivery system in Medicaid (Schwartz, et al, 2007). Throughout the 1990s, states significantly expanded their Medicaid managed care programs. In 1991, less than 10 percent of all Medicaid beneficiaries were enrolled in managed care plans. By 2006, nearly 65 percent of the total Medicaid population received health care services through managed care plans. The distribution of beneficiaries among managed care models has remained stable since 1998 – about 65 percent of beneficiaries enrolled in managed care were enrolled in an MCO, 35 percent in a prepaid health plan (PHP), and 23 percent in PCCM programs. Managed care organizations that serve primarily public enrollment and prepaid health plans continued to increase in the Medicaid managed care market while declining or remaining stable commercially (Kaye, 2005).

In South Carolina, the growth of managed care has been substantially different from the national profile – enrollment in Medicaid managed care has increased from 8.3 to 27.4 percent of all Medicaid recipients (SC Medicaid Managed Care Program, 2007). In the past two years alone, Medicaid managed care enrollment has increased by 20 percent while remaining a voluntary program with a substantially smaller presence than other southern states. In a voluntary and competitive environment, this increase allows consumer choice between six

providers delivering Medicaid managed care services and the traditional fee-for-service program. The most rapid growth has been among medical home entities serving recipients with medically complex conditions within less urban centers.<sup>1</sup>

### ***Medicaid Policy Decisions Influences on Health Care Delivery System***

The Deficit Reduction Act of 2005 (DRA) that was signed into law on February 8, 2006, contains a large number of changes in Medicaid policy which are expected to reduce federal Medicaid spending. Mandatory state compliance exists for 16 of these sections, while the remaining sections involve competitive demonstrations or optional changes that states can make to their Medicaid programs. The Medicaid policy changes included in the DRA are meant to reduce federal Medicaid spending by a net \$4.8 billion over the next five years and \$26.1 billion over the next ten years. Many of the DRA changes shift costs to beneficiaries and place limitations on health care coverage and access for low-income recipients.

Several Medicaid policy changes in the DRA require mandatory compliance for all state Medicaid programs. These include:

- a requirement that all U.S. citizens and nationals applying for or renewing their Medicaid coverage provide documentation of their citizenship status (exemption has been given through CMS guidance to Medicare beneficiaries and most individuals receiving Supplemental Security Income);
- provisions to restrict provider taxes on managed care organizations;
- specifications that tighten the definition of what meets the criteria for Medicaid targeted case management, including the enumeration of certain foster-care related activities that cannot qualify for reimbursement;
- changes in the way state Medicaid programs pay pharmacists to reduce federal and state payments for prescription drugs; and
- modifications to asset transfers related to eligibility for Medicaid long-term care services. These changes include:
  - increasing penalties for individuals who transfer assets for less than fair market value,
  - moving the start of the penalty period to the date of application for Medicaid,
  - increasing the look-back period for assessing asset transfers, and
  - counting as assets some previously exempt financial instruments (e.g. certain annuities, promissory notes, and mortgages).

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<sup>1</sup>The South Carolina Medicaid Program is undergoing a reversal of managed care models with an increase in HMOs and a reduction of medical home networks (MHNs) participating in managed care. This change, combined with the introduction of services of an enrollment broker, has the potential to alter beneficiary choice of medical homes and service coordination options. In 2008–09, this trend will be closely monitored as a function of access and quality of care.

The DRA will have an impact nationally on the delivery of Medicaid services. In response, the South Carolina Medicaid Program has taken steps to ameliorate the fiscal impact while continuing to emphasize the delivery of quality services.

South Carolina Medicaid continues to balance their long-term care delivery system by focusing on and expanding home- and community-based long-term care services. Cost containment measures enacted in early years have been kept in place, particularly strategies that control prescription drug spending. This emphasis is essential in light of DRA federal policy changes and their fiscal implications on the South Carolina Medicaid Program.

The State has maintained a focus on Medicaid quality improvements and initiatives to get better value from public expenditures. This year marks the second round using the nationally accepted quality measures, Healthcare Effectiveness Data and Information Set (HEDIS®) and Consumer Assessment of Healthcare Providers and Systems (CAHPS®), to measure and provide incentives for improved performance of managed care organizations. HEDIS® measures quality indicators in health care services and CAHPS® measures consumer experiences with health care providers and managed care plans. This will mark the first year that quality measures have been used to measure performance of the fee-for-service program. These efforts will allow for consideration of future initiatives that explore pay-for-performance reimbursement policies and public reporting of managed care organizations on quality measures.

Healthy Connections Choices is a new program that helps Medicaid members enroll in health plans. Serving as the link between the managed care delivery system and Medicaid consumers, the enrollment counselor provides outreach, education and enrollment services from a single, unbiased source to Medicaid consumers about the available participating Medicaid health plans in their area. When members enroll, they choose a health plan and a doctor (or clinic). Healthy Connections Choices will help consumers make informed and timely decisions about the choice of a health plan relative to their health care needs and geographical location.

These policies reflect the emphasis that the SC Department of Health and Human Services has placed on promoting a value-driven, cost-effective system of health care. This system must be equipped to address both the capacity of the Medicaid system and the utilization and content, which occur at the level of patient and provider. Informed Medicaid recipients are in a better position to compare the quality and price of health care services, so they can make better choices on the selection of health care providers. An emphasis on objective measures of quality indicators creates a feedback loop that providers can use to improve the delivery of health care services. Lastly, these policies allow for greater oversight, accountability, and identification of priority areas from which to target limited resources.

## ***Individual Influences on Health Care Delivery System***

In South Carolina, almost 20 percent of the population is on Medicaid, including 40 percent of children and 30 percent of seniors. Medicaid pays for about half of all births in the state. Medicaid expenditures are growing in every enrollee category. Nineteen percent of the state's budget funded Medicaid in 2005. By 2010, Medicaid is expected to consume 24 percent of the state's budget (Kaiser, 2007). The growth of the Medicaid program is a function of the poor health status of large segments of South Carolinians with barriers to timely prevention services.

South Carolina is ranked among the ten least healthy states based on chronic disease and conditions known to affect health status in the southeastern US. The United Health Foundation (2007) report<sup>2</sup> listed Louisiana as the least healthy state, followed by Mississippi, South Carolina, Tennessee, and Arkansas. On a positive note, the report acknowledged that the state has a high per capita health spending at \$219 per person and moderate access to adequate prenatal care with 70.5 percent of pregnant women receiving adequate prenatal care. Since 1990, significant gains were made in the following areas: the rate of deaths from cardiovascular disease declined 25 percent; and the infant mortality rate decreased by 33 percent. Despite these gains, the indicators that contributed to South Carolina's ranking were:

- Children living in poverty: 20 percent of population; Rank: 37
- Childhood immunization coverage: 79 percent of population; Rank: 35
- High prevalence of obesity: 29.1 percent of population; Rank: 47
- High infant mortality rate: 8.7 deaths per 1,000 live births; Rank: 46
- Low high school graduation rate: 59.7 percent of incoming ninth graders graduate within four years; Rank: 50
- High violent crime rate: 761 offenses per 100,000 population; Rank: 50
- High incidence of motor vehicle injuries: 2.2 per 100,000,000 miles driven; Rank: 47

An examination of these indicators presents challenges and opportunities for the delivery of Medicaid health care services. As an example, the rise in obesity could offset gains that medicine and public health have made against other causes of cancer and heart disease. According to the National Institutes of Health (2005), "The number of children who are overweight has *doubled* in the last two to three decades; currently *one child in five* is overweight." This trend requires the Medicaid Program to explore mechanisms that support a reduction in the rates of childhood obesity while monitoring for quality, costs, and clinical outcomes.

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<sup>2</sup> This report is produced in partnership with the American Public Health Association and Partnership for Prevention (<http://www.unitedhealthfoundation.org>.)

Medicaid is the major source of payment for long-term care, accounting for 47 percent of spending for nursing home and home care services. Severe disabilities resulting from violent crimes and motor vehicle injuries influence the delivery of health care services; presenting the challenge of providing access to and encouraging the use of services appropriate to meet the needs of beneficiaries. Violence-related injuries adversely affect the health and welfare of all South Carolinians through premature death, disability, medical costs, and lost productivity. Estimating the magnitude of the Medicaid health care burden of violence is critical for understanding the potential amount of resources that can be saved through cost-effective prevention and clinical partnerships.

According to the Agency for Health Care Research and Quality Report, *Literacy and Health Outcomes* (January 2004), low health literacy is linked to higher rates of hospitalization and higher use of expensive emergency services. The relationship between literacy and health is complex. Literacy influences health knowledge, health status, and access to health services. Health status is influenced by several related socioeconomic factors. Literacy impacts income level, occupation, education, housing, and access to medical care. It includes the ability to understand instructions on prescription drug bottles, appointment slips, medical education brochures, and doctor's directions and consent forms, as well as the ability to negotiate complex health care systems. Health literacy is not simply the ability to read. It requires a complex group of reading, listening, analytical, and decision-making skills, and the ability to apply these skills to health care situations. With the move towards a more "consumer-centric" health care system as part of an overall effort to improve the quality of health care and to reduce health care costs, individuals need to take an even more active role in health care related decisions. To accomplish this, Medicaid recipients need strong health information skills. Understanding educational attainment as a function of where recipients live is an essential component of ensuring their "active" participation in their health care.

## **Cost and Population Risk for Poor Health Outcomes**

In order to evaluate the cost to DHHS during State Fiscal Year 2007 for each of the delivery models employed by the Department, claims experience and enrollment/eligibility data for each of the participating entities was accumulated. In addition to the claims and enrollment data, premiums and kicker payments (both maternity and newborns) paid to the offered managed care organizations was gathered. The resulting database (claims and enrollment) was evaluated by the Adjusted Clinical Group (ACG) system from Johns-Hopkins University (Version 8.1, both diagnostic and pharmacy models) to calculate a risk score for each covered recipient. The ACG system produces a relative risk score where a risk score of 1.00 suggests average (relative to the ACG benchmark database) risk. A score of 1.10 represents risk that is 10 percent greater; .90 implies risk that is 10 percent more favorable.

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## Summary

An understanding of policy implications with parallel individual influences on health care delivery is essential for the interpretation of this program evaluation. In spite of a ten-year presence in South Carolina, the most significant growth has occurred within the last two years. This rapid growth, coupled with changes at the state and federal level, requires an emphasis on quality. The health care field, concentrating on what has been recognized as appropriate processes of care for certain disease states and conditions, has generated measures to log clinician efforts to abide by validated diagnosis and treatment guidelines.

By coupling the HEDIS® outcome measures with the CAHPS® survey results; we are able to paint a reliable picture about the care that is received through the Medicaid Program. Consumer satisfaction is measured using the CAHPS® survey. This survey looks at consumer experiences and key satisfaction drivers throughout the continuum of care, including health plan performance and the members’ experience in the physician office. Chapter 2 highlights the quality improvement program results designed to respond to Proviso 8.41. It presents the HEDIS® data outcomes illustrating areas where the efforts of the South Carolina Medicaid Program have resulted in improved health quality for enrollees and opportunities for improvement in the areas of chronic and preventative care. Chapter 3 of the report highlights the CAHPS® survey results.

## CHAPTER 2

# MEDICAID MANAGED CARE QUALITY IMPROVEMENT RESULTS

Outcome measures allow for the monitoring and evaluation of quality, appropriateness, and outcomes of care and services, and the processes by which they are delivered to managed care and fee-for-service Medicaid recipients. One of the methods of measuring the outcomes is the annual HEDIS<sup>®</sup> project conducted by University of South Carolina under contract with the SC Department of Health and Human Services. HEDIS<sup>®</sup> stands for Health Plan Employer Data and Information Set. The National Committee for Quality Assurance (NCQA) developed it as a part of their accreditation process. NCQA Accreditation is a nationally recognized evaluation that purchasers, regulators, and consumers can use to assess managed care plans. HEDIS<sup>®</sup> results are important to the South Carolina Medicaid Program for several reasons:

- The results are based on standardized performance measures applied to both managed care and the fee-for-service program.
- The scores are a reflection of the care and services being provided to our recipients by our physicians.
- By comparing rates from year to year, and comparing South Carolina rates to national rates, we can identify what we are doing well, and where we need to focus our quality improvement efforts.

For two years, the outcome measures<sup>3</sup> utilized have remained constant and include: well-child visits in the first 15 months of life; well-child visits in the 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, and 6<sup>th</sup> years of life; children's and adolescents' access to primary care providers; annual dental visit; use of appropriate medications for people with asthma; adults' access to preventive/ambulatory health services; hemoglobin A1c testing; and prenatal and postpartum care. Outcome measures are computed with regards to the managed care eligible Medicaid population. Most measures require that an enrollee be eligible for at least 11 months of the year for which the measure is being calculated. For well child visits in the first 15 months of life, children must be enrolled for 14 of the first 15 months of life. For prenatal and postpartum care, various enrollment periods are utilized to determine the rates.

### **Eligible Population**

Within the managed care eligible Medicaid Program, we have categorized each enrollee into one of three groups: those enrolled in an HMO, those in Medical Home Networks (MHN), and those in the fee-for-service (FFS) or traditional Medicaid program. For most outcomes, enrollees had to be eligible for at least 11 months during the state fiscal year (SFY) 2007. Of those eligible for at least 11 months during SFY2007, 132,468 were in an HMO, 85,922 were in a MHN, and 201,000 were in FFS. A comparison of demographics for this population is shown in Table 2. The number of people within the program for at least 11 months rose by almost 43

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<sup>3</sup> Some of the outcome measures require two-years of data capture. For these measures, Medicaid recipients enrolled in a managed care plan are counted in these results for SFY 06-07.

percent (more than 78,000) from SFY 2006 to SFY 2007. This increase was distributed across all age and gender groups; however, the greatest increase of people was added in the category of recipients 3–12 years of age.

**Table 2: Comparisons of demographics for Medicaid enrollees with at least 11 months eligibility in SFY 2007**

<b>Provider Profile</b>	<b>All HMOs</b>	<b>All MHNs</b>	<b>All Plans (HMOs &amp; MHNs)</b>	<b>Fee-for-service sample<sup>4</sup></b>
<b>Average Panel Size (unduplicated Medicaid recipients)</b>				
Recipients with Fee-for-Service claims	131,885	85,922	217,807	201,000
Recipients with Encounter data	93,743	514	94,257	N/A
<b>Total (*Details may not add to total)</b>	<b>132,468</b>	<b>85,922</b>	<b>218,390</b>	<b>201,000</b>
<b>Age Distribution of recipients</b>				
<b>Ages 0-20</b>	109,848	69,402	179,250	109,736
<b>Percent of Total</b>	82.9%	80.8%	82.1%	54.6%
<b>Ages 21-44</b>	18,180	7,506	25,686	49,413
<b>Percent of Total</b>	13.7%	8.7%	11.8%	24.6%
<b>Ages 45-64</b>	4,392	5,581	9,973	22,525
<b>Percent of Total</b>	3.3%	6.5%	4.6%	11.2%
<b>Ages 65+</b>	48	3,433	3,481	19,326
<b>Percent of Total</b>	0.0%	4.0%	1.6%	9.61%
<b>Total</b>	<b>132,468</b>	<b>85,922</b>	<b>218,390</b>	<b>201,000</b>

<sup>4</sup> The fee-for-service sample is a stratified random sample of Medicaid recipients, eligible for, but not enrolled in managed care. Those individuals not eligible for enrollment in managed care were excluded from the sample population drawn for this comparison.

## Prevention and Chronic Disease Management Outcome Measures

Primary prevention—taking action before a health condition arises—can make a vital contribution to efforts to reduce disparities in health, maximize quality of life, and reduce unnecessary health care costs. By addressing the underlying factors that negatively influence health, prevention has the power to reduce the incidence of poor health, injury, and premature death. Quality of care requires a focus on prevention efforts.

In the face of double-digit health care inflation, evidence of system wide poor health care quality, and an aging population, disease management seems an intuitively appealing way to improve the quality and reduce the cost of care, as well as to enhance health outcomes for individuals with chronic conditions. Chronic disease management comprises any medical or pharmaceutical intervention designed to improve both outcomes for the patient and cost effectiveness. It recognizes that a systematic approach is an optimal and cost-effective way of providing health care. The next set of measures examines prevention and chronic disease management efforts in the South Carolina Medicaid Program.

### *Well-Child and Adolescent Prevention and Disease Management Measures*

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

In accordance with the American Academy of Pediatrics recommendations, the Iowa Department of Public Health (IDPH) Early Periodic Screening, Diagnosis and Treatment (EPSDT) schedule indicates that children should have 8 visits during the first 15 months of life. The EPSDT schedule recommends visits at 2-3 days and 1, 2, 4, 6, 9, 12, and 15 months. There is one rate computed for this HEDIS® measure for the total number of visits. The denominator for this rate is the number of children who turned 15 months of age by June 30, 2007, and were eligible for at least 14 of the first 15 months of their life. The numerator is the number of children who each had visits numbering from zero to six or more. Table 3 indicates that though there is a difference between the rates within and between managed care and fee-for-service, the managed care plan rates were above the fee-for service and the 2007 national benchmark for six or more visits.

**Table 3: Number and proportion of children receiving well-child visits in the first 15 months of life in SFY 2007**

<i>HEDIS® Outcome Measure</i>	Numerator	Denominator	All Plans (HMOs & MHNs)	All HMOs	All MHNs	Fee-for-service sample	2007 National Medicaid Benchmark
<b>Well-Child Visits in the First 15 Months</b>							
<b>Rate</b>	4,868	5,554	87.7	82.7	93.0	67.6	75.2

The SC Managed Care rate is at the 90th percentile for NCQA Medicaid Benchmarks. The rate for well child visits in the first 15 months of life is above 90% of the Medicaid HMOs reporting results for their Medicaid enrolled populations.

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

The EPSDT schedule indicates that children from two to six years of age should have a well-child exam yearly. This outcome measure indicates the proportion of children ages three, four, five and six who have had at least one visit during SFY 2007. Past experience with this measure has shown that within these four age groups, children age five are the most likely to have a visit due to the immunization requirements to enter public school. Since most immunizations are given at the doctor’s office, parents are more likely to bring a child in for a well-child exam at age five and just prior to school admission. The denominators for these rates are the number of children who turned the given age (3, 4, 5, or 6) by June 30, 2007 and were eligible for at least 11 months during SFY 2007. The numerators for these rates are the number of children within each age group who had a well-child visit during SFY 2007.

These rates are reflected in Table 4. As has been evident in the past, children have the highest rate of well-child visits in the fifth year of life due to the need for immunizations prior to school entry. The rate indicates that the SC Medicaid Program falls in the bottom 50% nationally of managed care programs well-child visits in the third, fourth, fifth, and sixth years of life. The performance targets for this outcome should be set at 75% for the third, fourth and fifth year of life and at 65% for the sixth year of life. The parents of children receiving screening exams may not understand the need for a more extensive well-child visit. In addition, providers may not be using a reminder system to enhance parents’ ability to remember well-child visit schedules. Further investigation is warranted in the future to determine whether non-standard coding is being used, whether encounters are not being recorded and passed to the state, or whether children are not being seen.

**Table 4: Number and proportion of children receiving well-child visits in the third, fourth, fifth and sixth years of life in SFY 2007**

<i>HEDIS® Outcome Measure</i>	Numerator	Denominator	All Plans (HMOs & MHNs)	All HMOs	All MHNs	Fee-for-service sample	2007 National Medicaid Benchmark
<b>Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life</b>							
<b>Rate</b>	7,662	19,397	39.50	36.81	43.44	31.6	63.3

### Adolescent Well-Care Visits (12-21 Years)

Many health problems of adolescents are caused by adverse consequences of behavioral choices. These choices are generally assumed preventable, in part, through clinical preventive counseling and screening services delivered in primary care settings. Various guidelines for adolescent preventive care recommend screening and counseling to promote healthy behaviors and reduce risks. The adolescent well-care visits outcome measures the percentage of members who were 12 through 21 years of age who had at least one comprehensive well-care visit with a primary care practitioner or an obstetrics and gynecology (OB/GYN) practitioner during the measurement year.

The rate is documented in Table 5. The rate is based on one annual visit every two years preventing a comparison with national benchmarks. The performance targets for this outcome should be set at 50% through age 19. Although the HEDIS® measure captures data through age 21 years, this time is not reflective of the separation between children and adult services within the Medicaid program. After the implementation of this recommendation modifying the HEDIS measure definition to meet South Carolina program parameters, this measurement will provide insights for adolescent well care programmatic and policy directions.

**Table 5: Number and proportion of adolescents with well care visits (12–21 years) in SFY 2007**

HEDIS® Outcome Measure	Numerator	Denominator	All Plans (HMOs & MHNs)	All HMOs	All MHNs	Fee-for-service sample	2007 National Medicaid Benchmark
Adolescent Well- Care Visits (12-21) <sup>5</sup>							
Rate *	4,093	23,010	17.79	16.06	21.26	11.8	NA

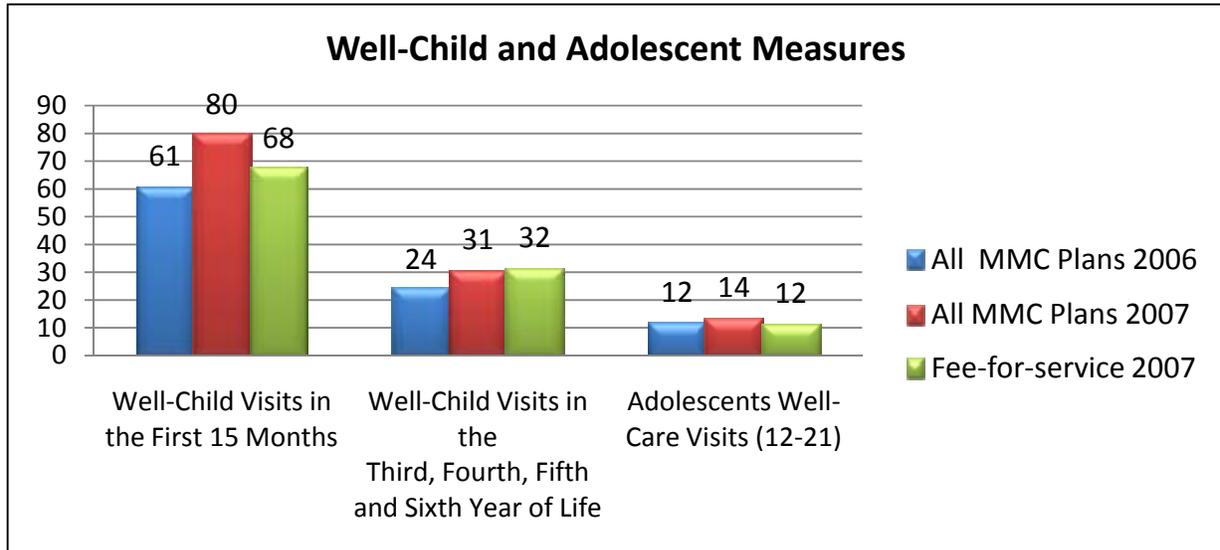
### Comparison of Well-Child and Adolescent Outcome Measures

Figure 1 provides a comparison of the rates for well child and adolescent well-care measures for the three groups over the last 2 years (SFY 2006–SFY 2007). This figure indicates substantive growth in the ability of SC Medicaid Managed Care (MMC) plans to coordinate care by improving access to well-child and adolescent care. Noteworthy in SFY 2007 is the twelve-point difference in the percentage of children receiving well-child visits between MMC plans and fee-for-service recipients. The lower rate for children in fee-for-service may result in lower anticipatory guidance for parents, reduced opportunities for developmental screening by the physician, and interrupted vaccination schedules compared to children enrolled in Medicaid managed care. Conversely, there is no statistical difference between MMC and fee-

<sup>5</sup> South Carolina adolescent well-care visits outcome measures are calculated using a visit every two years as the benchmark standard. As such, this rate cannot be compared to national benchmarks using annual well care visits.

for-service outcome measures for children above the age of three and below 21 years of age. These findings indicate an opportunity to target these outcomes as areas for improvement in SFY 2008.

**Figure 1: Comparison of well-child and adolescent well care HEDIS measures SFY 06 – 07**



**Annual Dental Visit**

The American Dental Association recommends at least one dental visit per year. This HEDIS measure determines the proportion of children and adolescents who had one or more dental visits. The denominators for these rates are the number of children who turned the given age by June 30, 2007 and were eligible for at least 11 months during SFY 2007. The numerators are comprised of the number of children in the denominator who had at least one dental visit during SFY 2007. As can be seen from Table 6, between 50 percent and 65 percent of children and adolescents have seen a dentist. These rates indicate above average compliance with national Medicaid established performance benchmarks.

**Table 6: Annual dental visits in SFY 2007**

HEDIS® Outcome Measure	Numerator	Denominator	All Plans (HMOs & MHNs)	All HMOs	All MHNs	Fee-for-service sample	2007 National Medicaid Benchmark
<b>Annual Dental Visits</b>							
Visits/1,000 Member Months	36,575	56,964	0.65	0.65	0.65	0.5	0.4

### Use of Appropriate Medications for Children and Adolescents with Asthma

Asthma is the most common chronic disease of childhood and is responsible for significant morbidity and health care expenditures (CDC, 2006). The prevalence of asthma, especially pediatric asthma, has increased dramatically in the United States since 1980. HEDIS® rates of asthma are lower than reported nationally for asthma levels. This measure uses a more stringent protocol counting only those enrollees with a designation of “persistent” asthma. The denominator of the measure is made of up enrollees who have met at least one of the following criteria in both SFY 2006 and SFY 2007:

- at least one emergency room visit or one acute inpatient stay with asthma as the primary diagnosis;
- at least four outpatient asthma visits with asthma as one of the listed diagnoses AND at least two asthma medication dispensing events; or
- at least four asthma medication dispensing events.

Enrollees must also have been in Medicaid for at least 11 months in SFY 2006 and at least 11 months in SFY 2007. The numerator of the measure is comprised of enrollees with persistent asthma who were dispensed at least one prescription for inhaled corticosteroids, nedocromil, cromolyn sodium, leukotriene modifiers, or methylxanthines during SFY 2007.

**Table 7: Use of appropriate medication for children and adolescents with “persistent” asthma**

HEDIS® Outcome Measure	Numerator	Denominator	All Plans (HMOs & MHNs)	All HMOs	All MHNs	Fee-for-service sample	2007 National Medicaid Benchmark
<b>Use of Appropriate Medications for People with Asthma Rates</b>							
<b>Ages 5-9</b>	268	355	75.50	69.10	84.50	73.1	88.0
<b>Ages 10-17</b>	192	258	74.40	70.60	80.00	78.0	85.6

Table 7 indicates the rates of appropriate use of medications for people with asthma across age and program for SFY 2007. The lowest rates were in the HMO plans. However, these rates must be interpreted with care. Since there are extremely small numbers of enrollees with persistent asthma, the rates may fluctuate widely both over time and across groups. As enrollment in managed care continues to grow, the performance targets for all groups should be set at 85 percent to meet the national Medicaid benchmarks.

## Adult Prevention and Disease Management Outcome Measures

### Breast Cancer Screenings

Breast cancer is the most common non-skin cancer in women and the second leading cause of cancer death in women in the United States. Every woman is at risk, and this risk increases with age. Breast cancer can be successfully treated when found in early stages of the disease. Table 8 highlights the percentage of women 40 – 69 years of age who had a mammogram during the measurement year, or the year prior to the measurement year. The results suggest an area for further analysis to determine the influence on the rates due to encounter and claim coding errors and the impact of other services provided to low-income women not captured within this limited data set. Nevertheless, the data suggests this area as one for improvement. The rates are below the national Medicaid benchmark on the percentage of eligible women receiving breast cancer screening services.

**Table 8: Breast cancer screening – SFY 2007**

HEDIS® Outcome Measure	Numerator	Denominator	All Plans (HMOs & MHNs)	All HMOs	All MHNs	Fee-for-service sample	2007 National Medicaid Benchmark
<b>Breast Cancer Screening**</b>							
<b>Rate</b>	553	1,432	38.60	37.80	42.40	27.7	53.9

### Cervical Cancer Screening

Cancer of the cervix may be prevented or detected early by regular Pap tests. If it is detected early, cervical cancer is one of the most successfully treatable cancers. In the United States, the cervical cancer death rate declined by 74 percent between 1955 and 1992, in large part due to the effectiveness of Pap smear screening. The death rate continues to decline each year due to increased prevention efforts.

**Table 9: Cervical Cancer Screening – SFY 2006 – 2007**

HEDIS® Outcome Measure	Numerator	Denominator	All Plans (HMOs & MHNs)	All HMOs	All MHNs	Fee-for-service sample	2007 National Medicaid Benchmark
<b>Cervical Cancer Screening (% of women 21-64 who received one or more PAP test in FY2006 and FY2007**</b>							
<b>Rate</b>	4,481	12,172	36.81	37.16	36.25	28.9	65.0

Similar to breast cancer screening, the results suggest an area for further analysis to determine the influence on the rates due to encounter and claim coding errors and the impact of other services provided to low-income women not captured within this limited data set. The rates are below 25 percent of the national benchmark, suggesting that 75 percent of Medicaid managed care plans scored higher on this measure. The performance targets for all groups should be set at 65 percent to meet the national Medicaid benchmarks.

### Adults' Access to Preventive/Ambulatory Health Services

Adults comprise approximately 18 percent of the population enrolled in Medicaid managed care, and of these, 80 percent are women primarily between the ages of 21 and 44. Access to preventive/ambulatory care is necessary for their long-term health and, more immediately, to treat them for acute diseases that may interfere with care of their children or work opportunities. The denominators for these rates are the numbers of adults above 20 years of age by June 30, 2007. The numerators for these rates are the numbers of people within the denominator who had a preventive or ambulatory visit during SFY 2007. Table 10 shows the proportion of adults with a preventive/ambulatory visit during SFY 2007. The rates are highest in managed care and lowest for in the traditional fee-for-service program. Rates drop from the national benchmark for all enrollees 45 years of age and older. This finding suggests the need for a careful review of the data with a goal of increasing rates for all age groups across plans. The number of enrollees 65 years of age and older is small, suggesting a careful interpretation of the results for this group.

**Table 10: Adults access to preventive/ambulatory health services**

HEDIS® Outcome Measure	Numerator	Denominator	All Plans (HMOs & MHNs)	All HMOs	All MHNs	Fee-for-service sample	2007 National Medicaid Benchmark
<b>Ambulatory Care – Outpatient Visits</b>							
<b>Visits/1,000 Member Months</b>							
<b>Ages 20-44</b>	81,782	191,361	427.40	356.70	585.90	313.2	360.9
<b>Ages 45-64</b>	34,331	81,859	419.40	315.40	491.80	307.6	482.2
<b>Ages 65-74</b>	2,763	15,903	173.70	NA	169.00	135.1	411.9
<b>Ages 75-84</b>	1,852	11,267	164.40	NA	164.40	135.5	337.2
<b>Ages 85+</b>	555	4,088	135.80	NA	135.80	123.7	270.8
<b>Total</b>	121,283	304,478	398.30	348.80	457.70	270.6	N/A

## Comprehensive Diabetes Care

The HEDIS® measure for comprehensive diabetes care includes nine components: Hemoglobin A1c testing; HbA1c poor control; HbA1c good control; eye exam; LDL-C screening performed; LDL-C control; medical attention for nephropathy; blood pressure control (<140/90mm HG); and blood pressure control (<130/80 mm HG). With the administrative data available through the Medicaid program, we are only able to determine whether an enrollee with diabetes has had Hemoglobin A1c, annual eye exam, LDCL-screening and medical attention for nephropathy. All other measures require the use of Logical Observation Identifiers Names and Codes (LOINC®) to identify the outcome of the procedure. Currently, these codes are not widely used for the Medicaid program.

Enrollees are designated as having diabetes for the purposes of this measure when they meet one of the following protocols during SFY 2006 or SFY 2007:

- one dispensing event of insulin or hypoglycemics/antihyperglycemics;
- two face-to-face encounters with different dates of service in an outpatient setting or non-acute inpatient setting with a diagnosis of diabetes; or
- one face-to-face encounter in an acute inpatient or emergency department setting with a primary diagnosis of diabetes.

The rates are contained in Table 11. As was discussed previously, there are small numbers for some measures. The effect of small numbers can be seen by the widely ranging values for these measures between the HMOs and MHNs and fee-for-service.

**Table 11: Comprehensive diabetes care**

HEDIS® Outcome Measure	Numerator	Denominator	All Plans (HMOs & MHNs)	All HMOs	All MHNs	Fee-for-service sample	2007 National Medicaid Benchmark
<b>Comprehensive Diabetes Care</b>							
<b>% of members 18-75</b>							
<b>HbA1c Testing</b>	1,323	1,937	68.30	63.50	72.70	58.2	76.2
<b>Eye Exam (retinal) performed</b>	1,784	1,937	92.10	92.20	92.00	88.3	48.6
<b>LDL-C screening performed</b>	1,184	1,937	61.10	53.10	68.50	49.5	80.5
<b>Medical Attention for Nephropathy</b>	1,516	1,937	78.30	79.60	77.10	67.5	48.8

The target rate for these measures should be set near the 50<sup>th</sup> percentile, or 75 percent, to meet national benchmarks. Across all measures, the managed care plans performed better than fee-for-service enrollees did in receiving comprehensive diabetes care.

**Use of Appropriate Medication for Adults with Asthma**

Asthma is commonly thought of as a disease of children, but it affects adults as well, and can be a serious condition, particularly for older adults. Asthma that begins in adult life may be more persistent and more resistant to typical medications. More than 4.8 million Americans over the age of 35 suffer from asthma (ALA, 2007). While some children outgrow asthma as they age, asthma may disappear only to reappear many years later.

Table 12 documents the rate associated with the use of appropriate medication associated with adults with “persistent” asthma. This measure uses a more stringent protocol counting only those enrollees with a designation of “persistent” asthma. The denominator of the measure is made of up enrollees who have met at least one of the following criteria in both SFY 2006 and SFY 2007:

- at least one emergency room visit or one acute inpatient stay with asthma as the primary diagnosis,
- at least four outpatient asthma visits with asthma as one of the listed diagnoses AND at least two asthma medication dispensing events, or
- at least four asthma medication dispensing events.

Enrollees must also have been in Medicaid for at least 11 months in SFY 2006 and at least 11 months in SFY 2007. The numerator of the measure is comprised of enrollees with persistent asthma who were dispensed at least one prescription for inhaled corticosteroids, nedocromil, cromolyn sodium, leukotriene modifiers, or methylxanthines during SFY 2007.

**Table 12: Use of appropriate medications for adults with asthma**

<b>HEDIS® Outcome Measure</b>	<b>Numerator</b>	<b>Denominator</b>	<b>All Plans (HMOs &amp; MHNs)</b>	<b>All HMOs</b>	<b>All MHNs</b>	<b>Fee-for-service sample</b>	<b>2007 National Medicaid Benchmark</b>
<b>Use of Appropriate Medications for People with Asthma Rates</b>							
<b>Ages 18-56</b>	91	161	57.40	52.30	64.30	53.3	83.4

From the table, it is clear that none of the groups are above the 50<sup>th</sup> percentile of the Medicaid National Benchmark of 75 percent. Of the groups, the MHN group comes closest to approximating the 50<sup>th</sup> percentile. Performance targets for all groups should be set at 75 percent with targeted efforts aimed at addressing the low rates associated with the use of appropriate medication for enrollees with “persistent” asthma.

## Summary

The ultimate intent of health care performance measures is to improve health status by stimulating improvements to health care quality. In this report, we explore meaningfulness at the population level, evaluating how well current HEDIS® measures address major public health concerns for the SC Medicaid population. HEDIS measures are used not to highlight any shortcomings, but because it is the most developed and most widely used performance measurement set with national Medicaid benchmarks. For example, studies document that an opt-in disease management program appears to be associated with a significant reduction in health care costs and other measures of health care use (Jencks et al., 2000) They document a simultaneous improvement in HEDIS® measures of quality care. The data suggest that disease management may result in savings for sponsored organizations and that improvement in HEDIS® measures are not necessarily associated with increased medical costs (Schoen, 2006).

The potential value is evident with the comparisons between fee-for-service and managed care enrollees. Managed care enrollees performance rates were better than fee-for-service in the following measures:

- well child visits in the first 15 months;
- use of appropriate medication for children with “persistent” asthma;
- adult preventive/ambulatory visits ( 20 – 44 years);
- comprehensive diabetes care; and
- use of appropriate medication for adults with “persistent” asthma.

In spite of these gains, the analysis highlights the need for improvement across all of the measures for all Medicaid enrollees. The 2008 evaluation will document a shift to a greater presence of HMOs in the South Carolina Medicaid Program with an increased population in managed care. These changes will require an emphasis on incorporating a variety of new measures for children (e.g., immunizations, ADHD medications) and adults (e.g., hypertension, and resources used for chronic disease) to the current set of measures. Lastly, these measures must be part of a larger quality improvement plan across all areas of the Medicaid Program. The agency-wide quality improvement activities would benefit from the following recommended actions:

1. Develop focused studies on targeted areas or population groups (e.g., in-depth utilization analysis of Medicaid Managed Care services with a focus on children with special health care needs).
2. Require a corrective action plan for Medicaid managed care plans based on failing to meet the national benchmarks.
3. Incorporate additional measures focused on improving the health status of recipients with chronic conditions.
4. Implement quality studies that address agency-wide quality improvement goals.

## **CHAPTER 3**

### **CONSUMER EXPERIENCES AND SATISFACTION**

An essential component of quality evaluation is consumer feedback on key quality indicators. As consumers play an increasing role in the health care market, their feedback on key quality indicators is increasingly important in a value-based purchasing environment. In order to obtain valid and reliable information about their experiences, states use consumer satisfaction surveys. The national standard for measuring and reporting on the experiences of consumers with their health plans is the Consumer Assessment of Healthcare Providers and Systems (CAHPS®) which was developed jointly by the Agency for Healthcare Research and Quality (AHRQ) and National Council on Quality Assurance (NCQA). CAHPS® is a set of survey tools developed to assess patient satisfaction with both commercial and public health plans. It is the most comprehensive tool available and has been used extensively with consumers in Medicaid.

CAHPS® surveys are similar to patient satisfaction surveys in that they include ratings of providers and health plans (e.g., rating of personal doctor, rating of health plan), but they go beyond this opinion type of question by asking patients and consumers to report on their experiences with health care services. Reports about care are regarded as more specific, actionable, understandable, and objective than general ratings alone (AHRQ/CAHPS, 2007). The CAHPS® addresses a variety of aspects of consumer satisfaction with their health plan, provider and overall health care. In addition, the survey collects information on the enrollees' health status, socio-demographic characteristics, health care utilization, and length of enrollment with the health plan. It provides practical information that helps states and health plans better understand consumers' health care information needs, helps develop an educated consumer, and places policymakers in a better position to improve access to health care, improve quality and reduce costs.

As part of the quality assurance plan, the State of South Carolina, Department of Health and Human Services (SCDHHS) contracted with the University of South Carolina Institute for Families in Society (IFS) to conduct an independent survey to measure adult and child enrollee satisfaction with services provided by the Medicaid managed care programs. The IFS conducted the first CAHPS® survey in 2006 with enrollees in managed care programs using the CAHPS® 3.0H Medicaid Adult and Child Member Satisfaction Surveys. In 2007, the IFS conducted a second CAHPS® survey. Although CAHPS® 4.0 was available for the Adult Medicaid population, it is not directly comparable to version 3.0. The decision was made to administer the CAHPS® 3.0H Medicaid Adult and Child Member Satisfaction Surveys to enable comparison with the previous year. Additionally in 2007, the IFS conducted the CAHPS® with enrollees in fee-for-service. This report presents the findings for these three groups: SFY 2006 enrollees in managed care, SFY 2007 enrollees in managed care and SFY 2007 enrollees in fee for service.

## **Methodology**

A stratified random sample of 3,341 Medicaid participants (adults and children) who had been enrolled in Medicaid managed care (HMO or PCCM) plans for at least six months was selected from State Fiscal Year 2007. Also, a stratified random sample was selected of 450 adult and 450 child Medicaid participants who had been enrolled in Medicaid fee-for-service for at least six months. A mixed methods approach combining mail and telephone contact was used to achieve the highest return rate possible. The survey process consisted of an initial survey mailing, a reminder postcard, a second survey mailing, and a second reminder postcard. The Adult CAHPS<sup>®</sup> survey was mailed to the enrollee and the Child CAHPS<sup>®</sup> survey was mailed to the parent of the enrolled child. A toll-free telephone number was established to respond to questions or consumer concerns with the survey.

At the completion of the mail process, the name and contact information for each non-respondent was forwarded to the USC Survey Research Laboratory, at the Institute for Public Service and Policy Research (IPSPR) to conduct a telephonic consumer survey. The CAHPS<sup>®</sup> questionnaires (Adult Fee-for-Service; Adult Managed Care; Child Fee-for-Service; and Child Managed Care) that had been mailed to the participant groups were adapted for telephone administration and programmed into IPSPR's Sawtooth Ci3 computer-aided telephone interviewing system.

The data collection was conducted by the interview staff of the IPSPR. Prior to the actual interviewing, the interviewers and interview supervisors received one day of specialized training for this survey. The training included an overview of the purpose of the study, question-by-question review of the questionnaires, and practice interviews, followed by debriefing. All interviewing was conducted from the Institute's facilities on the University of South Carolina-Columbia campus. Many of the interviews were monitored to insure that instructions were being followed. Calls were made from 9:00 a.m. to 9:30 p.m. Monday through Friday, from 10:00 a.m. to 4:00 p.m. on Saturday, and 3:00 p.m. to 8:00 p.m. on Sunday. Telephone numbers were called at different times of the day and on different days of the week to reach households in which residents were away on a consistent basis. Up to fifteen attempts were made to reach households in which the call attempts consistently resulted in a non-answered number or an answering machine.

## **Consumer Satisfaction and Access to Care Results and Analysis**

The data collection process yielded 1,619 completed managed care surveys and 243 completed fee-for-services surveys, for a 40 percent overall return rate, which is higher than the 32 percent national rate of return. Analysis of the survey respondents showed characteristics comparable to the stratified random sample and to the 2007 total managed care enrollment. Table 13 provides demographic characteristics of the survey respondents.

<b>TABLE 13: Respondent Characteristics</b>				
	<b>Managed Care</b>		<b>Fee for Service</b>	
	<b>Respondents</b>	<b>Percentages</b>	<b>Respondents</b>	<b>Percentages</b>
Age Range	<1 – 85+		<1 – 85+	
<b>Gender</b>				
Male	587	36%	106	34%
Female	1032	64%	185	66%
<b>Location</b>				
Rural	649	40%	121	40%
Urban	968	60%	170	60%
Unclass.	2	0%	0	0%
<b>Race</b>				
White	761	47%	126	43%
Black	709	44%	150	53%
Hispanic	25	2%	5	0%
Other	124	8%	10	4%
<b>Total</b>	<b>1619</b>	<b>100%</b>	<b>291</b>	<b>100%</b>

The majority of questions on the CAHPS ask respondents to report on their experiences with various aspects of their care. For analysis purposes, AHRQ has combined questions that relate to the same aspect of care or service into summary measures known as composites. The standard composites reported summarize enrollees' experiences in these five areas:

- Getting Needed Care
- Getting Care Quickly
- How Well Doctors Communicate
- Courteous and Helpful Office Staff
- Health Plan Customer Service

The two composites “getting needed care” and “customer service” are made up of questions that ask respondents to indicate how much of a problem the respondent has had with a certain aspect of care in the past 6 months:

- “not a problem,”
- “a small problem,” or
- “a big problem.”

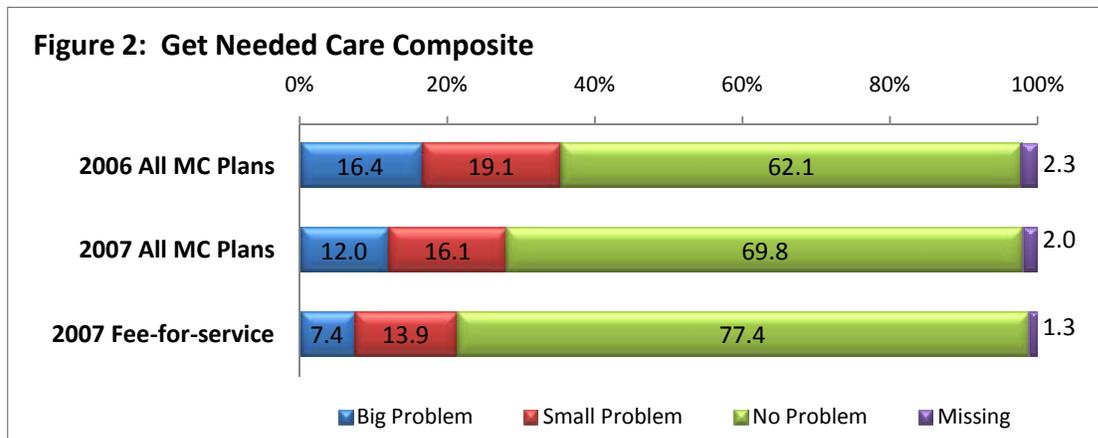
The remaining three composites are made up of questions that ask respondents how often something has happened in the past 6 months:

- “never,”
- “sometimes,”
- “usually,” or
- “always.”

The individual questions included in each of these measures and the types of responses are described in Appendix A. The distribution of CAHPS survey scores for each of the five composite measures are presented in the following bar charts.

## Get Needed Care

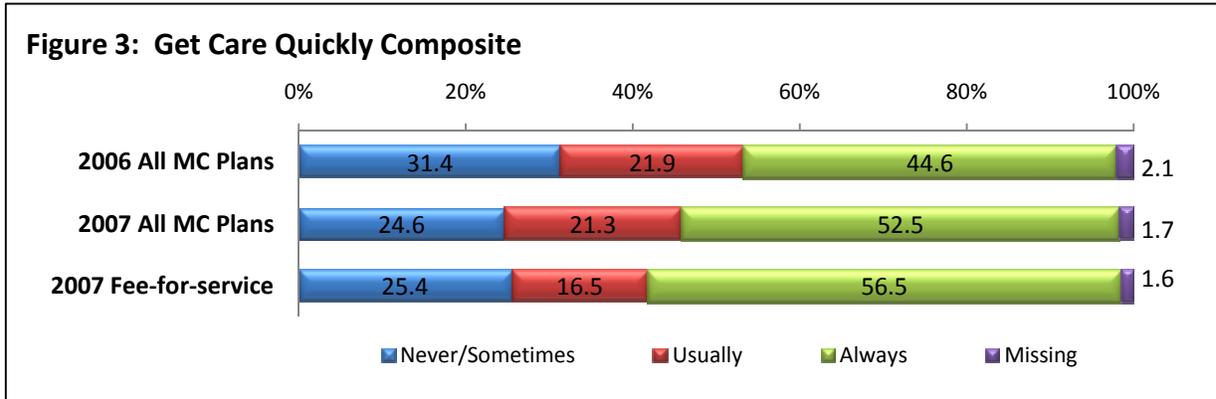
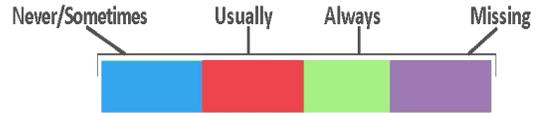
This composite combines responses from four questions regarding how much of a problem, if any, consumers had with various aspects of getting care.



There was approximately an eight percent improvement in getting needed care between 2006 and 2007. Respondents indicated that getting needed care was not a problem almost 70 percent of the time in managed care and 77 percent of the time in fee-for-services.

## Get Care Quickly

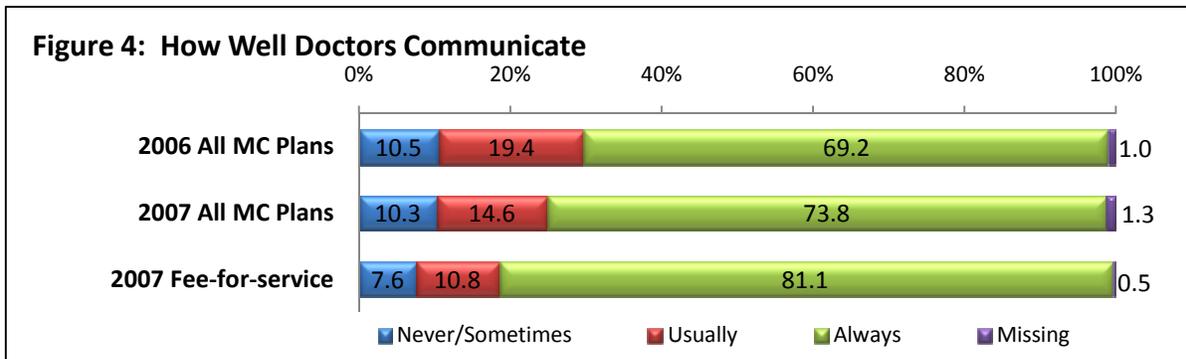
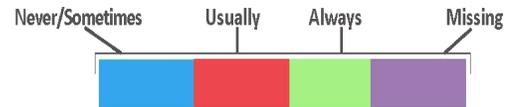
This composite combines responses from four questions regarding how often consumers received various types of care in a timely manner.



Although there was almost an eight percent improvement between 2006 and 2007, respondents reported their least positive experiences in getting care quickly with only slightly over half having no problem.

## How Well Doctors/Health Providers Communicate

This composite combines responses from four questions regarding how often doctors/health providers communicated well with consumers.



Respondents reported the most positive experiences related to how well doctors and other health care providers communicate with them in both managed care and fee-for-service.

## Office Staff were Courteous and Helpful

This composite combines responses from two questions regarding how often office staff were courteous and helpful.

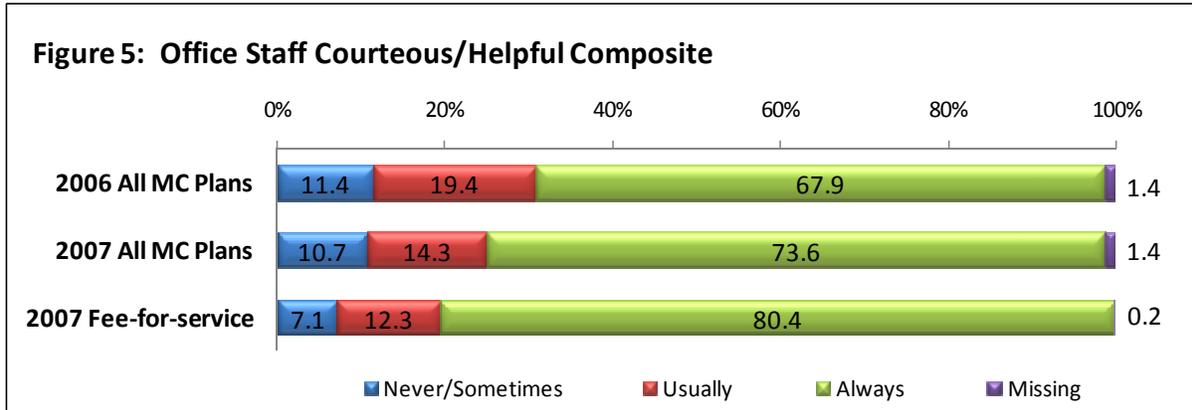
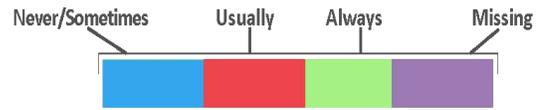
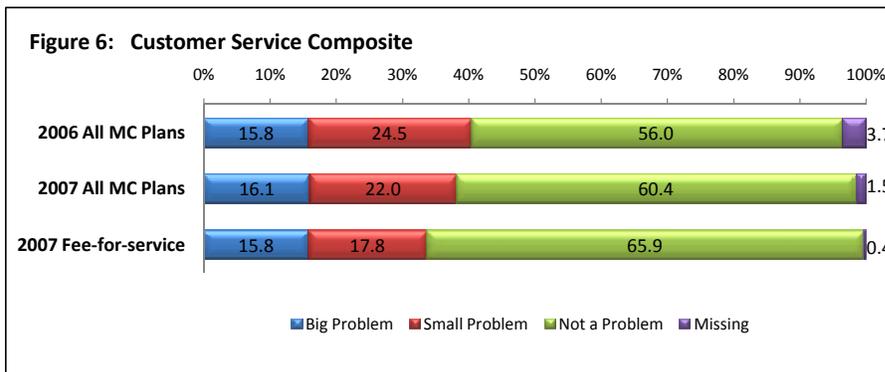
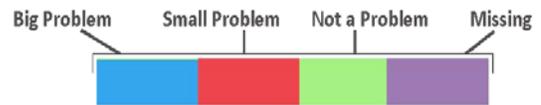


Figure 5 indicates that most respondents reported very positive experiences in dealing with courteous and helpful staff at their doctor's office (MC = 73.6; FFS = 80.4); however, they reported less positive experience (Figure 6) with the customer service of the health plan (MC = 60.4%; FFS = 65.9).

## Customer Service

This composite combines responses from three questions regarding getting needed information and help from your health plan.

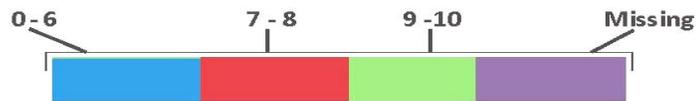


## Results of Global Rating Questions

The CAHPS Survey includes four rating questions designed to distinguish among important aspects of care. The four questions ask plan participants to rate their experiences in the past six months with the following:

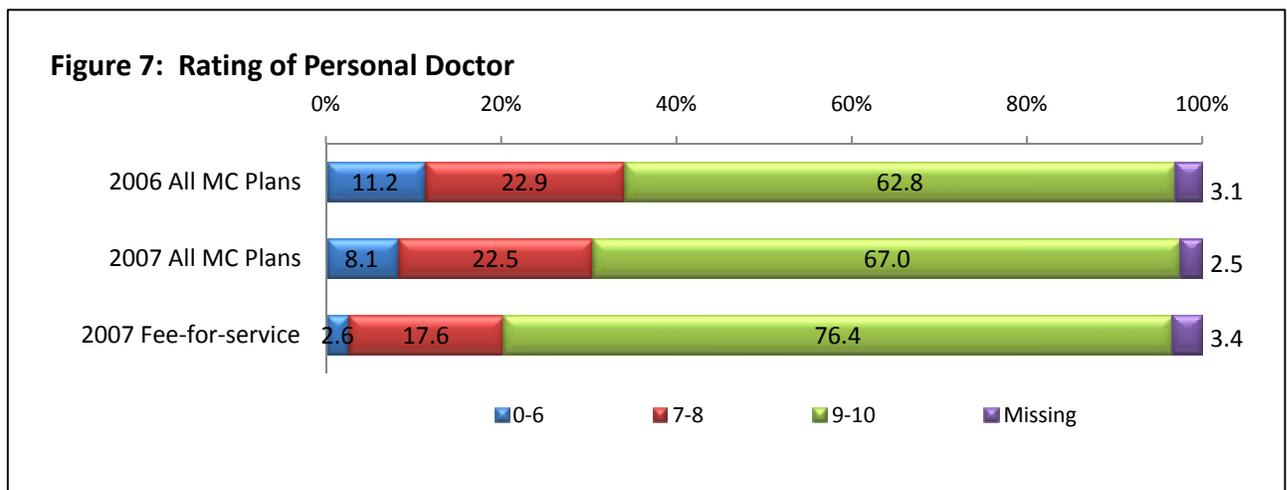
- their personal doctor or nurse
- the specialist the participant saw most often
- health care received from all doctors and other health providers; and
- their health plan overall

These ratings are scored from 0 – 10. Zero is the “worst possible” and 10 is the “best possible.” The following bar charts show the ratings of these four questions for both HMOs and MHNs.



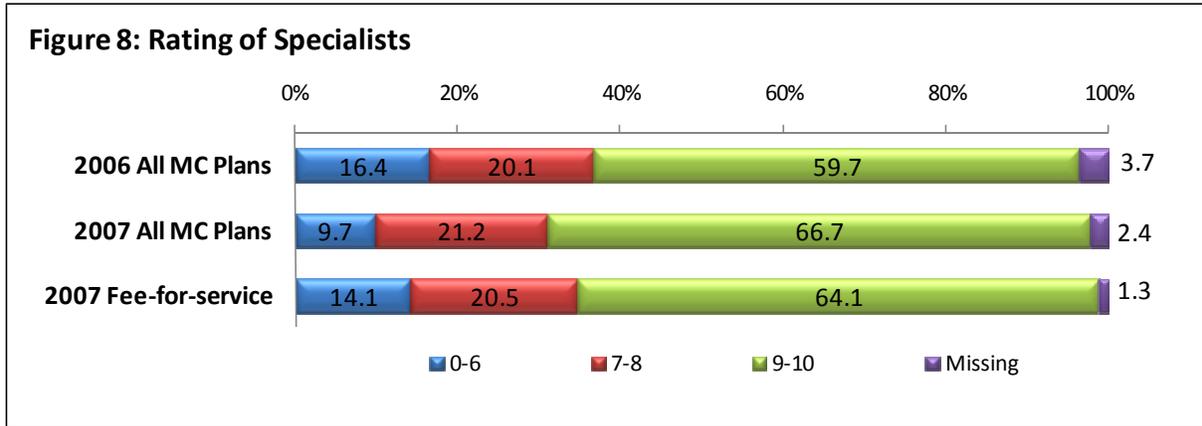
## Overall Rating of Personal Doctor or Nurse

Using a scale from 0 – 10, where zero is the “worst possible” and 10 is the “best possible, how would you rate your personal doctor or nurse?”



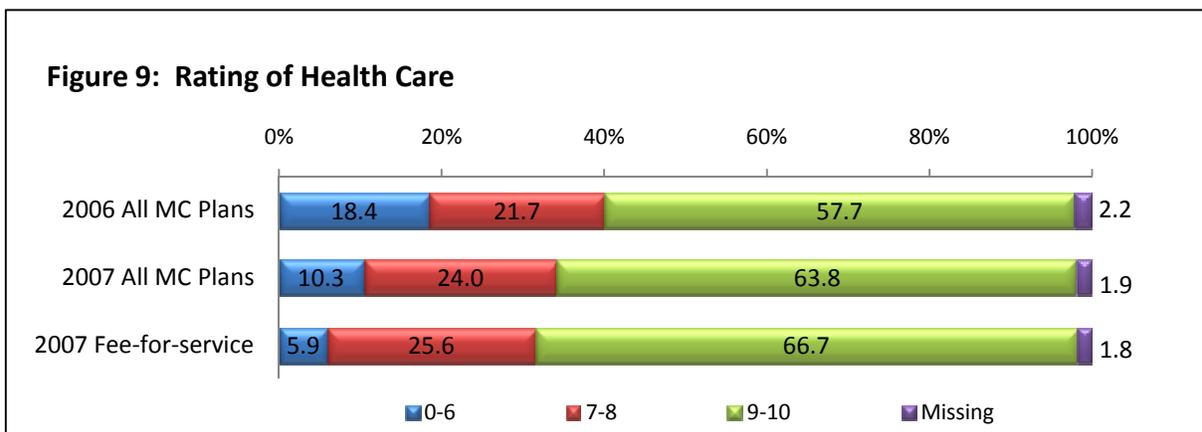
## Overall Rating of Specialists

Using a scale from 0 – 10, where zero is the “worst possible” and 10 is the “best possible, how would you rate your specialist?



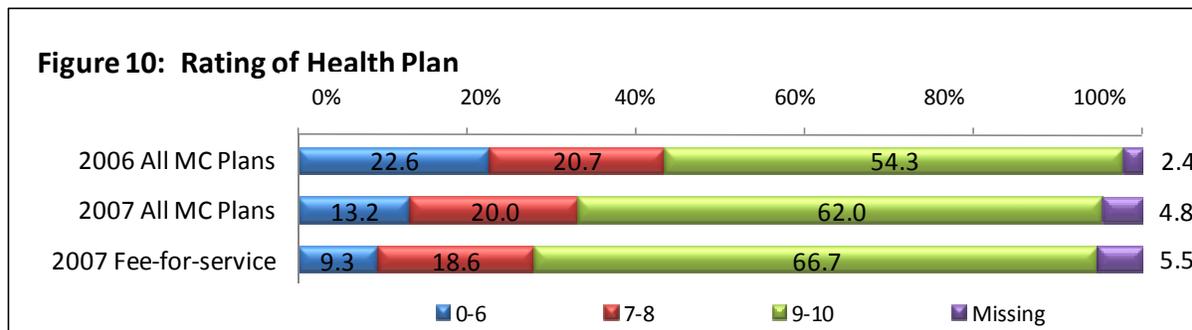
## Overall Rating of Health Care

Using a scale from 0 – 10, where zero is the “worst possible” and 10 is the “best possible, how would you rate all of your health care?



## Overall Rating of Health Plan

Using a scale from 0 – 10, where zero is the “worst possible” and 10 is the “best possible, how would you rate your health plan?”



## Consumer Satisfaction Conclusions

Consumer satisfaction with both managed care and fee-for-service is generally positive with more than 60 percent reporting positive experiences (i.e., no problems) on all but one of the measures. Consumer reports of positive experiences in managed care improved between 2006 and 2007 reflecting increased satisfaction in all aspects of health care. Although still positive, ratings for managed care were lower than fee-for-service on all but one measure (i.e., rating of specialists). This pattern is similar to other states during the early stages of managed care implementation in Medicaid.

Overall, survey respondents reported positive experiences with their doctors and other health care providers. The highest ratings in both managed care and fee-for-service relate to positive experiences with their health care providers. Respondents reported the most positive experiences with their doctor’s communication and with the courteous and helpful staff in their doctor’s office.

Consumers reported less positive experience with the customer service of the health plan. The least positive experiences for both managed care and fee-for-service were reported in getting care quickly. Generally, respondents in managed care rated their personal doctors and specialists higher than their overall health care and health plan. Respondents in fee-for-service also rated the personal doctor higher than their overall health care and health plan. Specialists were rated lower than the health plan in fee-for-service.

The increase in consumer satisfaction on all aspects of health care demonstrated by the comparison between two years of data for managed care is encouraging. These findings suggest an overall positive experience that is improving as managed care develops in South Carolina. Several changes are expected over the next few years including implementation of enrollment counselors, increased enrollment in managed care, decreased enrollment in fee-for-services and the shift in the types of managed care programs. In this changing Medicaid managed care environment, consumer reports of experiences will need to be monitored and balanced against costs benefits.

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## Appendix A: Individual Survey Items for Composite Measures and Response Format

<b>Measure: Getting Needed Care</b>	
Since you joined your/your child's health plan, how much of a problem, if any, was it to get a personal doctor or nurse you are happy with?	Response Format  <ul style="list-style-type: none"> <li>• A big problem</li> <li>• A small problem</li> <li>• Not a problem</li> </ul>
In the last 6 months, how much of a problem was it to see a specialist that you/your child needed to see?	
In the last 6 months, how much of a problem, if any, was it to get the care, tests, or treatments you or a doctor believed necessary?	
In the last 6 months, how much of a problem, if any, were delays in health care while you waited for approval from your/your child's health plan?	
<b>Measure: Getting Care Quickly</b>	
In the last 6 months, when you called during regular office hours, how often did you get the help or advice you needed for your child?	Response Format  <ul style="list-style-type: none"> <li>• Never</li> <li>• Sometimes</li> <li>• Usually</li> <li>• Always</li> </ul>
In the last 6 months, when you/your child needed care right away for an illness, injury, or condition, how often did your child get care as soon as you wanted?	
In the last 6 months, not counting time you needed health care right away, how often did you/your child get an appointment for health care as soon as you wanted?	
In the last 6 months, how often were you/your child taken to the exam room within 15 minutes of his or her appointment?	
<b>Measure: How Well the Doctors Communicate</b>	
In the last 6 months, how often did your/your child's doctors or other health providers listen carefully to you?	Response Format  <ul style="list-style-type: none"> <li>• Never</li> <li>• Sometimes</li> <li>• Usually</li> <li>• Always</li> </ul>
In the last 6 months, how often did your/your child's doctors or other health providers explain things in a way you could understand?	
In the last 6 months, how often did your/your child's doctors or other health providers show respect for what you had to say?	
In the last 6 months, how often did doctors or other health providers explain things in a way your child could understand? (Child Only)	
<b>Measure: Courtesy, Respect, and Helpfulness of Office Staff</b>	
In the last 6 months, how often did office staff at your child's doctor's office or clinic treat you and your child with courtesy and respect?	Response Format  <ul style="list-style-type: none"> <li>• Never</li> <li>• Sometimes</li> <li>• Usually</li> <li>• Always</li> </ul>
In the last 6 months, how often were office staff at your child's doctor's office or clinic as helpful as you thought they should be?	
<b>Measure: Health Plan Customer Service, Information, and Paperwork</b>	
In the last 6 months, how much of a problem, if any, was it to find or understand information about your/your child's health plan (in written material or on the Internet)?	Response Format  <ul style="list-style-type: none"> <li>• A big problem</li> <li>• A small problem</li> <li>• Not a problem</li> </ul>
In the last 6 months, how much of a problem, if any, was it to get the help you needed when you called your/your child's health plan's customer service?	
In the last 6 months, how much of a problem, if any, did you have with paperwork for your/your child's health plan?	

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