Medicaid Cost and Quality Effectiveness Report

The South Carolina Department of Health and Human Services (SCDHHS) commissioned the following three independent reports that meet the requirements of Proviso 21.33 of the General Appropriations Act of 2010-2011: "Medicaid Cost and Quality Effectiveness," "Managed Care Savings Analysis" and "South Carolina Health Plans Report Card." These reports are important tools in understanding South Carolina Medicaid's recent experience with coordinated care and will help guide future development of service delivery models.

While managed care has been an option for some South Carolina Medicaid beneficiaries since 1997, until recently only a relatively small number were enrolled. The state also lacked a critical mass of participating plans, an important component in establishing robust provider networks when beneficiary enrollment is voluntary. This began to change in the fall of 2007 with the launch of the *Healthy Connections Choices* program. Today, more than 480,000 beneficiaries are receiving care coordination through one of five plans in the state. These beneficiaries enjoy high-quality care and, as outlined in the attached reports, managed care options offer the state significant advantages over traditional fee-for-service (FFS) Medicaid.

The first report, "Medicaid Cost and Quality Effectiveness," (Madalena/Tester) compares the cost of the three existing Medicaid service delivery models offered through South Carolina Medicaid: FFS, Managed Care Organizations (MCOs) and the Medical Homes Network (MHN). The analysis is limited to data from CY 2009 and explores the evolution of reimbursement methodologies employed by SCDHHS and its actuary. Note that these methodologies have been adjusted since 2009 as newer managed care plans have become more established in the state's Medicaid market.

The second companion report, prepared by Milliman, applies SCDHHS' current payment methodologies to data from the last quarter of SFY 2010. This report is useful in demonstrating the current and future cost containment potential of the MHN and MCO models over FFS in the more mature managed care environment that now exists. The report estimates annual cost containment in excess of $13 million (state dollars).

Finally, the University of South Carolina's Institute for Families in Society prepared an analysis of the relative quality of care and customer satisfaction received under each of the three available service delivery models. The analysis is based on Healthcare Effectiveness Data and Information Set (HEDIS) and Consumer Assessment of Healthcare Providers and Systems (CAHPS). The report demonstrates that, overall, both the MCO and MHN models have significantly higher quality and consumer satisfaction scores than does FFS Medicaid. These findings are particularly encouraging since the ultimate goal of care coordination is to reduce long-term costs through improved health outcomes for Medicaid beneficiaries. A condensed version of the "report card" soon will be made available for use by beneficiaries and other stakeholders.

SCDHHS invites those who wish to learn more about the *Healthy Connections Choices* to visit www.scdhhs.gov

Report to South Carolina Department of Health and Human Services

Proviso 21.33 – Medicaid Cost and Quality Effectiveness

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This report is submitted to the SC Department of Health and Human Services as the financial analysis component of the report mandated by Proviso 21.33 of the fiscal 2010-11 Appropriations Act.

It is widely known that expenditures for Medicaid, the federal-state program to finance health care for the poor, have grown disproportionately in the past decade and represent a leading cause of fiscal stress for state governments throughout the nation. In response to this increasing financial burden and the prospect of more to come, the State of South Carolina began implementation of the Healthy Connections Choices program in October 2007. The objective of this program was to move Medicaid participants from the traditional fee-for-service (FFS) system into plans where participants would select a medical home that would focus on primary care, coordination of services, and appropriate use of the health care system. This strategy envisioned use of managed care techniques long in practice among commercial insurance plans that would result in long-term savings through emphasis on prevention and quality, as well as greater budget predictability by transferring a large measure of risk from the state to private insurers.

There are two categories of Medicaid managed care plans participating in the South Carolina program. One, Managed Care Organizations (MCOs) are licensed health maintenance organizations that operate in a manner in which a participant selects a primary care physician upon enrollment and all care is directed through the "gatekeeper". With certain exceptions (to be discussed later in this report), risk for the cost of care is borne by the MCO. Two, the state's Medical Homes Network (MHN) is composed of a contracted Primary Care Case Management (PCCM) organization and the primary care physicians enrolled in its network. The PCCM provides the infrastructure for the management of care, with the primary care physicians partnering with the beneficiary to manage care and authorize services rendered by other providers. The MHN is paid an administrative fee as well as an amount for "shared savings" that is calculated from a pre-determined formula if savings on claims payments are recognized. Conversely, should the costs associated with the enrolled MHN members exceed what the expected costs would have been in the MCO environment, the MHN is at risk for reimbursing the state up to all of the administrative fees paid to the MHN. Unlike with the MCOs, risk for claims cost in the MHN setting is borne by the state. In 2009, there were seven MCOs and one MHN operating at some point during the year in the South Carolina Medicaid program; two of the MCOs were consolidated into another MCO during the year, leaving five that operated throughout the period.

Medicaid managed care has operated in South Carolina since 1996, but enrollment grew rapidly with the onset of Healthy Connections Choices in October 2007. Prior to this rollout, a Medicaid beneficiary who wanted to enroll in a plan other than Medicaid FFS had to affirmatively take action to do so; the "default" plan was FFS. At that time, around 25% of Medicaid participants eligible to sign up for managed care were enrolled in one of the these options (MCOs—14.4%, MHN—10.5%). With the new Healthy Connections Choices program, Medicaid beneficiaries in most enrollment categories were required to choose a health care delivery model, to include traditional FFS. If the beneficiary did not choose a delivery system within 30-45 days he/she was auto-assigned to one of the managed care options. Upon choice or assignment, the beneficiary had 90 days to change from one plan to another or to transfer to traditional FFS. The rollout of Healthy Connections Choices was performed gradually by region, with the Midlands going on-line in October 2007, followed by the Piedmont in January 2008, the Lowcountry in March 2008, and the Pee Dee in May 2008.

By the beginning of 2009, this percentage of Medicaid membership in managed care had risen to over 55% of those eligible (MCOs—43.3%, MHN—12.1%), and by the end of 2009 the program had

grown to include two of every three participants eligible for managed care (MCOs—52.3%, MHN—14.2%). (Note: about 5/6 of all Medicaid beneficiaries are eligible for managed care) In order to examine the initial outcomes from this substantial shift of Medicaid enrollment to managed care, the General Assembly included proviso 21.33 in the fiscal 2011 Appropriations Act:

21.33 The Department of Health and Human Services 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. These measures must be complied on an annual basis. The Healthcare Effectiveness Data and Information Set (HEDIS) shall be utilized for quality measurement and must be performed by an independent third party according to HEDIS guidelines. 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 in order to adequately compare cost effectiveness of the different managed care programs versus Medicaid fee-for-service. The methodology must use appropriate case-mix and actuarial adjustments that allow cost comparison of managed care organizations, medical home networks, and fee-for-service. The department shall issue annual healthcare report cards for each participating Medicaid managed care plan and Medical Home Network operating in South Carolina and the Medicaid fee-for-service program. The report card measures shall be developed by the department and the report card shall be formatted in a clear, concise manner in order to be easily understood by Medicaid beneficiaries. The results of the cost effectiveness calculations, quality measures and the report cards shall be made public on the department's website no later than 90 days after the end of each fiscal year.

Calendar year 2009 was the time period used for this analysis.

The SC Department of Health & Human Services' (DHHS) contracted with an independent actuary to establish capitated premium rates for the MCOs to pay for most acute care services covered under Medicaid. Two separate rating periods are included as part of this analysis of calendar 2009: October 2008-September 2009, and October 2009-March 2010. The rates and some elements in the methodology changed effective October 2009; those changes are explained later in this report. Generally, the methodology for rate setting was driven by claims experience in FFS Medicaid, with certain qualifications and exceptions. Rates are set for distinct cells based on Medicaid eligibility categories, age, and, in certain age categories, gender. These rate cells are as follows:

TANF (Temporary Assistance for Needy Families): < 1 year (Jan-Sept only)
TANF: 1-3 months (Oct-Dec only)
TANF: 4-12 months (Oct-Dec only)
TANF: 1-6 years
TANF: 7-13 years
TANF: 14-18 years, male
TANF: 14-18 years, female
TANF: 19-44 years, male
TANF: 19-44 years, female
TANF: 45 years +
SSI (Supplemental Security Income)
OCWI (Optional Coverage for Women and Infants)

Whereas the premium payment to the MCOs covered most Medicaid services, certain items were excluded and continued to be paid through Medicaid FFS. Mental health and substance abuse services were carved out of the MCO contracts and were reimbursed through FFS throughout the study period. Dental services were excluded from the MCO contract and paid through FFS, with the exception of fluoride application beginning in October 2009. Claims associated with BabyNet and Sickle Cell services are not covered through managed care, and continued to be paid through FFS during this time period. Chiropractic services were excluded from the MCO contract during the period through September 2009; however, they were added to the MCOs' benefits beginning in October 2009. Likewise, therapy services provided by private rehabilitation therapy providers such as Physical, Occupational, and Speech & Language Therapists, were excluded prior to October 2009, but were added to the MCO contracts effective that month.

In addition to services not covered under the MCO contracts that were payable through FFS, the MCOs received additional payments with certain events. The "newborn reinsurance" program shifted to FFS the entire cost of hospital services for newborns whose length of stay was 15 or more days and whose admission occurred within three days of birth. This "reinsurance" program was in force through September 2009 but was terminated effective in October. In addition, the MCOs received "maternity kicker" payments for each delivery from an enrollee, and, through September 2009, a "newborn kicker" payment for each newborn; the "newborn kicker" payment was eliminated effective in October and replaced with separating the >1 year rating cell into 1-3 month and 4-12 month cells, with the cost associated with newborns rolled into to 1-3 month cell. In October 2009, a "low birth weight (LBW) kicker" and a "very low birth weight (VLBW) kicker" payment were introduced to direct more funding to MCOs that have a higher incidence of LBW and VLBW babies; the funding pool for the "LBW kicker" and "VLBW kicker" payments was established through a"withhold" reduction in the age 1-3 month premium cell paid to the MCOs.

Prior to October 2009, MCO premiums were paid based on enrollment of an "average" Medicaid beneficiary by rating cell, and each of the participating MCOs was paid the same amount by rating cell. Beginning in October, a risk selection adjustment was introduced to the Medicaid MCO rate setting methodology. Risk adjusted payments are a more accurate means of paying at-risk MCO providers in a system with multiple plans and plan types in which enrollees with varying health resource needs may disproportionately opt for one plan or plan type over another. In a non-risk adjusted system, an at-risk provider can rationally be expected to seek healthy enrollees and avoid the sick. With risk-adjusted payments, an MCO can be expected to receive premium payments based on the resource needs of their enrollees.

The contracted actuary utilized the Restricted Medicaid Rx model, developed by researchers at the University of California, San Diego (UCSD), for the risk adjustment calculation. This is a standalone pharmacy-based methodology; the pharmacy-only system was utilized because of the limited availability at the time of complete medical encounter data on which to determine diagnosis information. During 2009, DHHS and the contracted actuary extensively studied the completeness and reliability of the encounter data (both medical and prescription drugs) that was being reported to the state by the participating MCOs. The results of the study indicated that while the medical data was not robust enough for the purposes of risk adjustment, the pharmacy data was adequate for the risk adjustment exercise. Mental health-related prescriptions were omitted from the risk model because of the carve-out of mental health services from the MCO contracts, as well as other medications prone to "gaming"

in the opinion of the contracted actuary. The MCO selection adjustment was phased in beginning October 2009 at 50% of the total calculated adjustment value; the selection factor was fully implemented effective April 2010. In aggregate, premium payments to MCOs were reduced around 3.5% beginning October 2009 as a result of the risk adjustment, with a 7% total adjustment anticipated for the rating period starting April 2010. For SSI participants (eligible for Medicaid because of disability and as a group the most expensive enrollees), a risk-adjusted premium was calculated for each MCO separately; for other eligibility categories, MCO premiums were only risk adjusted in composite.

Because the time period for this analysis is calendar 2009, claims and payment data were aggregated across two rating periods with not only different MCO rates but different rating methodologies as well. Reforms initiated as a result of the learning process inevitable in the start-up of such an ambitious program would be reflected in these numbers only partially or not at all. The development of Medicaid managed care in South Carolina should be viewed as a continuum with ongoing course adjustments made on the basis of analysis such as this as well on regular review on the part of DHHS and its contracted actuaries.

For calendar 2009, this independent analysis first took the three distinct Medicaid plan types: FFS, MCO, and MHN, and, in order to normalize data and present an "apples-to-apples" comparison, calculated a risk adjustment for actual enrollees in the three respective plan types. The risk adjustment methodology used for this analysis was the Johns Hopkins Adjusted Clinical Groups® (ACG®) System, developed and maintained by Johns Hopkins University. The ACG System measures the morbidity burden of patient populations based on disease patterns, age and gender. This methodology assigns all codes into one of 32 diagnosis groups, known as Adjusted Diagnosis Groups (ADGs), with diseases placed in a diagnosis group based on five clinical dimensions: duration (acute, recurrent, or chronic), severity (minor/stable versus major/unstable), diagnostic certainty (symptoms versus diseases), etiology (infectious, injury, or other), and specialty care (medical, surgical, obstetric, hematology, etc.). An individual is assigned to one of 93 discrete ACG categories based on his or her particular combination of ADGs plus age and gender.

Medicaid beneficiaries eligible for a managed care plan, representing about five out of six persons enrolled in Medicaid in 2009, were used for this report's risk adjustment analysis. Because of the aforementioned doubt in the completeness of medical encounter data among the MCO, only pharmacy claims data was included in this analysis; all prescription drugs in claims history were included to determine an individual's risk status. This analysis includes only persons who had at least six months of Medicaid coverage during 2009. This is true both for purposes of risk adjustment as well as claim and premium payments.

The calculated risk adjustment was applied to gross claims expenditures per person for each of the plan types for its SSI and non-SSI enrollees. The following elements were used in the calculation to obtain the total risk-adjusted cost per member per month. For FFS, the cost components were the risk-adjusted claim payments, DHHS administrative expenses associated with FFS, and, as an offset, the pharmacy rebates obtained as part of the program. For MCOs, cost components were the risk-adjusted premium and "kicker" payments made to the MCOs, risk-adjusted claim payments in those service categories (i.e., mental health) that are carved out of the MCO contract, and the lesser element of DHHS administrative expenses associated with MCOs. For MHN, cost components are risk-adjusted claims payments, administrative fees paid to the CSO, contractual shared savings payments to the CSO, DHHS administrative expenses associated with MHN, and, pharmacy rebates as an offset. Payments related to

graduate medical education were removed from the claims payments for FFS and MHN, and from the premium payments to MCOs.

The following provides a technical description of the methodology used to develop the numbers illustrated in the subsequent tables:

Expense Development:

There were several sources of data used to develop costs in the analysis:

1. Fee for service claims incurred from January 1, 2009 to December 31, 2009, paid through June 30, 2010. Expenses for services associated with other state agencies were excluded using fund codes. The excluded list is attached.
2. Eligibility and RSP (Recipient Special Programs) files were used to develop eligibility spans.
3. Premiums paid to MCOs were provided by DHHS.
4. Kicker payments for maternity were developed by multiplying the number of deliveries times the applicable maternity kicker payment. Newborn kicker payments were developed in a similar methodology for the period of January 1, 2009 to September 30, 2009. MCO-supplied encounter records were utilized for these calculations.
5. Low birth weight and very low birth weight kicker payments for the period of October 1, 2009 to December 31, 2009 were provided by DHHS.
6. Adjustments to cost (administrative fees paid to MHN providers, IME / GME payments, pharmacy rebates, and DHHS administrative expenses) were developed based on actuarial data books and schedules provided by DHHS. Specifically, the DHHS administrative expense assumptions were based on input provided by DHHS staff and management. The supplemental teaching adjustment was developed based on enrollment and rate cell payments supplied by DHHS.
7. Dental services were excluded.

Claim data was merged to eligibility spans based on date of service so that FFS expenses for which DHHS is responsible for regardless of delivery model could be captured.

Risk Adjustment Processing:

The risk adjustment was developed using:

1. Prescription drug claims with dispense dates of January 1, 2009 to December 31, 2009, paid through June 30, 2010. Because of the almost instantaneous nature of prescription drug claims, no adjustment for IBNR (Incurred but not Reported) was made. All prescription drug classes were included in the analysis. Claims processed by DHHS and the participating MCOs were processed in the analysis. A total of 8,103,658 prescription records were evaluated.
2. Enrollment data (eligibility and RSP) that corresponds to calendar 2009. Recipient age and gender were determined based on enrollment data.
3. Adjusted Clinical Group (ACG) version 9.0 software from Johns Hopkins University. The evaluation was completed using the RX-PM total cost model operating in stringent mode. By operating in stringent

mode, the system is conservative in its evaluation of conditions and the ultimate assignment of risk score. The population selected for risk assessment variables (i.e. the population that the relationship of risk would be developed) was the US Non-Elderly population.

Selection criteria were applied to the population that was risk scored.

1. Recipients eligible for managed care. Recipients in payment categories '10','14','15','33','41','42','43','48','49','50','52','54','55','56','70','90','92' (institutionalized or on a waiver program) were ignored as well as those recipients who were dually eligible for Medicaid and Medicare.
2. Recipients with less than six months of eligibility in the period were excluded.

Of the 9,559,739 total members months of exposure to DHHS in 2009, 6,894,958 member months of exposure were included in the risk assessment analysis (72.12%)

The ACG software evaluates each person and the drugs that were prescribed during the analysis period and assigns a risk score. The score is expressed as relative risk to the population selected for risk assessment. A score of 1.0 indicates risk exactly equal to the benchmark population; a score of .90 indicates risk that is 10% more favorable; a risk score of 1.10 indicates risk that is 10% less favorable. The overall Medicaid population risk score in this analysis is 1.1067.

Enrollment, risk analysis, and financial results are illustrated in the following tables (Note: the term PMPM refers to Per Member Per Month):

Table 1: 2009 Medicaid Enrollment by Plan Type (Managed care eligible only)

Plan Type	**FFS**	**MCO**	**MHN**
Total Member Months	1.851,730 (26.9% of total)	3,945,823 (57.2%)	1,097,405 (15.9%)
SSI enrollees	472,655 (43.0% of SSI total)	462,690 (42.1%)	163,193 (14.9%)
Non-SSI enrollees	1,379,075 (23.8% of non-SSI total)	3,483,823 (60.1%)	934,212 (16.1%)
Enrollee composition	25.5%-SSI/74.5%-non-SSI	11.7%-SSI/88.3%-non-SSI	14.9%-SSI/85.1%-non-SSI

Table 2: FFS Claim Expenditures for 2009 Date of Service (Managed care eligible only)

Plan Type	**FFS**			**MCO**			**MHN**		
	SSI	Non-SSI	Total	SSI	Non-SSI	Total	SSI	Non-SSI	Total
Member Months	0.473M	1.379M	1.852M	0.463M	3.483M	3.946M	0.164M	0.934M	1.097M
FFS Claims	$449.5M	$374.1M	$823.5M				$131.4M	$164.3M	$295.7M
FFS Claims for MCO enrollees				$58.1M	$155.1M	$213.2M			
FFS Claims PMPM	$950.91	$271.26	$444.74	$125.53	$44.52	$54.02	$805.07	$175.89	$269.45

Table 3: Premiums and Kicker Payments Paid to MCOs: 2009

	SSI	Non-SSI	Total
Member Months	462,690	3,483,133	3,945,823
Premiums	$340.9M	$535.1M	$875.9M
Kicker Payments		$113.4M	$113.4M
Total Payments	$340.9M	$648.4M	$989.3M
PMPM	$736.70	$186.17	$250.72

Table 4: Risk Adjustment Analysis (Managed care eligible only)

Plan Type	FFS			MCO			MHN		
	SSI	Non-SSI	Total	SSI	Non-SSI	Total	SSI	Non-SSI	Total
Member Months	0.473M	1.379M	1.852M	0.463M	3.483M	3.946M	0.164M	0.934M	1.097M
Risk Score	3.0034	0.9723	1.4908	2.3680	0.7349	0.9264	2.9499	0.7854	1.1073

The considerable differences illustrated above demonstrate the importance of risk adjustment in the management of a health plan system involving different plan types. The risk scores for the entire Medicaid managed care eligible group among all types is 2.7278 for SSI enrollees, 0.7995 for non-SSI enrollees, and 1.1068 for the entire group. (The 1.1068 overall score indicates that this group would expect to require about 10.7% more health resources than the US non-elderly population as a whole) FFS enrollees are considerably higher in risk across the board, MCO enrollees are substantially lower, while MHN enrollees come closest to approximate the average risk of the group and, in fact, the overall MHN risk score of 1.1073 is almost identical to the overall Medicaid managed care eligible risk score of 1.1068. As mentioned earlier, there was no risk adjustment in the premiums paid to the MCOs prior to October 2009.

Another related item of note is the SSI enrollment in FFS. SSI enrollees, consisting of persons eligible for Medicaid because of disability, are generally the most expensive enrollees in the program. SSI enrollees made up 15.9% of member months in this group during 2009, but 25.5% of FFS months, and only 11.7% of MCO months. Again, MHN is closest to representative of the combined group, with SSI at 14.9% of MHN member months. In addition to enrolling relatively fewer members in this category, the SSI members in MCOs show a substantially lower risk score (2.3680) than those enrolled in FFS and MHN (3.0034 and 2.9499, respectively). The limited rollout approach adopted by DHHS for the SSI population in 2008 and 2009 may have contributed to the differences in risk between SSI enrollees in FFS and the SSI enrollees in MCO and MHN options. Because of network adequacy concerns, approximately 28,000 SSI recipients residing in certain areas of the state were withheld from the enrollment process. Once sufficient networks were in place for this higher risk patient pool, the rollout was concluded. This transition strategy was completed by May 2009. SSI risk scores in the MCO population increased 7.11% from the beginning of 2009 to the end of 2009.

Above-mentioned information flows into the following comprehensive table illustrating total Medicaid cost by plan type:

Table 5 Overall Financial Summary of Total Medicaid Costs in 2009 (Managed care eligible only)

Note: all dollar amounts in this table are represented on a PMPM basis

Plan Type	**FFS**			**MCO**			**MHN**		
	SSI	Non-SSI	Total	SSI	Non-SSI	Total	SSI	Non-SSI	Total
FFS Claims	$950.91	$271.26	$444.74	$125.53	$44.52	$54.02	$805.07	$175.89	$269.45
Risk Score	3.0034	0.9723	1.4908	2.3680	0.7349	0.9264	2.9499	0.7854	1.1073
Risk Adj Claims	$316.61	$278.97	$298.33	$53.01	$60.59	$58.32	$272.92	$223.94	$243.34
Premiums & Kickers Paid to MCOs				$736.70	$186.17	$250.72			
Risk Adj Premiums & Kickers				$311.10	$253.33	$270.65			
Total Risk Adj Claims, Premiums, & Kickers PMPM	**$316.61**	**$278.97**	**$298.33**	**$364.11**	**$313.92**	**$328.96**	**$272.92**	**$223.94**	**$243.34**
Adm Fees paid to MHN							$10.00	$10.00	$10.00
Suppl Teaching Payments				-$19.39	-$7.57	-$8.82			
IME/GME Payments	-$17.58	-$17.58	-$17.58				-$17.58	-$17.58	-$17.58
Pharmacy Rebates	-$32.47	-$32.47	-$32.47				-$32.47	-$32.47	-$32.47
Shared Savings							$8.61	$8.61	$8.61
DHHS Adm Expense	$9.68	$9.68	$9.68	$3.19	$3.19	$3.19	$9.68	$9.68	$9.68
Total Medicaid Risk Adj Cost	**$276.24**	**$238.60**	**$257.96**	**$347.91**	**$309.54**	**$323.33**	**$251.16**	**$202.18**	**$221.58**

One immediate note on the 2009 cost findings that will modify these results going forward is that effective with the enactment of the federal Patient Protection and Affordable Care Act (PPACA) in March 2010, pharmaceutical rebates will be available to Medicaid MCOs in the same manner they are applied now to state-paid Medicaid drug claims. Although this was not in force during the analysis period of 2009, its effect is illustrated below for demonstration purposes:

Table 6: Effect on Pharmaceutical Rebate Equalization on Relative Plan Costs

Plan Type	**FFS**	**MCO**	**MHN**
Total Medicaid Risk Adj Cost	$257.96	$323.33	$221.58
MCO as a % of Total Risk Adj Cost w/o Rebates	125.3%	----------	145.9%
	$290.43	$323.33	$254.05
MCO as a % of	111.3%	----------	127.3%

Elimination of the differential treatment of rebates that became effective in March 2010 takes away more than half of the 2009 cost difference between MCOs and FFS.

Other measures put into effect by DHHS with either the MCO rate exercises in October 2009 and /or April 2010 should also result in more favorable relative costs for the MCOs than is indicated in this analysis. The first iteration of risk adjustment was implemented in October 2009 at 50% of the

adjustment as calculated by the contracted actuary; the complete adjustment went into effect in April 2010. Therefore, the risk adjustment is given only 12.5% credibility for calendar 2009. As ¾ of 2009 was unaffected by any risk adjustment of the MCO premiums, this action will make a material difference going forward; however, this analysis indicates a difference substantially greater than 7% (the fully implemented, April 2010 adjustment) in the risk borne by the MCOs compared than that borne by the state. Continued refinement of the risk adjustment process will contribute to the progress that DHHS has made in recognizing selection bias in the development of capitation payments. Elimination of the existing newborn reinsurance program effective October 2009 would also be expected to result in more favorable MCO costs when that change is reflected in a full year of data.

One likely cause of the higher costs in MCOs is their inability to contract with health care providers for hospital and physician services at an equivalent rate as Medicaid FFS. The individual MCOs, which are required to establish a viable network as a condition of participation in Healthy Connections Choices are not able to negotiate payment rates on equal or better terms than Medicaid FFS with providers in the state. The contracted actuary has taken this consideration into account, at least with regard to physician pricing, in its MCO rate setting process. Market basket analysis of 2009 encounter data indicates that such adjustments are warranted. As the quality of encounter data submissions continues to improve, such market pressures and trends will become more readily identifiable and actionable through normal program monitoring and analysis. It should be noted that the federal standard for payment to Medicaid MCOs is "actuarial soundness", meaning that rates must be established to provide sufficient funds to pay claims, taking into consideration market conditions that may affect the MCOs' unit costs.

The University of South Carolina Institute for Families in Society (Institute) is under contract with DHHS to develop and report quality measures related to the various Medicaid plan types. Quality information is addressed extensively in another section of this report, but in order to give context to the cost analysis provided here, an effort was made to condense this data for simple comparison purposes. With one exception, the Institute has used measures from the National Committee on Quality Assurance (NCQA) HEDIS and CAHPS quality performance systems. The Institute has produced a report card with rankings of four MCOs, the MHN, and FFS for calendar 2009 based on information obtained from either administrative claim records (HEDIS) or survey responses (CAHPS). In each of 34 categories in which the plan has sufficient cell size, each plan receives a score relative to its standing among Medicaid managed care plans nationally; whether the plan scored at or above the 75th percentile, between the 61st and 74th percentile, between the 40th and 60th percentile, or at the 39th percentile or below. These rankings are represented on the report card with listing of either one, two, or three stars (the better the ranking the more stars) and the highest ranking is shown with three stars plus a shaded indicator.

To complement this financial analysis, plan scores for each measure were accumulated to arrive at a single score for each reporting plan. The following table describes how this number was calculated for this analysis.

Result of Measure	Report Card Representation	Scoring for this analysis
at or above 75th percentile	3 stars plus shade	+3
61st-74th percentile	3 stars	+2
40th-60th percentile	2 stars	+1
at or below 39th percentile	1 star	-1

Scores for each measure were added and, for the MCOs, were weighted and averaged according to their share of the MCO enrollment in 2009. Scores resulting from this exercise are as follows:

MHN: 24
MCO: 21.3
FFS: 9

This calculation clearly demonstrates that the movement of Medicaid beneficiaries into the managed care options has brought about increased quality of care and consumer satisfaction for these patients, as indicated in the HEDIS and CAHPS framework and summarized using the methodology developed for this report as described in the preceding paragraphs.

As the managed care initiative in South Carolina Medicaid is an evolutionary process, and the time period for this report cut across different MCO payment policies, it is recommended that DHHS continue to perform rigorous comparative analysis as to relative cost of the three plan types. It will be a positive development if the proposed expansion of Healthy Connections Choices lessens the risk differential between the plan types and brings a more representative group of enrollees into the MCOs, as expected. However, as risk differential is almost certainly going to continue to exist so long as there are plan options from which to choose, it is important to employ a rigorous and thorough risk adjustment methodology on which to base MCO premiums. As MCO encounter data becomes more complete and DHHS is confident that this information presents a sound picture of the health status of MCO enrollees, it is recommended that medical data be included along with prescription drugs in the risk adjustment methodology. It is understood that DHHS is now imposing financial penalties (amounting to 0.12% of capitated premium) on MCO plans that do not supply complete (defined as 95%) encounter data to DHHS in a timely fashion. Medical data is a critical component in the refinement of the risk adjustment process. Furthermore, it is recommended that mental health claims information be included in the risk analysis. Most (but not all) mental health drugs have been excluded from the methodology previously under the rationale that mental health/substance abuse claims are carved out from the MCO contract and payable under FFS for MCO enrollees. However, there is considerable literature that indicates that mental illness is a strong indicator for higher incidence of physiological disease as well. In addition, there is evidence that use of atypical antipsychotics have led to severe illness in certain cases. While some of the increased morbidity would be captured through these patients use of other pharmaceuticals, especially when the person has a diagnosed chronic disease, it would not always be the case. For example, it has been reported that 75% of individuals with either addictions or mental illness smoke cigarettes as compared with 23% of the general population, and it is widely accepted that smokers present greater health risk than non-smokers. Omitting mental health data from the risk analysis creates an avoidable gap in evaluating accurately the relative health status by different plan type. As the MHN model is decisively the most cost favorable plan type in this report's analysis, it is advantageous to expand capacity and seek to increase the share of Medicaid members enrolled in MHNs.

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September 29, 2010

Ms. Emma Forkner
Director
South Carolina Department of Health and Human Services
P.O. Box 8206
1801 Main Street
Columbia, SC 29202-8206

RE: MANAGED CARE SAVINGS ANALYSIS

Dear Ms. Forkner:

Milliman, Inc. (Milliman) has been retained by South Carolina Department of Health and Human Services (SCDHHS) to assist in the financial analysis related to the Medicaid medical assistance program, including managed care rate setting process and the development of a budget forecast model. SCDHHS has requested that Milliman provide comments to SCDHHS related to the emerging and expected savings under the risk based managed care programs implemented by SCDHHS.

LIMITATIONS

The information contained in this letter has been prepared for South Carolina Department of Health and Human Services. The letter may not be distributed to any other party without the prior consent of Milliman. Any distribution of the information should be in its entirety. Any user of the letter must possess a certain level of expertise in actuarial science and healthcare modeling so as not to misinterpret the data presented. The terms of Milliman's contract with SCDHHS effective July 1, 2010 apply to this letter and its use.

To the extent that Milliman consents to the distribution of this letter, we make no representations or warranties regarding the contents of this letter to third parties. Likewise, third parties are instructed that they are to place no reliance upon this letter prepared for SCDHHS by Milliman that would result in the creation of any duty or liability under any theory of law by Milliman or its employees to third parties.

In the development of the data and information presented in this letter, Milliman has relied upon certain data from the State of South Carolina and their vendors. To the extent that the data was not complete or accurate, the values presented in the letter will need to be reviewed for consistency and revised to meet any revised data.

EXECUTIVE SUMMARY

Between August 2007 and August 2010, managed care enrollment in the Healthy Connections Choices program increased from approximately 155,000 enrollees to approximately 483,000 enrollees. Under the program, eligible Medicaid members began enrolling in health plans. Eligible Medicaid members include all full benefit eligible members that are also not dual eligible (i.e., both Medicare and Medicaid eligible), are not institutionalized, and are not on a waiver program. The eligible Medicaid managed care members were able to choose from three options: risk-based Managed Care Organization (MCO) model, Medical Home Network (MHN) plan, or traditional fee-for-service.

The results illustrated in this correspondence focus upon percentage savings estimates for capitated services for the Adult, Children and SSI populations. The analysis excludes retroactive enrollment months. The analysis additionally excludes carve-out services as well as all services for the infants and pregnant women populations.

- Pregnant women were excluded due to several factors regarding the calculations; including:
  - Risk adjustment does not reflect risks associated with maternity related expenditures, since using pharmacy to reflect risk differentials
  - Timing of the delivery and the number of months eligible for pregnant women makes it difficult for analysis since the pre-natal costs may be incurred fee-for-service, while the higher delivery costs occur in the managed care plan or under the MHN enrollment period

- Newborns also were excluded since the risk adjustment process of pharmacy services are limited for the population.

The percentage savings for the MHN program are similarly limited to services that would be covered under the capitation contract if the enrollee was in the MCO program instead of the MHN program. The savings estimates are only applicable to the Adult, Children, and the non-dual SSI populations. The analysis excludes services such as dental services which are carved-out of the capitation rates as well as other services such as home and community based waiver services and hospice services. The MHN savings analysis additionally excludes all services for the infants, pregnant women, aged and dual eligible populations. The risk adjustment methodologies we used to compare MCO, MHN and FFS per member per month costs are not equally appropriate for those populations or the carve-out services.

Table 1 illustrates the estimated savings percentages by managed care option and in aggregate for the SSI and the TANF populations. The savings percentages were estimated using enrollment, claims and encounter data from SFY 2009, but reflect the current MCO capitation rate selection adjustment methodology. Consequently, the savings percentages are not necessarily appropriate to develop explicit SFY 2009 expenditure savings because selection adjustment was not fully incorporated into the capitation rates until April 2010. Any changes in Table 1 as compared to results from prior version of this letter relate to the limitation of the study to capitated services only.

Table 1
South Carolina
Department of Health and Human Services
Managed Care Savings Percentages
Developed from SFY 2009 Enrollment, Claims and Encounter Data

Estimated Percentage Savings

Population	MCO	MHN	Total Managed Care
SSI	4.5%	10.2%	5.7%
TANF Adults	4.5%	(2.1%)	(0.2%)
TANF Children	4.5%	(3.7%)	2.7%

Notes: (1) The managed care savings analysis was developed excluding the Medicaid/Medicare dual eligible population (MHN specific) and the infant and pregnant women populations and excludes retroactive eligibility months.

(2) The managed care saving estimates are limited to services covered under the capitation contract. Carve-out services and services such as home and community based services and hospice services were not included in the analysis.

(3) The loss for the MHN TANF Adult and Children populations was limited to the MHN fee of $10 PMPM which equates to (2.1%) savings for Adults and (3.7%) savings for Children.

The managed care savings percentages illustrated in Table 1 best represent the savings percentages anticipated following the full implementation of selection adjustments in the April 2010 capitation rates.

Milliman has developed an annualized savings estimate based upon estimated savings for the period of April 2010 through June 2010. The estimated savings for April 2010 was derived by multiplying the percentage savings estimates from Table 1 by the corresponding MCO and MHN expenditures for April 2010 through June 2010. The MCO expenditures were limited to capitation expenditures only (i.e., excludes carve-out expenditures). The MHN expenditures were limited to services that would fall under the capitation contract (i.e., does not include carve-out type expenditures or expenditures related to services such as home and community based services or hospice services). The savings estimate for April 2010 through June 2010 was multiplied by four to arrive at an annualized estimate.

The annualized savings estimate does not reflect: (1) expected future growth in enrollment, (2) managed care expansion targeted for October 2010 or (3) transition of the Healthy Connection Kids in October 2010.

Table 2
South Carolina
Department of Health and Human Services
Managed Care Savings Estimate
Annualized based upon April 2010 through June 2010 Savings Estimates

Estimated Annualized Expenditure Savings in Millions

Population	MCO	MHN	Total Managed Care
SSI	$18.0	$13.0	$31.0
TANF Adults	10.0	(1.1)	8.9
TANF Children	12.7	(7.4)	5.4
Total – State and Federal	$40.7	$4.6	$45.3
Total – State Only	$12.2	$1.4	$13.6

Notes:
(1) The estimated savings for April 2010 was derived by multiplying the percentage savings estimates from Table 1 by the corresponding MCO and MHN expenditures for April 2010 through June 2010.

(2) The MCO savings were limited to capitation expenditures only (i.e., excludes carve-out expenditures).

(3) The MHN savings were limited to services that would fall under the capitation contract (i.e., does not include carve-out type expenditures or expenditures related to services such as home and community based services or hospice services).

(4) The MHN savings estimates for the Adult and Children populations were derived by capping the loss at the MHN fee of $10 PMPM per enrollee.

(5) The savings estimate for April 2010 through June 2010 was multiplied by four to arrive at an annualized estimate.

(6) The annualized savings estimate does not reflect: (1) expected future growth in enrollment, (2) managed care expansion targeted for October 2010 or (3) transition of the Healthy Connection Kids in October 2010.

(7) The State Only estimated expenditure savings assumes the standard FMAP of 70.07%. State savings would be lower under the enhanced FMAP.

MCO Savings Observations and Assumptions:

- The MCO savings estimate of 4.5% corresponds to time periods subsequent to April 2010 and primarily reflects the capitation rate setting assumptions for managed care reductions less the additional administrative and care management costs.

- In the development of the 4.5% savings estimates, Milliman has assumed an administrative savings of approximately 2% of fee-for-service claim costs related to expenditures that are foregone with the enrollment of members into a health plan.

- Pharmacy rebates were not reflected in the analysis. The exclusion of pharmacy rebates from the analysis recognizes that pharmacy rebates are now treated equally under managed care and fee-for-service Medicaid programs as a result of the Patient Protection and Affordable Care Act as amended by the Health Care and Education Reconciliation Act.

- The savings model reflects 79% of the capitation rate expenditures for the managed care enrolled population. The residual component reflects the population exclusions.

MHN Savings Observations and Assumptions:

- In the development of the MHN savings estimates, Milliman has assumed that administrative costs are approximately 2% of MHN total claim costs. The 2% is in addition to the $10 PMPM MHN fee.

- The SSI population enrolled in the MHN plan has a higher morbidity risk profile based upon the risk analysis performed by Milliman. We would anticipate the potential for the greatest care management savings in the least healthy population. The higher savings percentage for the SSI population enrolled in the MHN plan is consistent with this assumption.

- The losses for the TANF Adult and Children populations were limited to the MHN fee of $10 PMPM which equates to (2.1%) savings for Adults and (3.7%) savings for Children.
    - To the extent that the TANF Adult MHN enrollees have a greater occurrence of pregnancy than the FFS and MCO populations, the MHN risk score may be understated since it is developed from pharmacy data only.
    - Emerging expenditure data suggests decreasing TANF Adult and Children PMPMs for the MHN plan and increasing TANF Adult and Children PMPMs for the FFS population. Unless these changes correspond to a significant shift in risk scores, the level of negative savings should be decreasing or shifting towards zero during the next several fiscal years. In fact, preliminary review of MHN Children expenditures for the April through June 2010 period suggests the potential for positive savings in the current fiscal year for MHN Children.

- The savings model reflects 92% of the fee-for-service expenditures for the MHN enrolled population. This reflects the services that correspond to the MCO capitation rate. The residual component reflects the population exclusions.

DEVELOPMENT OF SAVINGS PERCENTAGES

The development of the managed care savings percentages in Table 1 is illustrated in Table 3 and further documented below. As mentioned previously, the savings percentages were estimated using enrollment, claims and encounter data from SFY 2009, but reflect the current MCO capitation rate selection adjustment methodology.

Table 3
South Carolina
Department of Health and Human Services
Development of Managed Care Savings Percentages
Based upon SFY 2009 Enrollment, Claims and Encounter Data

Population: SSI

	MCO	MHN	FFS
Average Monthly Enrollment	29,287	8,169	33,852
Paid PMPM	$776.41	$885.27	$965.09
Risk Score	0.898	1.089	1.066
Normalized PMPM	$864.60	$812.92	$905.34
Estimated Savings Percentage	4.5%	10.2%	N/A

Population: TANF Adults

	MCO	MHN	FFS
Average Monthly Enrollment	30,094	5,583	31,964
Paid PMPM	$311.24	$471.04	$355.47
Risk Score	0.948	1.093	1.034
Normalized PMPM	$328.31	$430.96	$343.78
Estimated Savings Percentage	4.5%	(2.1%)	N/A

Population: TANF Children

	MCO	MHN	FFS
Average Monthly Enrollment	173,535	50,561	128,969
Paid PMPM	$104.78	$133.55	$134.93
Risk Score	0.901	1.058	1.108
Normalized PMPM	$116.30	$126.23	$121.78
Estimated Savings Percentage	4.5%	(3.7%)	N/A

Notes: (1) The managed care savings analysis was developed excluding the Medicaid/Medicare dual eligible population (MHN specific) and the pregnant women population.

(2) The managed care saving estimates are limited to services covered under the capitation contract. Carve-out services and services such as home and community based services and hospice services were not included in the analysis.

(3) The loss for the MHN TANF Adult and Children populations was limited to the MHN fee of $10 PMPM which equates to (2.1%) savings for Adults and (3.7%) savings for Children.

Milliman offers the following descriptions for the values included in Table 3.

Average Monthly Enrollment **–** The average monthly enrollment of managed care eligible Medicaid enrollees. Managed care eligible Medicaid members include all full benefit eligible members that are also not dual eligible (i.e., both Medicare and Medicaid eligible), are not institutionalized, and are not on a waiver program. The adult population excludes pregnant women and the children population excludes infants. The enrollment values are based upon the Summer 2010 Medicaid Assistance Forecast. The MCO and MHN enrollment values are consistent to those contained in the forecast. The FFS enrollment values differ from the forecast values since the FFS enrollment considered in this analysis is limited to the managed care eligible FFS enrollment and additionally excludes retroactive eligibility months.

Paid PMPM **–** The Paid PMPM values correspond to the SFY 2009 Adjusted Paid PMPM values from the Summer 2010 Medicaid Assistance Forecast prepared by Milliman. However, the PMPM values from those illustrated in the forecast for three reasons: (1) the enrollment considered in this analysis is limited to the MCO eligible FFS and MHN enrollment, (2) the analysis excludes retroactive enrollment months and their corresponding claims, and (3) the analysis excludes MCO carve-out services such as dental services as well as other services such as home and community based waiver services and hospice services. Milliman included an additional 2% for claims administration for both the FFS and MHN populations since claims administration is reflected in the capitation rates.

Risk Score – Consistent with the development of the selection adjustments for the MCO capitation rates, the risk scores were developed on a concurrent basis using the Restricted Medicaid Rx v.5.1 model with a Mental Health Carveout. The Restricted Medicaid Rx model excludes GAD (Gastric Acid Disorder), folate and iron deficiency anemias, EENT (Eyes, ears, nose, throat), insomnia, pain and low-cost infections. The illustrated risk scores were developed using standard weights.

Milliman developed concurrent risk scores for SFY 2009 data (July 2008 through June 2009) based upon both FFS and encounter pharmacy data. Individual recipients were required to have a minimum six months of Medicaid eligibility during the data period to be assigned a risk score. FFS enrollees were limited to those meeting MCO eligibility requirements. Retroactive eligibility months were excluded consistent with the MCO rate development methodology as follows:

- Three months of claims and eligibility are removed for SSI and SSI related payment categories.
- Two months of claims and eligibility are removed for all other payment categories

The percentage of average eligibles scored by plan for each population for SFY 2009 is illustrated in Table 4.

Table 4
South Carolina
Department of Health and Human Services
SFY 2009 Percentage of Eligibles Scored

Population	MCO	MHN	FFS
SSI	94%	92%	82%
TANF Adults	80%	80%	67%
TANF Children	92%	92%	83%

Normalized PMPM – The normalized PMPM was derived as the paid PMPM divided by the risk score by plan for each population. In other words, the Normalized PMPM reflects a consistent morbidity base and consistent service categories across the MCO, MHN and FFS plans.

Estimated Savings Percentage – The estimated savings percentage was calculated by comparing the Normalized PMPM for each plan to the Normalized PMPM for the FFS plan. This comparison was made for each population/plan combination. These savings percentages are only applicable for estimating savings subsequent to the full implementation of the selection adjustment factor in the April 2010 capitation rate development. For the MHN populations, negative savings was limited to the equivalent of the MHN fee of $10 PMPM.

The following example illustrates the derivation of the estimated savings for the TANF Adult MCO population:

Estimated Savings =
1 – [Normalized PMPM TANF Adult MCO / Normalized PMPM TANF Adult FFS] =
1 – [$328.31 / $343.78] =
1 – 0.955 =
0 .045 =
4.5% Estimated Savings

If you have any questions regarding the enclosed information, please contact me at (317) 524-3512.

Sincerely,

Robert M. Damler, FSA, MAAA
Principal and Consulting Actuary

RMD/lrb

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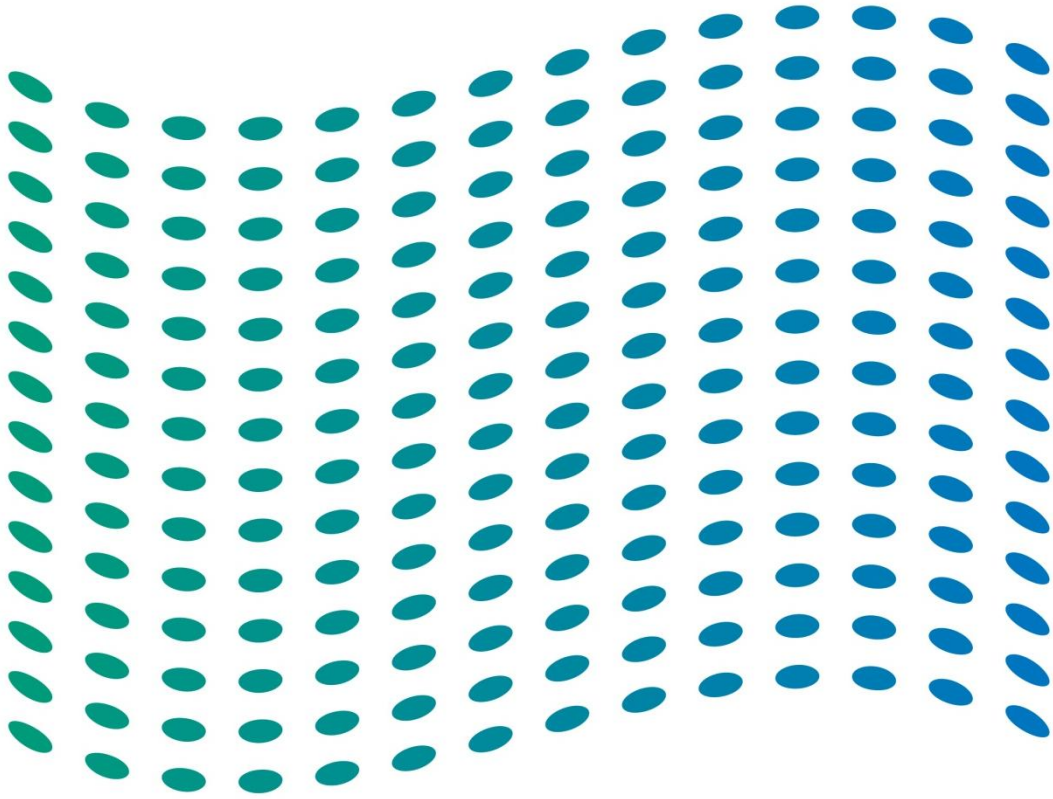
South Carolina Medicaid

Health Plans Report Card

Calendar Year 2009



Submitted by

University of South Carolina

Institute for Families in Society—Health Services Research Unit

Columbia, South Carolina 29208

http://ifs.sc.edu/HSR

September 2010

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EXECUTIVE SUMMARY

Category Ratings for South Carolina Medicaid Health Plans

Calendar Year 2009

	Absolute Total Care	BlueChoice	First Choice	SC Solutions	Unison	Fee-For-Service
STAYING HEALTHY: CHILDREN						
Annual Dental Visits: Total (Ages 2-21)	★★★	★★★	★★★	★★★	★★★	★★★
Appropriate Use of Antibiotics: Treatment for Children With Upper Respiratory Infection (URI)	★	★	★	★	★	★
Child and Adolescent Access to Primary Care: (Ages 12-24 months)	★	★	★★★	★★★	★★	★★★
Child and Adolescent Access to Primary Care: (Ages 25 mos - 6 yrs)	★	★	★★★	★	★	★
Child and Adolescent Access to Primary Care: (Ages 7-11 years)	★★	★	★★★	★	★	★
Child and Adolescent Access to Primary Care: (Ages 12-19 years)	★	★	★★★	★★	★	★
Childhood Immunizations: (Ages <2) ▲	★★★	NSI	★★★	★	★★★	★★
Lead Screening in Children: (Ages <2)	★	NSI	★	★	★	★
Well-Child Visits: (Ages 0 Through 15 Months: 5 Visits)	★★★	NSI	★★★	★★★	★★★	★★★
Well-Child Visits: (Ages 3 Through 6 Years)	★	★	★	★	★	★
STAYING HEALTHY: ADULTS						
Adult Access to Preventative Ambulatory Health Services: (Ages 20-44 years)	★	★	★★★	★★★	★	★
Adult Access to Preventative Ambulatory Health Services: (Ages 45-64 years)	★	★	★★★	★	★	★
Breast Cancer Screening: Total	★	NSI	★★★	★★★	★	★
Cervical Cancer Screening (PAP Test)	★	★	★	★	★	★
Colorectal Cancer Screening: (Ages 50-80)	★	NSI	★	★	★	★
Postnatal Care Visits	★	★	★★★	★★★	★★★	★★★
Prenatal Care Visits	★	★	★	★	★	★

	Absolute Total Care	BlueChoice	First Choice	SC Solutions	Unison	Fee-For-Service
LIVING WITH ILLNESS AND DISABILITY						
Asthma: Appropriate Medication Use: Adults (Ages 18-56)	★	NSI	★	★	★	★
Asthma: Appropriate Medication Use: (Ages 5-9)	★★★	NSI	★★★	★★★	★★★	★★★
Asthma: Appropriate Medication Use: (Ages 10-17)	★★★	NSI	★★★	★★★	★	★★★
Diabetes Care: Hemoglobin A1c (HbA1c) Test (% Members Ages 18-75)	★	★	★	★	★	★
Diabetes Care: Dilated Eye Exam (% Members Ages 18-75)	★★★	★★★	★★★	★★★	★★★	★★★
Diabetes Care: Lipid Profile (LDL-C) Screening (% Members Ages 18-75)	★	★	★	★	★	★
Diabetes Care: Urine Screening for Microalbumin or Medical Attention for Nephropathy (% Members Ages 18-75)	★★★	★★★	★★★	★★★	★★★	★
BEHAVIORAL HEALTH						
Behavioral Health: Attention-Deficit Hyperactivity Disorder (ADHD): % Ages 6 to 12 Years With an ADHD Prescription Who Had a Follow-Up During 30-Day Initiation Phase	★	NSI	★	★	★	★
Behavioral Health: Attention-Deficit Hyperactivity Disorder (ADHD): % Ages 6 to 12 Years With an ADHD Prescription Who Had a Follow-Up During 30-Day Continuation and Maintenance Phase	NSI	NSI	★	★	★	★
Behavioral Health: Follow-Up Care Within 7 Days After Hospitalization for Mental Illness: Ages 6 Years and Above	★★★	★	★★★	★★★	★★★	★
Behavioral Health: Follow-Up Care Within 30 Days After Hospitalization for Mental Illness: Ages 6 Years and Above	★★★	★	★★★	★★★	★★★	★★★
ACCESSING HEALTH CARE: CONSUMER SATISFACTION						
Getting Needed Care: Adult	★	★	★	★★	★	★★★
Getting Needed Care: Child	★	★	★★★	★★★	★★	★★★
Getting Care Quickly: Adult	★	★★	★★	★★	★	★★
Getting Care Quickly: Child	★	★	★★	★★	★★	★
EXPERIENCING HEALTH CARE: CONSUMER SATISFACTION						
Doctors Communicate Well With Patients: Adult	★★	★★	★★	★★	★★	★★
Doctors Communicate Well With Patients: Child	★★★	★★	★★	★★	★★	★★★

★★★ Above National Average

★★ National Average

★ Below National Average

NSI Not sufficient information available to rate

Ratings that exceed the National 75th percentile

▲ State Measure

Note: Ratings are for CY 2009 compared to 2009 NCQA Medicaid Benchmark.

Data Source: SC Medicaid claims January 1-December 31, 2009, adjudicated through May 2010.

INTRODUCTION

Overview

Improving the health care of all Medicaid recipients requires having accurate, complete, and up-to-date information about the care being provided and its results on ensuring the health of recipients. The SC Department of Health and Human Services (DHHS) is committed to promoting improvements in health care by reporting on the performance of health plans serving Medicaid recipients – managed care organizations (MCO), medical home networks (MHN), and fee-for-service (FFS). This year, DHHS continues its commitment to advancing health care quality by releasing the first report card rating the performance of MCO, MHN, and FFS health plans. The *2009 South Carolina Health Plans Report Card* gives consumers, policymakers, plans, providers, researchers, and other stakeholders plan-specific indicators of performance and consumer satisfaction with health care. The report card illustrates the comparison of managed care Medicaid health plans (i.e., MCO and MHN) with FFS and national benchmarks for selected quality and consumer experiences with care measures. **Overall, the report card indicates that Medicaid managed care health plans' rates for quality and consumer satisfaction were better than rates for fee-for-service.**

As a means of obtaining this information, DHHS retained the services of the Institute for Families in Society (IFS) at the University of South Carolina, to evaluate performance and consumer satisfaction measures objectively for each health care plan. The selected measures represent a broad range of selected measures that are important to Medicaid recipients, policy makers, stakeholders, and DHHS program staff. *This report is submitted to the SC Department of Health and Human Services as the quality analysis component of the report mandated by Proviso 21.33 of the fiscal 2010-11 Appropriations Act.*

Report Card Organization

The *2009 Medicaid Health Plans Report Card* is organized along four dimensions of care designed to encourage consideration of similar measures. The dimensions of care are the following: 1) *Staying Healthy* measures provide information about how well a health plan provides services that maintain good health and prevent illness in children and adults; 2) *Living with Illness and Disability* measures provide information on how well a health plan helps people manage chronic illness; 3) *Behavioral Health* measures provide information on how well a health plan helps people manage mental illness; and 4) *Satisfaction with Care* measures provide information on how often consumers report satisfaction with health care – getting needed care, getting care quickly, and communication with personal doctor. The measures assess the performance of four MCO's (Absolute Total Care; Blue Choice; First Choice; Unison), one MHN (SC Solutions), and FFS.

Data Sources

IFS followed the guidelines in *HEDIS 2010 Volume 2: Technical Specifications* in developing this report card. **HEDIS®** (Health Plan Employer Data and Information Set) is the most widely used set of standardized performance measures designed to ensure that stakeholders and consumers have the information they need to reliably compare the performance of managed healthcare plans. It is part of an

integrated system to establish accountability in managed care across the nation. The performance measures in HEDIS are related to many significant public health issues such as well child care, asthma and diabetes. HEDIS® is sponsored, supported and maintained by the National Committee for Quality Assurance (NCQA), a national non-profit organization dedicated to improving quality of managed health care.

CAHPS® (Consumer Assessment of Healthcare Providers and Systems), a standardized survey of consumers' experiences that evaluates plan performance in areas such as customer service and access to care, is included as a component of HEDIS®. CAHPS® is sponsored, supported and maintained by the Agency for Healthcare Research and Quality (AHRQ). The report card utilizes results from the CAHPS® 4.0H Adult Medicaid and the 4.0H Child Medicaid surveys. IFS and the USC Survey Research Lab, a certified CAHPS vendor, conducted these surveys between April and June, 2010. A total of 5,277 surveys form the basis for the reported CAHPS® rates. A minimum of four hundred surveys were completed for each plan for adults and four hundred were completed for children. The overall response rate for the combined surveys was 32% which is consistent with Medicaid national benchmarks. The response rates by group are as follows: Adults = 30.32% (2649 completed/8737 sample) and Children = 33% (2628 completed/7971 sample).

Scoring and Rating Measures

Measures: All but one performance measure were constructed using the HEDIS® and CAHPS® quality performance systems. The one state measure, Childhood Immunizations, was modified by the SC Department of Health and Human Services to enable comparison with members in fee-for-service. All of the performance measure rates are based on services, care, and experiences of members who enrolled in the SC Medicaid Program throughout calendar year (CY) 2009.

The HEDIS® scores are based on the number of members enrolled in the plan who are eligible and who received the service based on administrative records (claims and encounters). These records do not include information from medical charts or laboratory results available to medical providers and health plans. Restricting the data to administrative records allows for a comparison between managed care organizations and fee-for-service rates. The accuracy of this information relies on the administrative records submitted by providers for services rendered to Medicaid patients in CY 2009. All administrative records were adjudicated through May 31, 2010.

The CAHPS® measures are based on a list of randomly selected children and adult Medicaid recipients enrolled in a designated health plan for at least six months during 2009. These members completed the CAHPS® survey by telephone and were asked to report their experiences with their healthcare plans, services and their doctors. These measures are collected using survey methodology with detailed specifications and contained in *HEDIS 2010, Volume 3: Specifications for Survey Measures*.

Rating Method: IFS uses a NCQA certified survey vendor and software to calculate the performance scores on the Health Plan Report Card. Plans whose scores were statistically different than the national average range (40th to 60th percentile) either received an above average (61th percentile and above) or below average (39th percentile and below). The ratings are illustrated in the report card as above average (three stars - ***), average (two stars - **), below average (one star - *). Plans that scored at the 75th percentile and above received three stars shaded in green. A below average (one star) does not mean the health plan provided poor care or bad service. It means the plan scored below average nationally compared to other Medicaid managed care health plans.

A designation of ***Not Sufficient Information (NSI)*** means that the health plan has too few members who were enrolled long enough to meet the HEDIS® requirements to be able to report a meaningful score for that performance measure. This is common with newer health plans. An NSI designation does not evaluate the quality of the service nor does it mean the services are not being provided for these measures by the health plan.

General Considerations for Interpreting Report Card Results

All data analyses have limitations and those presented in this report card are no exception. The reader is cautioned that several caveats must be taken into consideration in interpreting the report card.

Claims and Encounter Data: A plan's ability (or that of its contracted vendor) to submit complete claims and encounter data can affect performance on reports generated using **administrative** data. Per NCQA's specifications, a member for whom no administrative data is found or does not contain the necessary documentation, the record is incomplete and not reflected in the rates.

Lack of Case-Mix Adjustment: The specifications for collecting HEDIS measures do not allow case-mix adjustment or risk adjustment for existing co-morbidities, disability (physical or mental), or severity of disease. Therefore, it is difficult to determine whether differences among plan rates were due to differences in the quality of care or use of services, or differences in the health of the populations served by the plans. IFS and DHHS are working on new methodologies for analyzing SC Medicaid HEDIS results which may clarify this issue for future reports.

Demographic Differences in Plan Membership: In addition to disability status, the populations served by each plan may differ in other demographic characteristics such as age, gender, and geographic residence. The impact of these differences on reported HEDIS rates is unknown.

Overlapping Provider Networks: Many providers caring for SC Medicaid recipients have contracts with multiple plans. Overlapping provider networks may affect the ability of any one plan to influence provider behavior.

Variation in Data Collection Procedures Reported by Plans and SC Medicaid Health Plan Report Card: Each plan collects and reports its own HEDIS data. Although there are standard specifications for collecting HEDIS measures, factors that may influence the collection of HEDIS data by plan include: a) Use of software to calculate the administrative measures, b) Completeness of administrative data due to claim lags, c) Staffing changes among the plan's HEDIS team, and d) Size of the Medicaid population enrolled in the plan.

Choice of Administrative or Hybrid Data Collection: HEDIS measures are collected through one of two data collection methods—the administrative method or the hybrid method -- for measures that allow either method. IFS calculated the administrative measures using programs developed by statistical staff and a Certified HEDIS Software Vendor. The ***administrative method*** requires plans to identify the denominator and numerator using claims or encounter data, or data from other administrative databases. For measures collected through the administrative method, the denominator includes all members who satisfy all criteria specified in the measure including any age and continuous enrollment requirements (these members are known as the "eligible population"). The numerator includes all members in the eligible population (denominator) who are found through administrative data to have received the service (e.g., visits, treatment). The plan's HEDIS rate is based on all members who

received the services (numerator) divided by all members who were eligible to receive the service (denominator).

Some health plans use the ***hybrid method*** to report HEDIS rates. This method requires plans to use both administrative and medical record data to identify both the members who receive the service (numerator) and the members who are eligible to receive the service (denominator). Plans may collect medical record data using their own staff and a plan-developed data collection tool; contract with a vendor for the tool and staffing; or both. To identify the population eligible to receive the service (denominator), plans draw a systematic sample of members from the measure's total eligible population. This sample must consist of a minimum of 411 members who qualify after accounting for valid exclusions and contraindications. The members who received the service (numerator) are identified from the sample eligible (411 or greater). The measure's rate is based on members who received the service divided by members who are eligible to have received the service. It is important to note that performance on a hybrid measure can be impacted by the ability of a plan or its contracted vendor to locate and obtain member medical records. According to NCQA's specifications, members for whom no medical record documentation is found are considered noncompliant with the measure.

STAYING HEALTHY: CHILDREN'S MEASURES

Staying Healthy Children's Measures

These measures comprise the staying healthy HEDIS® measures focusing on providing information about how well a plan provides services that maintain good health and prevent illness in children.

- HEDIS®-Like Childhood Immunization: The percentage of children 2 years of age who had claims indicating the administration of immunizations consistent with recommended best-practices: four diphtheria, tetanus and acellular pertussis (DTaP); three polio (IPV); one measles, mumps and rubella (MMR); two H influenza type B (HiB); three hepatitis B (HepB), one chicken pox (VZV); four pneumococcal conjugate (PCV); two hepatitis A (HepA); two or three rotavirus (RV); and two influenza (flu) vaccines by their second birthday.

- Lead Screening in Children: The percentage of children 2 years of age who had one or more capillary or venous lead blood test for lead poisoning by their second birthday.

- Children and Adolescent Access to Primary Care: The percentage of members 12 months–19 years of age who had a visit with a PCP. The organization reports four separate percentages for each product line.
    - Children 12–24 months and 25 months–6 years who had a visit with a PCP during the measurement year
    - Children 7–11 years and adolescents 12–19 years who had a visit with a PCP during the measurement year or the year prior to the measurement year

- Annual Dental Visit: The percentage of members 2–21 years of age who had at least one dental visit during the measurement year.

- 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.

- Well-Child Visits for Infants and Young Children: The percentage of members who turned 15 months old during the measurement year and who had the required number of well-child visits with a PCP during their first 15 months of life.

Staying Healthy Children's Measures Results

	Absolute Total Care	BlueChoice	First Choice	SC Solutions	Unison	Fee-For-Service
STAYING HEALTHY: CHILDREN						
Annual Dental Visits: Total (Ages 2-21)	★★★	★★★	★★★	★★★	★★★	★★★
Appropriate Use of Antibiotics: Treatment for Children With Upper Respiratory Infection (URI)	★	★	★	★	★	★
Child and Adolescent Access to Primary Care: (Ages 12-24 months)	★	★	★★★	★★★	★★	★★★
Child and Adolescent Access to Primary Care: (Ages 25 mos - 6 yrs)	★	★	★★★	★	★	★
Child and Adolescent Access to Primary Care: (Ages 7-11 years)	★★	★	★★★	★	★	★
Child and Adolescent Access to Primary Care: (Ages 12-19 years)	★	★	★★★	★★	★	★
Childhood Immunizations: (Ages <2) ▲	★★★	NSI	★★★	★	★★★	★★
Lead Screening in Children: (Ages <2)	★	NSI	★	★	★	★
Well-Child Visits: (Ages 0 Through 15 Months: 5 Visits)	★★★	NSI	★★★	★★★	★★★	★★★
Well-Child Visits: (Ages 3 Through 6 Years)	★	★	★	★	★	★

★★★ Above National Average

★★ National Average

★ Below National Average

NSI Not sufficient information available to rate

Ratings that exceed the National 75th percentile

▲ State Measure

Note: Ratings are for CY 2009 compared to 2009 NCQA Medicaid Benchmark.
Data Source: SC Medicaid claims January 1-December 31, 2009, adjudicated through May 2010.

STAYING HEALTHY: ADULT MEASURES

Staying Healthy Adult Measures

These measures comprise the staying healthy HEDIS® measures focusing on providing information about how well a plan provides services that maintain good health and prevent illness in adults.

- Adult Access to Preventative and Ambulatory Health Services: The percentage of members 20 years and older who had an ambulatory or preventive care visit.

- Breast Cancer Screening: The percentage of women 40–69 years of age who had a mammogram to screen for breast cancer.

- Cervical Cancer Screening: The percentage of women 21–64 years of age who received one or more Pap tests to screen for cervical cancer.

- Colorectal Cancer Screening: The percentage of members 50–75 years of age who had appropriate screening for colorectal cancer.

- Prenatal and Postpartum Visits: 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 plan in the first trimester *or* within 42 days of enrollment in the plan.
    - *Postpartum Care.* The percentage of deliveries that had a postpartum visit on or between 21 and 56 days after delivery.

Staying Healthy Adult Measures Results

	Absolute Total Care	BlueChoice	First Choice	SC Solutions	Unison	Fee-For-Service
STAYING HEALTHY: ADULTS						
Adult Access to Preventative Ambulatory Health Services: (Ages 20-44 years)	★	★	★★★	★★★	★	★
Adult Access to Preventative Ambulatory Health Services: (Ages 45-64 years)	★	★	★★★	★	★	★
Breast Cancer Screening: Total	★	NSI	★★★	★★★	★	★
Cervical Cancer Screening (PAP Test)	★	★	★	★	★	★
Colorectal Cancer Screening: (Ages 50-80)	★	NSI	★	★	★	★
Postnatal Care Visits	★	★	★★★	★★★	★★★	★★★
Prenatal Care Visits	★	★	★	★	★	★

★★★ Above National Average

★★ National Average

★ Below National Average

NSI Not sufficient information available to rate

Ratings that exceed the National 75th percentile

▲ State Measure

Note: Ratings are for CY 2009 compared to 2009 NCQA Medicaid Benchmark.
Data Source: SC Medicaid claims January 1-December 31, 2009, adjudicated through May 2010.

LIVING WITH ILLNESS AND DISABILITY

Living with Illness and Disability Measures

These measures comprise the living with illness and disability HEDIS® measures providing information about how well a plan helps people manage chronic illness.

- Use of Appropriate Medication for People with Asthma: The percentage of members 5–50 years of age during the measurement year who were identified as having persistent asthma and who were appropriately prescribed medication during the measurement year.

- HEDIS-Like Comprehensive Diabetes Care: 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
  - Eye exam (retinal) performed
  - LDL-C screening
  - Medical attention for nephropathy

  Note: This measure is modified to exclude reporting rates requiring lab results.

Living with Illness and Disability Measures Results

	Absolute Total Care	BlueChoice	First Choice	SC Solutions	Unison	Fee-For-Service
LIVING WITH ILLNESS AND DISABILITY						
Asthma: Appropriate Medication Use: Adults (Ages 18-56)	★	NSI	★	★	★	★
Asthma: Appropriate Medication Use: (Ages 5-9)	★★★	NSI	★★★	★★★	★★★	★★★
Asthma: Appropriate Medication Use: (Ages 10-17)	★★★	NSI	★★★	★★★	★	★★★
Diabetes Care: Hemoglobin A1c (HbA1c) Test (% Members Ages 18-75)	★	★	★	★	★	★
Diabetes Care: Dilated Eye Exam (% Members Ages 18-75)	★★★	★★★	★★★	★★★	★★★	★★★
Diabetes Care: Lipid Profile (LDL-C) Screening (% Members Ages 18-75)	★	★	★	★	★	★
Diabetes Care: Urine Screening for Microalbumin or Medical Attention for Nephropathy (% Members Ages 18-75)	★★★	★★★	★★★	★★★	★★★	★

★★★ Above National Average

★★ National Average

★ Below National Average

NSI Not sufficient information available to rate

Ratings that exceed the National 75th percentile

▲ State Measure

Note: Ratings are for CY 2009 compared to 2009 NCQA Medicaid Benchmark.
Data Source: SC Medicaid claims January 1-December 31, 2009, adjudicated through May 2010.

BEHAVIORAL HEALTH

Behavioral Health Measures

These measures comprise the behavioral health HEDIS® measures providing information about how well a plan helps people manage their behavioral health needs.

- Follow-up Care for Children Prescribed Medication for ADHD/ADD: The percentage of children newly prescribed attention-deficit/hyperactivity disorder (ADHD) medication that had at least three follow-up care visits within a 10-month period, one of which was within 30 days of when the first ADHD medication was dispensed. Two rates are reported.
    - *Initiation Phase.* The percentage of members 6–12 years of age as of the initial appointment with an ambulatory prescription dispensed for ADHD medication, which had one follow-up visit with practitioner with prescribing authority during the 30-day Initiation Phase.
    - *Continuation and Maintenance (C&M) Phase.* The percentage of members 6–12 years of age as of the initial appointment 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.

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

Behavioral Health Measures Results

	Absolute Total Care	BlueChoice	First Choice	SC Solutions	Unison	Fee-For-Service
BEHAVIORAL HEALTH						
Behavioral Health: Attention-Deficit Hyperactivity Disorder (ADHD): % Ages 6 to 12 Years With an ADHD Prescription Who Had a Follow-Up During 30-Day Initiation Phase	★	NSI	★	★	★	★
Behavioral Health: Attention-Deficit Hyperactivity Disorder (ADHD): % Ages 6 to 12 Years With an ADHD Prescription Who Had a Follow-Up During 30-Day Continuation and Maintenance Phase	NSI	NSI	★	★	★	★
Behavioral Health: Follow-Up Care Within 7 Days After Hospitalization for Mental Illness: Ages 6 Years and Above	★★★	★	★★★	★★★	★★★	★

	Absolute Total Care	BlueChoice	First Choice	SC Solutions	Unison	Fee-For-Service
Behavioral Health: Follow-Up Care Within 30 Days After Hospitalization for Mental Illness: Ages 6 Years and Above	★★★	★	★★★	★★★	★★★	★★★

★★★ Above National Average

★★ National Average

★ Below National Average

NSI Not sufficient information available to rate

Ratings that exceed the National 75th percentile

▲ State Measure

Note: Ratings are for CY 2009 compared to 2009 NCQA Medicaid Benchmark.
Data Source: SC Medicaid claims January 1-December 31, 2009, adjudicated through May 2010.

CONSUMER SATISFACTION WITH HEALTH CARE

Consumer Satisfaction with Health Care Measures

These measures provide information on the members or the parents'/caregivers' experience with their child's Medicaid plan. Results summarize member experiences through ratings, composites of multiple questions, and individual question summary rates. Three composite scores are reported for this report card.

- Getting Needed Care: These measures report how often consumers said that it was easy for them or their child to:
    - Get appointments with a specialists
    - Get the care, tests, or treatment they needed through their health plan
- Getting Care Quickly: These measures report how often consumer said that they or their child:
    - Got care as quickly as they needed when sick or injured
    - Got an appointment as soon as needed when sick or injured
- Communication with Personal Doctor: These measures report how well consumers report their personal doctor:
    - Explained things in a way it was easy to understand
    - Listened carefully to them
    - Showed respect for what they had to say
    - Spent enough time with them

Consumer Satisfaction with Health Care Measures Results

	Absolute Total Care	BlueChoice	First Choice	SC Solutions	Unison	Fee-For-Service
ACCESSING HEALTH CARE: CONSUMER SATISFACTION						
Getting Needed Care: Adult	★	★	★	★★	★	★★★
Getting Needed Care: Child	★	★	★★★	★★★	★★	★★★
Getting Care Quickly: Adult	★	★★	★★	★★	★	★★
Getting Care Quickly: Child	★	★	★★	★★	★★	★
EXPERIENCING HEALTH CARE: CONSUMER SATISFACTION						
Doctors Communicate Well With Patients: Adult	★★	★★	★★	★★	★★	★★
Doctors Communicate Well With Patients: Child	★★★	★★	★★	★★	★★	★★★

★★★ Above National Average

★★ National Average

★ Below National Average

NSI Not sufficient information available to rate

Ratings that exceed the National 75th percentile

▲ State Measure

Note: Ratings are for CY 2009 compared to 2009 NCQA Medicaid Benchmark.

Data Source: SC Medicaid claims January 1-December 31, 2009, adjudicated through May 2010.


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