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January 2, 2015

Mr. Christian Soura
Director
State of South Carolina
Department of Health and Human Services
1801 Main Street
Columbia, SC 29202-8206

Re: Supplement to Proviso 33.16: Medicaid Cost Effectiveness Analysis – Pharmacy Rebate Discussion

Dear Mr. Soura:

Thank you for the opportunity to assist the South Carolina Department of Health and Human Services with this important project. The enclosed report is a supplement to the Proviso 33.16 Medicaid Cost Effectiveness Analysis dated December 23, 2014, and discusses the impact of pharmacy rebates on the cost effectiveness of South Carolina's Medicaid managed care programs.

Please call me at 262-796-3434 if you have questions.

Sincerely,

A handwritten signature in black ink, appearing to read "John D. Meerschaert", written over a light blue horizontal line.

John D Meerschaert, FSA, MAAA
Principal and Consulting Actuary

JDM/zk

Attachments



**State of South Carolina
Department of Health and Human Services
Supplement to Medicaid Cost Effectiveness Analysis
January 2013 – December 2013
Including Pharmacy Rebates**

Prepared for:
**State of South Carolina
Department of Health and Human Services**

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I. EXECUTIVE SUMMARY

This report supplements our analysis of the cost effectiveness of South Carolina's Medicaid programs as required by Proviso 33.16 for the period January 1, 2013 through December 31, 2013 (Proviso 33.16 Cost Effectiveness Report), by recognizing the impact of pharmacy rebates on the cost effectiveness results.

Consistent with the Proviso 33.16 Cost Effectiveness Report, this report measures the cost effectiveness of the two forms of Medicaid managed care, Managed Care Organizations (MCOs) and Medical Home Networks (MHNs). We prepared this analysis to assess the cost effectiveness of the two managed care programs compared to the fee-for-service (FFS) program. Our analysis provides SC DHHS with an actuarially sound determination of the programs' cost effectiveness, and discusses the considerations to be applied when integrating pharmacy rebates into the calculation of cost effectiveness.

RESULTS

We used the results presented in the Proviso 33.16 cost effectiveness report and applied pharmacy rebates to evaluate the cost effectiveness of the managed care programs relative to the FFS program. The considerations associated with applying rebates to pharmacy expenditures are discussed in Section II - Discussion of Pharmacy Rebates. The application of pharmacy rebates to expenditures is outlined in Section III – Methodology.

Table 1 shows the results of our analysis including the impact of pharmacy rebates. Based on results using net pharmacy cost, we estimate the MHN program saves 12.2% and the MCO program saves 5.5% compared to the FFS program. In comparison, the results presented in our Proviso 33.16 cost effectiveness report indicated that the MHN program saves 9.5% and the MCO program saves 9.3% compared to the FFS program. This result is caused by the MHN program's higher pharmacy rebate percentage coupled with the higher prescription drug spend PMPM. For the groups of individuals included in this cost effectiveness analysis, individuals enrolled in the MHN program had, on average, 30% more prescription drug expenditures than those enrolled in the MCO or FFS programs. Additionally, based on information provided by SCDHHS, we estimated that pharmacy rebates were approximately 43% of expenditures for MCO, and approximately 57% of FFS expenditures.

Table 1
South Carolina Department of Health and Human Services
Risk Adjusted CY 2013 Cost Per Member Per Month (PMPM)
Including Impact of Pharmacy Rebates

Population	FFS Cost PMPM	MCO Cost PMPM	MHN Cost PMPM
TANF Children	\$111.72	\$112.44	\$98.61
TANF Adult	293.18	302.70	260.23
SSI	688.69	622.50	595.12
Total Population	215.79	208.64	188.94
Marginal SC DHHS Administrative Expenses Compared to MCO Program	5.00	0.00	5.00
Total with Marginal SC DHHS Administrative Expenses	\$220.79	\$208.64	\$193.94
Ratio of Total Cost to Total FFS Cost		94.5%	87.8%

The infant and pregnant women populations are excluded from our analysis.

DATA RELIANCE AND IMPORTANT CAVEATS

We used FFS program expenditures for April 2011 through March 2012 dates of service, managed care program experience and Medicaid eligibility for CY 2013, and the results of several other SCDHHS analyses to determine the cost effectiveness of the Medicaid managed care programs compared to FFS. This data was provided by SCDHHS. We have not audited or verified this data and other information. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete. We performed a limited review of the data used directly in our analysis for reasonableness and consistency and have not found material defects in the data. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or for relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

Milliman prepared this report for the specific purpose of determining the cost effectiveness of the Medicaid managed care programs, and is intended to supplement the results of the Proviso 33.16 Cost Effectiveness Report dated December 23, 2014. As a result, it should be reviewed in conjunction with the Proviso 33.16 Cost Effectiveness Report. This report should not be used for any other purpose. This report was prepared solely for the internal business use of, and is only to be relied upon by, the management of SC DHHS. We anticipate the report will be shared with contracted MCOs, MHNs, and other interested parties. Milliman does not intend to benefit, or create a legal duty to, any third party recipient of its work.

The results of this report are technical in nature and are dependent upon specific assumptions and methods. No party should rely on these results without a thorough understanding of those assumptions and methods. Such an understanding may require consultation with qualified professionals.

Guidelines issued by the American Academy of Actuaries require actuaries to include their professional qualifications in all actuarial communications. The authors of this report are members of the American Academy of Actuaries and meet the qualification standards for performing the analyses in this report.

The terms of Milliman's contract with SC DHHS dated July 1, 2014 apply to this report and its use.

II. DISCUSSION OF PHARMACY REBATES

Prior to enactment of the Drug Rebate Equalization Act in March 2010, states were only eligible to receive rebate revenue on prescription drug expenditures in the FFS environment. The Drug Rebate Equalization Act changed the law to allow states to receive OBRA '90 rebates for Medicaid enrollees served by managed care entities.

CONFLICTING INCENTIVES

The Drug Rebate Equalization Act did not address the conflicting incentives managed care plans may encounter, which are considered in this section.

DATA QUALITY

Since federal rebates are payable directly to the State, the plans do not have a natural incentive to give this issue significant concern. SC DHHS has addressed this issue with its managed care health plans by contractually obligating the MCOs to ensure the pharmacy encounter data is both timely and complete.

DRUG SELECTION – COST BEFORE AND AFTER REBATES

Not only do plans lack the financial incentive to be concerned about rebates, but their financial incentives may conflict with those of the State. In cases where the brand name drug and an available generic drug both involve the same molecule, it is generally agreed that there is no clinical reason to prefer one over the other. In these cases, the state would prefer selection of the lower cost drug – *after* rebates. The plans would also prefer the lower cost drug, but since manufacturer rebates would be paid directly to the State, their financial interests would best be served if they chose the lower cost drug *before* rebates. In the Medicaid environment, it is common for single source brand drugs – net of rebates – to be less expensive than the generic equivalent.

OTHER CONSIDERATIONS

We calculated pharmacy rebates as a percentage of total prescription drug spend for the MCO program and the FFS and MHN programs combined. SC DHHS collects OBRA rebates only for MCO prescription drug utilization while supplemental rebates and diabetic supply rebates are also collected for the FFS and MHN programs. As such, total SC DHHS pharmacy rebates, as a percent of total prescription drug spend, are lower for the MCO program than for the FFS and MHN programs. We estimated SC DHHS pharmacy rebates to be 43% for the MCO program and 57% for the FFS and MHN programs.

III. METHODOLOGY

This section of our report documents the methodology used in applying pharmacy rebates to the results of the Proviso 33.16 Cost Effectiveness Report, and also provides documentation of the results displayed in Table 1 of this report.

FFS POPULATION COST

Using the Gross Rx Cost PMPM information developed as part of the Proviso 33.16 Cost Effectiveness Report, we estimated SC DHHS pharmacy rebates at 57% of total prescription drug spend. Our pharmacy rebate estimate for the FFS program was based on information provided by SC DHHS and includes OBRA rebates, supplemental rebates, and diabetic supply rebates.

Table 2 below shows the estimated CY 2013 pharmacy rebates for the FFS population. Note that detailed rate cell results are combined into the TANF Children, TANF Adult, and SSI categories using the total MCO-eligible population demographics (including FFS, MCO and MHN enrollees).

Table 2 South Carolina Department of Health and Human Services CY 2013 FFS Population Pharmacy Rebates Impact of Pharmacy Rebates			
Rate Cell	Gender	CY 2013 MCO Eligible Member Months	Estimated Pharmacy Rebates PMPM
TANF: Age 1 - 6	Unisex	2,136,863	\$9.97
TANF: Age 7 - 13	Unisex	2,037,273	26.70
TANF: Age 14 - 18	Male	555,678	28.51
TANF: Age 14 - 18	Female	570,302	24.79
TANF: Age 19 - 44	Male	170,267	22.85
TANF: Age 19 - 44	Female	749,324	22.26
TANF: Age 45+	Unisex	112,206	47.58
SSI: Child	Unisex	302,768	78.75
SSI: Adult	Unisex	694,752	149.96
Prior to Risk Adjustment			
TANF Children		5,300,116	\$19.94
TANF Adult		1,031,797	25.11
SSI		997,520	128.35
Risk Adjusted			
TANF Children		5,300,116	\$16.51
TANF Adult		1,031,797	27.93
SSI		997,520	116.86

Table 3 estimates the total PMPM cost for the FFS population based on the net PMPM pharmacy cost calculated in Table 2.

Table 3
South Carolina Department of Health and Human Services
CY 2013 FFS Population Cost
Including the Impact of Pharmacy Rebates

Rate Cell	Gender	CY 2013 MCO Eligible Member Months	Total Cost PMPM*
TANF: Age 1 - 6	Unisex	2,136,863	\$96.16
TANF: Age 7 - 13	Unisex	2,037,273	116.98
TANF: Age 14 - 18	Male	555,678	246.41
TANF: Age 14 - 18	Female	570,302	235.95
TANF: Age 19 - 44	Male	170,267	235.61
TANF: Age 19 - 44	Female	749,324	240.07
TANF: Age 45+	Unisex	112,206	462.88
SSI: Child	Unisex	302,768	413.54
SSI: Adult	Unisex	694,752	903.63
Prior to Risk Adjustment			
TANF Children		5,300,116	\$134.96
TANF Adult		1,031,797	263.57
SSI		997,520	754.88
Risk Adjusted			
TANF Children		5,300,116	\$111.72
TANF Adult		1,031,797	293.18
SSI		997,520	688.69

*Net of pharmacy rebates.

MCO POPULATION COST

Using the Gross Rx Cost PMPM information developed as part of the Proviso 33.16 Cost Effectiveness Report, we estimated SC DHHS pharmacy rebates at 43% of total prescription drug spend based on data provided by SC DHHS. Our pharmacy rebate estimate for the MCO program only includes OBRA rebates.

Table 4 below shows the estimated CY 2013 pharmacy rebates for the MCO population. Note that detailed rate cell results are combined into the TANF Children, TANF Adult, and SSI categories using the total MCO-eligible population demographics (including FFS, MCO and MHN enrollees).

Table 4
South Carolina Department of Health and Human Services
CY 2013 MCO Population Pharmacy Rebates
Impact of Pharmacy Rebates

Rate Cell	Gender	CY 2013 MCO Eligible Member Months	Estimated Pharmacy Rebates PMPM
TANF: Age 1 - 6	Unisex	2,136,863	\$7.64
TANF: Age 7 - 13	Unisex	2,037,273	14.80
TANF: Age 14 - 18	Male	555,678	12.99
TANF: Age 14 - 18	Female	570,302	11.96
TANF: Age 19 - 44	Male	170,267	17.75
TANF: Age 19 - 44	Female	749,324	23.38
TANF: Age 45+	Unisex	112,206	46.47
SSI: Child	Unisex	302,768	47.72
SSI: Adult	Unisex	694,752	89.00
Prior to Risk Adjustment			
TANF Children		5,300,116	\$11.42
TANF Adult		1,031,797	24.96
SSI		997,520	76.47
Risk Adjusted			
TANF Children		5,300,116	\$11.25
TANF Adult		1,031,797	22.75
SSI		997,520	67.28

Table 5 estimates the total PMPM cost for the MCO population based on the net PMPM pharmacy cost calculated in Table 4.

Table 5
South Carolina Department of Health and Human Services
CY 2013 MCO Population Cost
Including the Impact of Pharmacy Rebates

Rate Cell	Gender	CY 2013 MCO Eligible Member Months	Medical Capitation PMPM*	FFS Cost PMPM	Total Cost PMPM
TANF: Age 1 - 6	Unisex	2,136,863	\$115.93	\$1.55	\$117.48
TANF: Age 7 - 13	Unisex	2,037,273	94.39	3.35	97.74
TANF: Age 14 - 18	Male	555,678	112.77	7.91	120.68
TANF: Age 14 - 18	Female	570,302	146.38	7.33	153.71
TANF: Age 19 - 44	Male	170,267	232.58	1.25	233.83
TANF: Age 19 - 44	Female	749,324	327.50	2.67	330.17
TANF: Age 45+	Unisex	112,206	491.69	2.07	493.76
SSI: Child	Unisex	302,768	383.05	28.61	411.66
SSI: Adult	Unisex	694,752	835.84	6.33	842.17
Prior to Risk Adjustment					
TANF Children		5,300,116	\$110.59	\$3.53	\$114.13
TANF Adult		1,031,797	329.69	2.37	332.06
SSI		997,520	698.41	13.09	711.50
Risk Adjusted					
TANF Children		5,300,116	\$108.96	\$3.48	\$112.44
TANF Adult		1,031,797	300.54	2.16	302.70
SSI		997,520	608.80	13.71	622.50

*Includes \$2.92 PMPM for FQHC / RHC wraparound payments. Net of pharmacy rebates.

MHN POPULATION COST

Using the Gross Rx Cost PMPM information developed as part of the Proviso 33.16 Cost Effectiveness Report, we estimated SC DHHS pharmacy rebates at 57% of total prescription drug spend. Our pharmacy rebate estimate for the MHN program was based on information provided by SC DHHS and includes OBRA rebates, supplemental rebates, and diabetic supply rebates. The same rebate percentage is applied for both the FFS and MHN programs since information was not available to stratify the rebate amounts applied to prescription drug expenditures paid on a FFS basis between the FFS and MHN delivery systems.

Table 6 below shows the estimated CY 2013 pharmacy cost for the MHN population, net of pharmacy rebates. Note that detailed rate cell results are combined into the TANF Children, TANF Adult, and SSI categories using the total MCO-eligible population demographics (including FFS, MCO and MHN enrollees).

Table 6 South Carolina Department of Health and Human Services CY 2013 MHN Population Pharmacy Rebates Impact of Pharmacy Rebates			
Rate Cell	Gender	CY 2013 MCO Eligible Member Months	Estimated Pharmacy Rebates PMPM
TANF: Age 1 - 6	Unisex	2,136,863	\$12.39
TANF: Age 7 - 13	Unisex	2,037,273	26.81
TANF: Age 14 - 18	Male	555,678	25.24
TANF: Age 14 - 18	Female	570,302	23.11
TANF: Age 19 - 44	Male	170,267	34.22
TANF: Age 19 - 44	Female	749,324	45.47
TANF: Age 45+	Unisex	112,206	77.49
SSI: Child	Unisex	302,768	106.98
SSI: Adult	Unisex	694,752	154.73
Prior to Risk Adjustment			
TANF Children		5,300,116	\$20.43
TANF Adult		1,031,797	47.09
SSI		997,520	140.24
Risk Adjusted			
TANF Children		5,300,116	\$18.51
TANF Adult		1,031,797	39.71
SSI		997,520	115.11

Table 7 estimates the total PMPM cost for the MHN population based on the net PMPM pharmacy cost calculated in Table 6.

Table 7
South Carolina Department of Health and Human Services
CY 2013 MHN Cost Component
Including the Impact of Pharmacy Rebates

Rate Cell	Gender	CY 2013 MCO Eligible Member Months	Total Cost PMPM*	MHN Management Fee PMPM	Total Cost PMPM
TANF: Age 1 - 6	Unisex	2,136,863	\$94.11	\$10.00	\$104.11
TANF: Age 7 - 13	Unisex	2,037,273	87.64	10.00	97.64
TANF: Age 14 - 18	Male	555,678	115.99	10.00	125.99
TANF: Age 14 - 18	Female	570,302	130.43	10.00	140.43
TANF: Age 19 - 44	Male	170,267	198.62	10.00	208.62
TANF: Age 19 - 44	Female	749,324	297.24	10.00	307.24
TANF: Age 45+	Unisex	112,206	442.51	10.00	452.51
SSI: Child	Unisex	302,768	455.01	10.00	465.01
SSI: Adult	Unisex	694,752	846.00	10.00	846.00
Prior to Risk Adjustment					
TANF Children		5,300,116	\$97.83	\$10.00	\$107.83
TANF Adult		1,031,797	296.77	10.00	306.77
SSI		997,520	720.36	10.00	730.36
Risk Adjusted					
TANF Children		5,300,116	\$102.67	\$10.00	\$98.61
TANF Adult		1,031,797	294.77	10.00	260.23
SSI		997,520	612.47	10.00	595.12

*Net of pharmacy rebates.

RISK ADJUSTMENT PROCESS

The risk adjustment factors used in this report are consistent with the factors used in the Proviso 33.16 Cost Effectiveness Report, by eligibility group and program type.

Table 8 shows the average risk scores for the various eligibility categories for each program.

Table 8
South Carolina Department of Health and Human Services
CY 2013 Risk Scores

Eligibility Group	FFS Population	MCO Population	MHN Population	Total Population
TANF Children	1.208	1.015	1.104	1.050
TANF Adult	0.899	1.097	1.186	1.090
SSI Children	1.197	0.858	1.014	0.997
SSI Adult	1.078	1.230	1.297	1.228