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August 28, 2017

Ms. Tara Smith Clark, JD, CHP  
Executive Administrator  
Mississippi Office of the Governor, Division of Medicaid  
550 High Street, Suite 1000  
Jackson, MS 39201

**Re: SFY 2018 CHIP Rate Calculation and Certification**

Dear Tara:

The Mississippi Division of Medicaid (DOM) has retained Milliman to develop the State Fiscal Year 2017 – 2018 (SFY 2018) capitation rate for the Children's Health Insurance Program (CHIP) population. This report outlines the rate development.

Please note that this rate does not include an adjustment for the Affordable Care Act Health Insurer Fee (HIF), if it is collected in fall of 2018 consistent with current law. Once the final liabilities for each Coordinated Care Organization (CCO) are released, we will calculate the necessary retrospective adjustment to the capitation rate. Our approach for determining the adjustment is outlined in Section III of this report.



Please call me or Michael Cook at 262 784 2250 if you have questions. We look forward to discussing the report with you and the CCOs.

Sincerely,

Jill A. Bruckert, FSA, MAAA  
Consulting Actuary

JAB/kal

Attachment



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**State of Mississippi  
Division of Medicaid  
July 1, 2017 – June 30, 2018  
CHIP Capitation Rate Development**

Prepared for:  
**The State of Mississippi  
Division of Medicaid**

Prepared by:  
**Milliman, Inc.**

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## I. SUMMARY AND DISCUSSION OF RESULTS

This report documents the development of the State Fiscal Year 2017 - 2018 (SFY 2018) Coordinated Care Organization (CCO) capitation rate for the Children’s Health Insurance Program (CHIP) population.

The Mississippi Division of Medicaid (DOM) retained Milliman to calculate and document its capitation rate development. Milliman developed the proposed capitation rate using the methodology described in this report.

Section II documents the CCO calendar year 2015 (CY 2015) financial summary data, which serves as the basis for the calculation of the capitation rate development.

Section III describes the capitation rate methodology.

Appendices A – C document the development of the SFY 2018 capitation rate with supporting data.

Appendix D includes an expenditure projection for the CHIP population.

Appendix E includes an Actuarial Certification of SFY 2018 CHIP capitation rate. While a certification of the CHIP rates is not required by regulation, we nonetheless certify to their actuarial soundness.

Appendix F documents any information provided by DOM that Milliman relied upon for the development of this rate.

### SFY 2018 CAPITATION RATE

Table 1 includes the per member per month (PMPM) capitation rate for SFY 2018. We also included the SFY 2016 and SFY 2017 capitation rates for comparison purposes.

<b>Table 1 CHIP Capitation Rate Per Member Per Month (PMPM)</b>			
<b>Region</b>	<b>July 2015 – June 2016</b>	<b>July 2016 – June 2017</b>	<b>July 2017 – June 2018</b>
Statewide	\$270.46	\$256.95	\$244.60

### CAPITATION RATE CHANGE SUMMARY

Overall, the SFY 2018 CHIP capitation rate is 4.8% lower than the SFY 2017 capitation rate. Table 2 shows a summary of the main drivers of the rate change that make up the 4.8% decrease to the capitation rate.

**Table 2  
CHIP Capitation Rate  
Summary of SFY 2018 Rate Change by Component**

<b>Final SFY 2017 Capitation Rate</b>	<b>\$256.95</b>
Actual to Expected Difference	0.941
Restated Trend	0.983
<b>Restated SFY 2017 Rate</b>	<b>0.925</b>
SFY 2017 to SFY 2018 Trend	1.020
Non-Benefit Assumption Change	1.009
<b>SFY 2018 Rate Change*</b>	<b>0.952</b>

*\*Rate will be adjusted retrospectively for HIF, if applicable.*

- Actual CY 2015 medical costs for the CHIP population came in approximately 5.9% lower than expected in the SFY 2017 development. Initial experience for CY 2016 through September 30th continues to show low growth in medical costs for the CHIP population compared to CY 2014 and CY 2015. As a result, medical trends from CY 2015 to SFY 2017 were lowered 1.7% compared to those used in the SFY 2017 rate development, driven by a significant decrease in the prescription drug trend assumptions. The combined impact is a rate decrease of approximately 7.5%.
- Medical costs were increased approximately 2.0% for anticipated utilization and provider reimbursement increases from SFY 2017 to SFY 2018.
- Administrative expenses developed from the ground-up starting with CCO MississippiCAN and CHIP reported administrative expenses for CY 2015. This update resulted in increased overall administrative expenses by 0.9% of revenue.

## DATA RELIANCE AND IMPORTANT CAVEATS

We used CCO detailed financial reporting for January 2013 to December 2015, CCO emerging experience from January 2016 to September 2016, historical and projected reimbursement information, fee schedules, and other information from DOM, CCOs, and CMS to calculate the capitation rate shown in this report. If the underlying data used is inadequate or incomplete, the results will be likewise inadequate or incomplete.

Differences between the capitation rate and actual experience will depend on the extent to which future experience conforms to the assumptions made in the capitation rate calculations. It is certain that actual experience will not conform exactly to the assumptions used. Actual amounts will differ from projected amounts to the extent that actual experience is better or worse than expected.

Our report is intended for the internal use of DOM to develop the SFY 2018 CHIP capitation rate. It may not be appropriate for other purposes. We anticipate the report will be shared with contracted CCOs and other interested parties. Milliman does not intend to benefit, and assumes no duty or liability to, other parties who receive this work. It should only be distributed and reviewed in its entirety. This capitation rate may not be appropriate for all CCOs. Any CCO considering participation should consider their unique circumstances before deciding to contract under this rate.

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.

Jill Bruckert is an actuary for Milliman, a member of the American Academy of Actuaries, and meets the Qualification Standards of the Academy to render the actuarial opinion contained herein. To the best of her knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices.

The terms of Milliman's contract with DOM effective June 1, 2015 apply to this report and its use.

## II. CY 2015 CCO FINANCIAL REPORTING

This section of our report describes how CY 2015 CHIP claim experience was included in the capitation rate development.

Starting January 1, 2015, both CCOs started covering CHIP enrollees. Therefore, in developing the CHIP capitation rate for SFY 2018, experience from both CCOs is utilized for the first time.

Financial reports for CY 2015 CHIP experience were submitted by the administering CCOs. The CCOs attested to the accuracy and completeness of the experience and that it reconciles to audited financial reporting. We also compared this experience to the CY 2013 and CY 2014 CHIP experience and emerging CY 2016 CHIP costs for reasonableness. The report included CY 2015 earned premium, claim experience with run out through June 30, 2016, best estimate Incurred but Not Reported (IBNR) claims, subcapitated arrangements, administrative expenses, reinsurance expenses, and membership.

Minor adjustments were made to the subcapitated claim amounts provided to use as the base data for the CHIP rate.

- 1) Subcapitated amounts related to behavioral health services were reallocated from other medical to physician and outpatient based on the distribution of behavioral health services within the detailed MississippiCAN Medical Assistance (MA) Children encounter data for CY 2015.
- 2) Subcapitated costs were reduced to remove margin and variable expense loads, as reported in the submitted financial reports, that are later included in the development of non-benefit expenses in the capitation rate.

The financial reporting data for CY 2015 is summarized in Table 3. Claim experience by broad level category of service for CY 2015 from the financial reporting is shown on Appendix A.

<b>Table 3 Statewide CY 2015 Enrollment and Costs CHIP Population</b>			
<b>Income Eligibility Group</b>	<b>Member Months</b>	<b>Net Costs Including IBNR</b>	<b>PMPM</b>
Children in FPL 134% – 150%	180,080	\$37,157,493	\$206.34
Children in FPL 151% – 175%	211,039	42,490,402	201.34
Children in FPL 176% – 209%	214,172	43,268,409	202.03
<b>Total</b>	<b>605,292</b>	<b>\$122,916,304</b>	<b>\$203.07</b>

Consistent with prior years' CHIP capitation rates, one statewide rate was set for the CHIP population for SFY 2018. Data in Table 3 does not support the need to develop separate rate cells by income level. Experience will be monitored to determine if separate regional rate cells should be implemented in the future. Region specific information is included in Appendix B.

### III. CAPITATION RATE METHODOLOGY

This section of our report describes the development of the SFY 2018 CHIP capitation rate.

#### METHODOLOGY OVERVIEW

The methodology used to calculate the capitation rate can be outlined in the following steps:

1. Summarize financial reporting data as described in Section II for CY 2015 CHIP enrollees
2. Trend CY 2015 adjusted experience to SFY 2018
3. Apply adjustments for program changes
4. Provide an allowance for CCO administrative expenses

Each of the above steps is described in detail below.

#### Step 1: Summarize Financial Reporting Data for CY 2015 CHIP Enrollees

CY 2015 experience, as collected through the CCO CHIP financial reporting, is summarized in columns (a) to (c) of Appendix A.

All experience used to develop the SFY 2018 capitation rate is on a net basis, excluding any member cost sharing. The cost sharing for the CHIP population varies by the income eligibility of the enrolled child's family.

- No copayments are charged to enrolled children in families with an annual income up to 150% FPL
- Enrolled children in families with an annual income above 150% of the FPL are charged the following copayments:
  - Outpatient Health Care Professional Visit – \$5.00
  - Emergency Room Visit – \$15.00
- Out-of-pocket maximums for the following are in place:
  - Families with annual income from 151% to 175% FPL shall pay no more than \$800
  - Families with annual income above 175% FPL shall pay no more than \$950

We assumed that the overall split of the CHIP population by income level will remain consistent with the population splits underlying the base period experience in the contract period.

#### IBNR Adjustment

The adjustment for IBNR claims uses the best estimate IBNR claims provided in the financial reporting. We validated the reasonability of these estimates against payment patterns seen in the FFS Medicaid and MississippiCAN programs.

This adjustment is shown in Appendix A in column (d).

#### Step 2: Trend CY 2015 Adjusted Experience to SFY 2018

Table 4 shows the annual utilization and unit cost trends applied to the CY 2015 financial data in order to put it on an SFY 2018 basis.

**Table 4**  
**Mississippi Division of Medicaid**  
**CY 2015 to SFY 2018 Utilization and Unit Cost Trends**

Category of Service	Annualized Utilization Trend	Annualized Unit Cost Trend
Hospital Inpatient	0.00%	0.00%
Hospital Outpatient	0.00%	1.24%
Physician	0.00%	-0.05%
Prescription Drugs	0.30%	3.28%
Dental	0.00%	2.00%
Other Professional	0.00%	-0.05%

The rest of this section outlines the methodology used to develop these trend values.

Utilization Trend for All Services Except Prescription Drugs

Utilization trend assumptions reflect expected changes in:

- Demand for medical services
- Intensity or mix of medical services
- Provider practice patterns
- Provider coding changes

Detailed claim data for the CHIP program was not available to perform a CHIP specific utilization trend analysis. Therefore, we reviewed multiple data sources to determine utilization trends for use in the SFY 2018 CHIP rate development.

- FFS and encounter data for MA children to analyze utilization trends by major service categories from CY 2013 to CY 2015.
- High level CY 2013, CY 2014 and CY 2015 CHIP experience. Over this time period, the PMPM medical costs for the CHIP population has increased lower than industry trends, supporting the 0% utilization trend assumed for the SFY 2018 capitation rate.
- Emerging CY 2016 experience. This data was collected for Q1 – Q3 (with run out through November 30, 2016). This initial CY 2016 experience shows very little growth compared to CY 2014 and CY 2015 experience, indicating little to no utilization trend for the population.
- Experience from similar programs in other states.

The adjustment resulting from these utilization trends is shown in Appendix B in column (b).

Unit Cost Trend for All Services Except Prescription Drugs

It is our understanding that CHIP reimbursement is close to commercial levels for facility and dental services and comparable to Medicaid reimbursement levels for all other types of services. DOM changes most Medicaid fee schedules July 1<sup>st</sup> of each year, generally consistent with the most recent Medicare fee change. Historical and projected changes to DOM’s fee schedules are shown in Table 5 below.

This report assumes that the reader is familiar with the State of Mississippi’s CHIP program, its benefits, and rate setting principles. The report was prepared solely to provide assistance to DOM to set the July 1, 2017 – June 30, 2018 capitation rate for the CHIP program. It may not be appropriate for other purposes. Milliman does not intend to benefit, and assumes no duty or liability to, other parties who receive this work. This material should only be reviewed in its entirety.

For SFY 2018 capitation rate development, we utilized charge trends comparable to typical Medicaid fee schedule updates for all service categories due to very low to flat growth in the CHIP PMPM over the last few years. This low growth does not support using commercial charge trends, which are generally higher than Medicaid fee schedule updates.

Table 5 Mississippi Division of Medicaid Services Other than Prescription Drug Unit Cost Increases					
Effective Date	IP Hospital	OP Hospital	Physician	Dental	Other
7/1/2015	0.00%	4.00%	0.25%	2.00%	0.25%
7/1/2016	0.00%	-0.53%	-0.25%	2.00%	-0.25%
7/1/2017	0.00%	1.67%	0.00%	2.00%	0.00%

### Drug Services Utilization and Unit Cost Trend

Detailed claim data for the CHIP program was not available to perform a CHIP specific drug cost trend analysis. Therefore, we analyzed CY 2013 to emerging CY 2016 pharmacy experience for the MA Children population and developed utilization and cost summaries by brand, generic, and specialty drug types for 25 top therapeutic classes for non-specialty prescriptions and five top therapeutic classes for specialty prescriptions. We developed cost projections for CY 2015 to SFY 2018, using those summaries, giving consideration for script utilization per 1,000 increases, and average script cost increases for brand, generic, and specialty drugs.

As a result of this analysis, we applied separate utilization and unit cost trends for two time periods; CY 2015 to SFY 2016 and SFY 2016 to SFY2017, as summarized in Table 6. The lower overall trends from CY 2015 to SFY 2016 are largely driven by actual experience. Column (c) in Appendix B includes this adjustment for the drug services.

Table 6 Mississippi Division of Medicaid Prescription Drug Annualized Trends		
	Utilization	Unit Cost
CY 2015 to SFY 2016	0.50%	1.50%
SFY 2016 to SFY 2017	0.00%	6.00%

### **Step 3: Apply Program Change Adjustments**

#### PDL Impact

This rate continues to use the same effective PDL adjustment as was utilized in the SFY 2017 capitation rate to reflect minor changes in the PDL between January 1, 2015 and July 1, 2015.

**Step 4: Provide an Allowance for CCO Non-Benefit Expenses**

Administrative Expenses, Premium Tax, and Targeted Margin

The administrative allowance included in the capitation rate is intended to cover the following costs:

- Case management
- Utilization management
- Claim processing and other IT functions
- Customer service
- Provider contracting and credentialing
- Third party liability and program integrity
- Member grievances and appeals
- Financial and other program reporting
- Local overhead costs
- Corporate overhead and business functions (e.g., legal, executive, human resources)

The non-benefit expense allowance for the SFY 2018 capitation rate is comprised of a flat PMPM for fixed administrative costs and a percentage of revenue for variable administrative costs. We also included explicit adjustments of 2.00% of revenue for target margin and 3.00% for the Mississippi premium tax, for a total variable non-benefit expense allowance of 10.75%, as reflected in Appendix C. Table 7 displays the allowance included in the CHIP rate for non-benefit expenses.

<b>Table 7 Mississippi Division of Medicaid Non-Benefit Expenses</b>		
	% of Revenue	PMPM
Fixed Costs*	3.27%	<b>\$8.01</b>
Variable Costs**	<b>5.75%</b>	\$14.06
Premium Tax**	<b>3.00%</b>	\$7.34
Margin**	<b>2.00%</b>	\$4.89
<b>Total</b>	<b>14.02%</b>	<b>\$34.30</b>

\* Included in the rate as a PMPM, equivalent % of revenue shown.

\*\*Included in the rate as a % of revenue, equivalent PMPM is shown.

Since the same two CCOs administer both CHIP and MississippiCAN, we coordinated the administrative expense development across the two programs. We developed the administration allowance based on an analysis of the actual CY 2015 CHIP and MississippiCAN CCO administrative expenses. The actual CY 2015 reported administrative costs, excluding taxes and fees, were compared to national benchmarks released by the Sherlock Company and in Milliman’s annual analysis of administrative costs for Medicaid managed care plans. Adjustments were made as necessary to reduce actual program experience to align with these benchmarks.

We estimated a split of fixed versus variable expenses across all populations. Projected variable expenses, as a percentage of non-kick payment revenue, were kept consistent with adjusted CY 2015 administrative expenses. Similar to last year, we gave consideration to the impact of increased CCO enrollment over which to spread fixed costs between CY 2015 and SFY 2018 due to the roll-in of MA Children in CY 2015, resulting in a slightly lower total fixed administrative allowance on a PMPM basis. We dampened the impact of the administrative decrease compared to the membership increase based on the change in fixed expenses reported by the CCOs between Q1 2015 (which excluded MA Children) and Q3 through Q4 2015

This report assumes that the reader is familiar with the State of Mississippi’s CHIP program, its benefits, and rate setting principles. The report was prepared solely to provide assistance to DOM to set the July 1, 2017 – June 30, 2018 capitation rate for the CHIP program. It may not be appropriate for other purposes. Milliman does not intend to benefit, and assumes no duty or liability to, other parties who receive this work. This material should only be reviewed in its entirety.

(which included MA Children), as well as a published study by the Sherlock Company. An illustration of the development of the administrative cost assumptions is included in Appendix C2.

### Heath Insurer Fee

DOM will process the CHIP capitation rate adjustments for any ACA Health Insurer Excise Fee (HIF) paid in the fall of 2018 outside of the monthly capitation rate payment system in the form of one annual payment to the CCOs for the actual HIF amount (allocated across CCO lines of business by revenue) and the associated income tax impact related to the HIF. We will calculate an adjusted capitation rate after the Internal Revenue Service fee notices are distributed to the CCOs and these fee notices are provided to DOM. The annual capitation rate adjustment will be allocated to each managed care contract period effective in 2017, proportional to the revenue associated with each contract. Bill H.R.2029 signed into law on December 18, 2015 put a moratorium on 2017 HIF. Based on the current law, no HIF payment shall be made in calendar year 2017.

The capitation rate adjustment will include consideration for the marginal federal and state corporate tax income rates, as well as the Mississippi premium tax, using the following assumptions:

- A = Marginal Federal Income Tax % = 35%
- B = Marginal State Income Tax % = 0% (Mississippi tax code allows income tax to be offset by premium tax payments)
- C = State Premium Tax % = 3%

The total capitation rate adjustment to CCOs would be based on the following formula:

$$\text{Total Capitation Adjustment} = \text{HIF} / (1 - A - B * (1 - A)) * 1 / (1 - C) = 1.5860 * \text{HIF}$$

### **Other Program Considerations**

#### Minimum MLR

The program includes a minimum medical loss ratio (MLR) requirement of 85% of revenue. The sum of medical expenses and health care quality initiative (HCQI) expenses, must meet or exceed 85% of revenue. Revenue for premium taxes and HIF are excluded from the MLR calculation. If the 85% threshold is not met, CCOs return revenue to DOM until the threshold is met.

#### Withholds

There are no withholds associated with the CHIP capitation rate.

#### Risk Adjustment

The SFY 2018 CHIP capitation rate will not be risk adjusted.

## **APPENDICES A – C**

### **Capitation Rate Development**

- A. CY 2015 CHIP CCO Financial Data**
- B. PMPM Medical and Pharmacy Cost Estimates Projected to SFY 2018**
- C. Non-Benefit Expense Allocation Development**

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**State of Mississippi Division of Medicaid**

July 1, 2017 – June 30, 2018 CHIP Capitation Rate Development

This report assumes that the reader is familiar with the State of Mississippi's CHIP program, its benefits, and rate setting principles. The report was prepared solely to provide assistance to DOM to set the July 1, 2017 – June 30, 2018 capitation rate for the CHIP program. It may not be appropriate for other purposes. Milliman does not intend to benefit, and assumes no duty or liability to, other parties who receive this work. This material should only be reviewed in its entirety.

August 28, 2017

**Appendix A**  
**Mississippi Division of Medicaid**  
**July 2017 - June 2018 CHIP Capitation Rate Development**  
**CHIP Financial Reporting Data - CY 2015**

**Region: Statewide**

**Eligibility Category: Children in 134-150% FPL**

	a	b	c = b / a	d	e = c * d
Category of Service	CY 2015 Member Months	Total Net Dollars	Per Capita Monthly Net Cost	IBNR Adjustment	Per Capita Monthly Net Cost
Inpatient Hospital Services	180,080	\$1,991,554	\$11.06	1.0098	\$11.17
Outpatient Hospital Services	180,080	\$11,141,026	\$61.87	1.0052	\$62.19
Physician Services	180,080	\$8,600,113	\$47.76	1.0066	\$48.07
Drug Services	180,080	\$7,935,509	\$44.07	1.0000	\$44.07
Dental Services	180,080	\$5,988,719	\$33.26	1.0052	\$33.43
Other Services	180,080	\$1,331,576	\$7.39	1.0027	\$7.41
<b>Total</b>	<b>180,080</b>	<b>\$36,988,497</b>	<b>\$205.40</b>		<b>\$206.34</b>

**Appendix A**  
**Mississippi Division of Medicaid**  
**July 2017 - June 2018 CHIP Capitation Rate Development**  
**CHIP Financial Reporting Data - CY 2015**

**Region: Statewide**

**Eligibility Category: Children in 151-175% FPL**

	a	b	c = b / a	d	e = c * d
Category of Service	CY 2015 Member Months	Total Net Dollars	Per Capita Monthly Net Cost	IBNR Adjustment	Per Capita Monthly Net Cost
Inpatient Hospital Services	211,039	\$2,189,239	\$10.37	1.0112	\$10.49
Outpatient Hospital Services	211,039	\$13,286,780	\$62.96	1.0062	\$63.35
Physician Services	211,039	\$10,282,302	\$48.72	1.0074	\$49.08
Drug Services	211,039	\$7,961,985	\$37.73	1.0000	\$37.73
Dental Services	211,039	\$6,983,533	\$33.09	1.0063	\$33.30
Other Services	211,039	\$1,554,063	\$7.36	1.0030	\$7.39
<b>Total</b>	<b>211,039</b>	<b>\$42,257,902</b>	<b>\$200.24</b>		<b>\$201.34</b>

**Appendix A**  
**Mississippi Division of Medicaid**  
**July 2017 - June 2018 CHIP Capitation Rate Development**  
**CHIP Financial Reporting Data - CY 2015**

**Region: Statewide**

**Eligibility Category: Children in 176-209% FPL**

	a	b	c = b / a	d	e = c * d
Category of Service	CY 2015 Member Months	Total Net Dollars	Per Capita Monthly Net Cost	IBNR Adjustment	Per Capita Monthly Net Cost
Inpatient Hospital Services	214,172	\$2,360,950	\$11.02	1.0110	\$11.15
Outpatient Hospital Services	214,172	\$13,050,734	\$60.94	1.0067	\$61.35
Physician Services	214,172	\$10,545,769	\$49.24	1.0081	\$49.64
Drug Services	214,172	\$8,455,996	\$39.48	1.0000	\$39.48
Dental Services	214,172	\$7,061,082	\$32.97	1.0070	\$33.20
Other Services	214,172	\$1,539,793	\$7.19	1.0031	\$7.21
<b>Total</b>	<b>214,172</b>	<b>\$43,014,323</b>	<b>\$200.84</b>		<b>\$202.03</b>

**Appendix A**  
**Mississippi Division of Medicaid**  
**July 2017 - June 2018 CHIP Capitation Rate Development**  
**CHIP Financial Reporting Data - CY 2015**

**Region: Statewide**

**Eligibility Category: Children in 134-209% FPL**

	a	b	c = b / a	d	e = c * d
Category of Service	CY 2015 Member Months	Total Net Dollars	Per Capita Monthly Net Cost	IBNR Adjustment	Per Capita Monthly Net Cost
Inpatient Hospital Services	605,292	\$6,541,743	\$10.81	1.0107	\$10.92
Outpatient Hospital Services	605,292	\$37,478,540	\$61.92	1.0061	\$62.30
Physician Services	605,292	\$29,428,184	\$48.62	1.0074	\$48.98
Drug Services	605,292	\$24,353,490	\$40.23	1.0000	\$40.23
Dental Services	605,292	\$20,033,334	\$33.10	1.0062	\$33.30
Other Services	605,292	\$4,425,431	\$7.31	1.0030	\$7.33
<b>Total</b>	<b>605,292</b>	<b>\$122,260,722</b>	<b>\$201.99</b>		<b>\$203.07</b>

*This letter and exhibits assume the reader is familiar with the CHIP, its benefits, and rate setting principles. The letter and exhibits dated August 28, 2017 were prepared solely to provide assistance to DOM to develop SFY 2018 capitation rates for the CHIP. It may not be appropriate for other purposes. Milliman does not intend to benefit, and assumes no duty or liability to, other parties who receive this work. This material should only be reviewed in its entirety.*

**Appendix B**  
**Mississippi Division of Medicaid**  
**July 2017 - June 2018 CHIP Capitation Rate Development**  
**PMPM Medical and Pharmacy Cost Estimates Projected to July 1, 2017 - June 30, 2018**

**Region: Statewide**

**Eligibility Category: Children in 134-209% FPL**

	a	b	c	d	e	f = a * b * c * d * e
Category of Service	CY 2015 PMPM Cost	Utilization Trend Factors CY 2015 to SFY 2018	Charge Trend Factors CY 2015 to SFY 2018	Benefit Adjustment	PDL Adjustment	Per Capita Monthly Net Cost
Inpatient Hospital Services	\$10.92	1.0000	1.0000	1.0000	1.0000	\$10.92
Outpatient Hospital Services	\$62.30	1.0000	1.0312	1.0000	1.0000	\$64.24
Physician Services	\$48.98	1.0000	0.9987	1.0000	1.0000	\$48.92
Drug Services	\$40.23	1.0075	1.0839	1.0000	0.9990	\$43.90
Dental Services	\$33.30	1.0000	1.0508	1.0000	1.0000	\$34.99
Other Services	\$7.33	1.0000	0.9987	1.0000	1.0000	\$7.32
<b>Total</b>	<b>\$203.07</b>					<b>\$210.29</b>

**Appendix B**  
**Mississippi Division of Medicaid**  
**July 2017 - June 2018 CHIP Capitation Rate Development**  
**PMPM Medical and Pharmacy Cost Estimates Projected to July 1, 2017 - June 30, 2018**

**Region: North**

**Eligibility Category: Children in 134-209% FPL**

	a	b	c	d	e	f = a * b * c * d * e
Category of Service	CY 2015 PMPM Cost	Utilization Trend Factors CY 2015 to SFY 2018	Charge Trend Factors CY 2015 to SFY 2018	Benefit Adjustment	PDL Adjustment	Per Capita Monthly Net Cost
Inpatient Hospital Services	\$14.69	1.0000	1.0000	1.0000	1.0000	\$14.69
Outpatient Hospital Services	\$60.32	1.0000	1.0312	1.0000	1.0000	\$62.20
Physician Services	\$50.88	1.0000	0.9987	1.0000	1.0000	\$50.82
Drug Services	\$36.13	1.0075	1.0839	1.0000	1.0000	\$39.46
Dental Services	\$33.19	1.0000	1.0508	1.0000	1.0000	\$34.88
Other Services	\$7.37	1.0000	0.9987	1.0000	1.0000	\$7.37
<b>Total</b>	<b>\$202.59</b>					<b>\$209.41</b>

**Appendix B**  
**Mississippi Division of Medicaid**  
**July 2017 - June 2018 CHIP Capitation Rate Development**  
**PMPM Medical and Pharmacy Cost Estimates Projected to July 1, 2017 - June 30, 2018**

**Region: Central**

**Eligibility Category: Children in 134-209% FPL**

	a	b	c	d	e	f = a * b * c * d * e
Category of Service	CY 2015 PMPM Cost	Utilization Trend Factors CY 2015 to SFY 2018	Charge Trend Factors CY 2015 to SFY 2018	Benefit Adjustment	PDL Adjustment	Per Capita Monthly Net Cost
Inpatient Hospital Services	\$8.73	1.0000	1.0000	1.0000	1.0000	\$8.73
Outpatient Hospital Services	\$70.95	1.0000	1.0312	1.0000	1.0000	\$73.16
Physician Services	\$47.03	1.0000	0.9987	1.0000	1.0000	\$46.97
Drug Services	\$41.28	1.0075	1.0839	1.0000	1.0000	\$45.08
Dental Services	\$33.04	1.0000	1.0508	1.0000	1.0000	\$34.71
Other Services	\$7.07	1.0000	0.9987	1.0000	1.0000	\$7.06
<b>Total</b>	<b>\$208.09</b>					<b>\$215.72</b>

**Appendix B**  
**Mississippi Division of Medicaid**  
**July 2017 - June 2018 CHIP Capitation Rate Development**  
**PMPM Medical and Pharmacy Cost Estimates Projected to July 1, 2017 - June 30, 2018**

**Region: South**

**Eligibility Category: Children in 134-209% FPL**

	a	b	c	d	e	f = a * b * c * d * e
Category of Service	CY 2015 PMPM Cost	Utilization Trend Factors CY 2015 to SFY 2018	Charge Trend Factors CY 2015 to SFY 2018	Benefit Adjustment	PDL Adjustment	Per Capita Monthly Net Cost
Inpatient Hospital Services	\$9.99	1.0000	1.0000	1.0000	1.0000	\$9.99
Outpatient Hospital Services	\$53.20	1.0000	1.0312	1.0000	1.0000	\$54.86
Physician Services	\$49.59	1.0000	0.9987	1.0000	1.0000	\$49.52
Drug Services	\$42.96	1.0075	1.0839	1.0000	1.0000	\$46.92
Dental Services	\$33.75	1.0000	1.0508	1.0000	1.0000	\$35.47
Other Services	\$7.63	1.0000	0.9987	1.0000	1.0000	\$7.62
<b>Total</b>	<b>\$197.13</b>					<b>\$204.38</b>

*This letter and exhibits assume the reader is familiar with the CHIP, its benefits, and rate setting principles. The letter and exhibits dated August 28, 2017 were prepared solely to provide assistance to DOM to develop SFY 2018 capitation rates for the CHIP. It may not be appropriate for other purposes. Milliman does not intend to benefit, and assumes no duty or liability to, other parties who receive this work. This material should only be reviewed in its entirety.*

**Appendix C**  
**Mississippi Division of Medicaid**  
**July 2017 - June 2018 CHIP Capitation Rate Development**  
**Non-Benefit Expense Add-Ons**

	a	b	c	$d = (a + b) / (1 - c) - (a + b)$	$e = b + d$	$f = a + e$
Eligibility Category	SFY 2018 PMPM Cost	Fixed Non-Claim Expense Load	Variable Non-Claim Expense Load (Including 3% Premium Tax and 2% Margin)	Variable Non-Claim Expense Allocation	Total Non-Claim Expense Allocation	SFY 2018 Capitation Rates
Children in 134-209% FPL	\$210.29	\$8.01	10.75%	\$26.29	\$34.30	\$244.60

*This letter and exhibits assume the reader is familiar with the CHIP, its benefits, and rate setting principles. The letter and exhibits dated August 28, 2017 were prepared solely to provide assistance to DOM to develop SFY 2018 capitation rates for the CHIP. It may not be appropriate for other purposes. Milliman does not intend to benefit, and assumes no duty or liability to, other parties who receive this work. This material should only be reviewed in its entirety.*

## APPENDIX D

### CHIP Expenditure Projection

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**State of Mississippi Division of Medicaid**

July 1, 2017 – June 30, 2018 CHIP Capitation Rate Development

This report assumes that the reader is familiar with the State of Mississippi's CHIP program, its benefits, and rate setting principles. The report was prepared solely to provide assistance to DOM to set the July 1, 2017 – June 30, 2018 capitation rate for the CHIP program. It may not be appropriate for other purposes. Milliman does not intend to benefit, and assumes no duty or liability to, other parties who receive this work. This material should only be reviewed in its entirety.

August 28, 2017

**Appendix D**  
**Mississippi Division of Medicaid**  
**July 2017 - June 2018 CHIP Capitation Rate Development**  
**CHIP Expenditure Projection**

	a	b	c = a * b	d = c * 100.00%
Eligibility Category	Projected SFY 2018 Enrollment	SFY 2018 Capitation Rates	CHIP Projected Cost	Federal Projected Cost *
Children in 134-209% FPL	584,352	\$244.60	\$142,931,707	\$142,931,707

\* Mississippi eFMAP at 100% for July 2017 - June 2018 if fully funded by Congress for Federal Fiscal Year 2018

*This letter and exhibits assume the reader is familiar with the CHIP, its benefits, and rate setting principles. The letter and exhibits dated August 28, 2017 were prepared solely to provide assistance to DOM to develop SFY 2018 capitation rates for the CHIP. It may not be appropriate for other purposes. Milliman does not intend to benefit, and assumes no duty or liability to, other parties who receive this work. This material should only be reviewed in its entirety.*

## APPENDIX E

### Actuarial Certification

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**State of Mississippi Division of Medicaid**

July 1, 2017 – June 30, 2018 CHIP Capitation Rate Development

This report assumes that the reader is familiar with the State of Mississippi's CHIP program, its benefits, and rate setting principles. The report was prepared solely to provide assistance to DOM to set the July 1, 2017 – June 30, 2018 capitation rate for the CHIP program. It may not be appropriate for other purposes. Milliman does not intend to benefit, and assumes no duty or liability to, other parties who receive this work. This material should only be reviewed in its entirety.

August 28, 2017



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Consulting Actuary

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August 28, 2017

**Mississippi Division of Medicaid  
Capitated Contracts Ratesetting  
Actuarial Certification  
SFY 2018 CHIP Capitation Rates**

I, Jill Bruckert, am associated with the firm of Milliman, Inc., am a member of the American Academy of Actuaries, and meet its Qualification Standards for Statements of Actuarial Opinion. I was retained by the Mississippi Division of Medicaid (DOM) to perform an actuarial certification of the Children's Health Insurance Program (CHIP) capitation rates for July 1, 2017 – June 30, 2018 (SFY 2018) for filing with the Centers for Medicare and Medicaid Services (CMS). While a certification of the CHIP rates is not required by regulation, we nonetheless certify to their actuarial soundness. I reviewed the capitation rate development and am familiar with the following regulation and guidance:

- The requirements of 42 CFR §438.3(c), 438.3(e), 438.4 (excluding paragraphs (b)(3),(b)(4) and (b)(9)), 438.5, 438.6, and 438.7 (excluding paragraph (c)(3))
- CMS "Appendix A, PAHP, PIHP, and MCO Contracts Financial Review Documentation for At-risk Capitated Contracts Ratesetting" dated November 10, 2014
- 2017-2018 Medicaid Managed Care Rate Development Guide
- Actuarial Standard of Practice 49

I examined the actuarial assumptions and actuarial methods used in setting the capitation rates for SFY 2018 dated August 28, 2017 and accompanying this certification.

To the best of my information, knowledge, and belief, for the SFY 2018 period, the capitation rates offered by DOM are in compliance with the relevant requirements of 42 CFR 438.4(b). The attached actuarial report dated describes the capitation rate setting methodology.

In my opinion, the capitation rates are actuarially sound, as defined in Actuarial Standard of Practice 49, were developed in accordance with generally accepted actuarial principles and practices, and are appropriate for the populations to be covered and the services to be furnished under the contract.

In making my opinion, I relied upon the accuracy of the underlying claim and eligibility data records and other information prepared by DOM and participating CCOs. I did not audit the data and calculations, but did review them for reasonableness and consistency and did not find material defects. In other respects, my examination included such review of the underlying assumptions and methods used and such tests of the calculations as I considered necessary. The reliance letter from DOM is included in Appendix F.

Actuarial methods, considerations, and analyses used in forming my opinion conform to the appropriate Standards of Practice as promulgated from time to time by the Actuarial Standards Board, whose standards form the basis of this Statement of Opinion.



It should be emphasized that capitation rates are a projection of future costs based on a set of assumptions. Actual costs will be dependent on each contracted coordinated care organization's situation and experience.

This Opinion assumes the reader is familiar with the CHIP program and actuarial rating techniques. The Opinion is intended for the State of Mississippi and the Centers for Medicare and Medicaid Services and should not be relied on by other parties. The reader should be advised by actuaries or other professionals competent in the area of actuarial rate projections of the type in this Opinion, so as to properly interpret the projection results.

A handwritten signature in black ink, reading "Jill A. Bruckert".

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Jill A. Bruckert  
Member, American Academy of Actuaries

August 28, 2017

## APPENDIX F

### Data Reliance Letter

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**State of Mississippi Division of Medicaid**

July 1, 2017 – June 30, 2018 CHIP Capitation Rate Development

This report assumes that the reader is familiar with the State of Mississippi's CHIP program, its benefits, and rate setting principles. The report was prepared solely to provide assistance to DOM to set the July 1, 2017 – June 30, 2018 capitation rate for the CHIP program. It may not be appropriate for other purposes. Milliman does not intend to benefit, and assumes no duty or liability to, other parties who receive this work. This material should only be reviewed in its entirety.

August 28, 2017

August 28, 2017

MISSISSIPPI DIVISION OF  
**MEDICAID**

Ms. Jill A. Bruckert, FSA, MAAA  
Consulting Actuary  
Milliman, Inc.  
15800 Bluemound Road, Suite 100  
Brookfield, WI 53005

**Re: Data Reliance for Actuarial Certification of MississippiCAN and CHIP Capitation Rates**

Dear Ms. Bruckert:

I, Tara S. Clark, Executive Administrator for the Mississippi Division of Medicaid (DOM), hereby affirm that the data prepared and submitted to Milliman, Inc. (Milliman) for the purpose of certifying MississippiCAN and CHIP capitation rates were prepared under my direction and, to the best of my knowledge and belief, are accurate, complete, and consistent with the data used to develop the capitation rates. Capitation rates are effective July 1, 2017 – June 30, 2018.

Provided data or information used in the development of the capitation rates includes:

1. Data from DOM's Medicaid Management Information Systems (MMIS) vendor:
  - a. FFS claims through June 2016
  - b. Encounter claims through June 2016
  - c. Medicaid eligibility through December 2015
2. Supporting documentation provided by DOM:
  - a. Documentation of historical third party liability (TPL) recoveries
  - b. Mississippi Hospital Access Program (MHAP) amount of \$533,110,956 to be used in capitation rate development
  - c. Estimated Autism Spectrum Disorder (ASD) cost projections
  - d. Inpatient DRG re-pricing impact for July 2017
  - e. Actual Acquisition Cost (AAC) pharmacy reimbursement information including:
    - i. Dispensing fees
    - ii. Reimbursement methodology
    - iii. State Specialty Drug List
    - iv. State AAC Rate File
  - f. Other computer files and clarifying correspondence

Milliman relied on DOM and their MMIS vendor for the collection and processing of the FFS and CCO encounter. Milliman relied on the CCOs to provide accurate CY 2015 and emerging CY 2016 financial data as certified by each CCO. Milliman did not audit the FFS data, the CCO financial data, or the encounter data, but did assess the data for reasonableness as documented in the capitation rate report.

Tara S. Clark

Name

Executive Administrator

Title

August 28, 2017

Date