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April 21, 2021

Jennifer Wentworth
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[Sent via email: jennifer.wentworth@medicaid.ms.gov]

Re: Report08 - State Fiscal Year 2022 MississippiCAN Preliminary Rate Calculation and Certification

Dear Jennifer:

The Mississippi Division of Medicaid (DOM) has retained Milliman to develop actuarially sound capitation rates for state fiscal year (SFY) 2022 for Mississippi Coordinated Access Network (MississippiCAN), a coordinated care program for Medicaid beneficiaries.

This report documents the preliminary capitation rates for all populations enrolled in MississippiCAN. This report assumes ultimate approval of the preprints for the Mississippi Hospital Access Program (MHAP), Mississippi Medicaid Access to Physician Services (MAPS) program, and the directed fee schedule for autism spectrum disorder (ASD) services.

Rates will be retroactively adjusted and recertified for the following items:

- Payments for MHAP Quality Incentive Payment Program (QIPP)
- Payments for MAPS program
- Actual membership to determine the final MHAP fee schedule adjustment (FSA) amounts
- Actual membership to determine the population acuity adjustment for the MA Adult, MA Children, and Quasi-CHIP rate cells, if materially different

This recertification will be done at one time for capitation rates for the entire SFY 2022 time period. This recertification is anticipated to happen during the quarter following the end of SFY 2022.

As of the time of this report, the impact on capitation rates due to COVID-19 is uncertain for SFY 2022. As such, a risk corridor will be used in SFY 2022 to reflect the uncertainty in the capitation rates due to COVID-19. The risk corridor is described in more detail in Section IV. In addition, explicit adjustments for COVID-19 are made in the rate development for the following:

- Utilization trends from CY 2019 to CY 2020 were dampened.
- Medicaid enrollment is projected to remain elevated through the end of the Department of Health and Human Services (HHS) declared public health emergency (PHE). This change in enrollment is anticipated to impact the acuity mix of beneficiaries. For rate cells modeled to have significant enrollment differences due to the PHE, the rate development includes an acuity adjustment. As a result of eligibility redeterminations, some of these members may be transitioned from MississippiCAN to FFS prior to the end of the PHE. Given the uncertainty around the timing of this transition, and the volume of members impacted, we will retrospectively adjust the population acuity adjustment to reflect actual enrollment, if materially different than assumed when developing the current acuity adjustments. The retroactive adjustment will use the same methodology used in these preliminary rates.



Jennifer Wentworth
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- The capitation rates include provisions for expected vaccination administration fees related to COVID-19 in SFY 2022.

We will continue to monitor the development of this pandemic and adjust assumptions in SFY 2022 capitation rates, if appropriate.



Jennifer, please call us at 262 784 2250 if you have questions. We look forward to discussing this report with you and the CCOs.

Sincerely,

A handwritten signature in black ink that reads "Jill Bruckert".

Jill A. Bruckert, FSA, MAAA
Senior Consulting Actuary

JAB/KNL/zk

Attachments

A handwritten signature in black ink that reads "Katarina Lorenz".

Katarina N. Lorenz, FSA, MAAA
Consulting Actuary

MILLIMAN REPORT

State of Mississippi Division of Medicaid

State Fiscal Year 2022 MississippiCAN Preliminary Rate Calculation and Certification

April 21, 2021

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I. SUMMARY AND DISCUSSION OF RESULTS

The Mississippi Division of Medicaid (DOM) retained Milliman to calculate, document, and certify to capitation rates for Mississippi Coordinated Access Network (MississippiCAN), a coordinated care program for targeted Medicaid beneficiaries, effective for state fiscal year (SFY) 2022. This report provides preliminary SFY 2022 capitation rates and documents their development. This report is structured as follows:

- Section I includes a high-level overview of the change in capitation rates relative to the July 1, 2020 to June 30, 2021 (SFY 2021) capitation rates
- Section II provides a short background of the MississippiCAN program
- Section III documents the development of the base data
- Section IV documents the rate setting process for SFY 2022 capitation rates
- Appendices A and B contain additional details on the SFY 2022 rate cell definitions and base period data sources and processing
- Appendix C contains the CY 2018 and CY 2019 databooks
- Appendix D contains a detailed mapping of the applicability of the 5% provider assessment to the base period data
- Appendix E summarizes program, population, and reimbursement changes to the MississippiCAN program from CY 2018 to SFY 2022
- Appendix F breaks down the rate change from SFY 2021 by rate cell
- Appendices G and H provide responses to the CMS rate setting checklist and CMS managed care rate setting guide for all rate cells
- Appendix I contains an Actuarial Certification for all MississippiCAN rate cells
- Appendix J documents our reliance on DOM for data and other assumptions in the development of the capitation rates

SFY 2022 CAPITATION RATES

Table 1 includes per member per month (PMPM) preliminary capitation rates effective for SFY 2022, including all components that will be paid to the Coordinated Care Organizations (CCOs) on a monthly basis. Each CCO will be paid based on the distribution of members enrolled in each rate cell. In addition, CCO capitation payments will vary based on their members' county of residence. We assigned each county to one of the following regions: North, Central, or South, as shown in Appendix A.

Table 1
Mississippi Division of Medicaid
MississippiCAN Capitation Rates Including MHAP FSA
Per Member Per Month (PMPM)
Effective SFY 2022

Rate Cell	North	Central	South
Non-Newborn SSI / Disabled	\$1,186.70	\$1,400.91	\$1,401.67
Breast and Cervical Cancer	\$3,828.79	\$4,279.69	\$4,575.30
MA Adult	\$518.71	\$577.91	\$551.34
Pregnant Women	\$1,349.61	\$1,499.00	\$1,422.67
SSI / Disabled Newborn	\$10,488.81	\$11,240.78	\$10,535.97
Non-SSI Newborns 0 to 2 Months	\$2,648.66	\$2,746.66	\$2,632.14
Non-SSI Newborns 3 to 12 Months	\$314.34	\$322.92	\$311.55
Foster Care	\$805.57	\$873.58	\$798.43
MYPAC	\$4,315.46	\$4,599.77	\$4,420.68
MA Children	\$231.88	\$244.54	\$236.97
Quasi-CHIP	\$231.10	\$243.46	\$236.76

¹ Rates include MHAP FSA, including associated premium tax. Rates are prior to the application of a 1.00% quality withhold. Rates exclude MHAP QIPP and MAPS.

The MississippiCAN capitation rates include a number of components: some that will be paid prospectively on a monthly basis in the capitation rates and some that will require retrospective adjustments to the capitation rates. The PMPM capitation rates in Table 1 only include the following components that will be paid prospectively in the capitation rates:

- Estimated costs of medical, pharmacy, and non-service expenses, as documented in Sections I to IV.
- The Mississippi Hospital Access Program (MHAP) hospital fee schedule adjustment (FSA), which varies by rate cell on a PMPM basis based on projected utilization of inpatient and outpatient services. The MHAP FSA payments will be \$285.6 million in SFY 2022, reduced from \$317.9 million in SFY 2021. Please see Section IV of this report for additional details on the MHAP FSA.

The capitation rates will be retrospectively adjusted for the following components, which are not included in Table 1:

- Payments for the MHAP quality incentive payment program (QIPP) are paid outside of the capitation rates on a quarterly basis. The MHAP QIPP payments will be \$247.5 million in SFY 2022, increased from \$215.2 million in SFY 2021. Please see Section IV of this report for additional details on the MHAP QIPP.
- The MAPS program will be included in MississippiCAN to enhance payments to physicians and other eligible professional service practitioners who are employed by a qualifying hospital or who assigned Mississippi Medicaid payments to a qualifying hospital. The MAPS payments are estimated to be \$38.8 million in SFY 2022. Please see Section IV of this report for additional details on the MAPS program.
- Actual membership to determine the final MHAP FSA PMPM amount.
- The population acuity adjustments currently applied to the capitation rates reflect our current best estimate of SFY 2022 enrollment. Following the conclusion of SFY 2022, we will retrospectively adjust capitation rates for the MA Adult, MA Children, and Quasi-CHIP rate cells to reflect actual SFY 2022 enrollment, if materially different. Please see the "COVID-19 Population Acuity Change" description in Section IV below for greater details surrounding this adjustment.

In addition, the capitation rates will be adjusted on a CCO specific basis for the following rate adjustments:

- Quality Withhold: As in SFY 2021 rates, DOM will apply a quality withhold to MississippiCAN payments in SFY 2022 based on HEDIS scores reported by the CCOs. The PMPM capitation rates in Table 1 are prior to the application of this quality withhold. Please see Section IV for more information on the quality withhold for SFY 2022.

- **Risk Adjustment:** The capitation rates for the Non-Newborn SSI / Disabled, MA Adult, MA Children, and Quasi-CHIP rate cells will be risk adjusted for each CCO using the combined Chronic Illness and Disability Payment System and Medicaid Rx risk adjuster (CDPS + Rx). The CDPS + Rx risk adjuster will be used to adjust for the acuity differences between the enrolled populations of each CCO and will be budget-neutral to DOM. The CDPS + Rx demographic and disease category weights are calculated using Mississippi fee-for-service (FFS) and encounter data.

The capitation rates for the Foster Care rate cell will be risk adjusted using a custom risk adjustment model developed for this population. This custom model uses a member's eligibility for either state or federal financial assistance to assign a risk score. The risk adjustment for the Foster Care rate cell will be applied on a concurrent basis.

Please see Section IV for more information on the application of risk adjustment to the applicable rate cells.

- **Risk Corridor:** Similar to SFY 2021, a risk corridor will be implemented to recognize the uncertainty in setting rate setting assumptions for the impact of COVID-19 on the SFY 2022 rating period. Please see Section IV for more information on how the risk corridor settlements will be calculated.

Our Actuarial Certification of the SFY 2022 MississippiCAN capitation rates is included as Appendix I. It should be emphasized that capitation rates are a projection of future costs based on a set of starting data and assumptions. Actual costs will be dependent on each contracted CCO's situation, experience, and enrolled population.

COVID-19 CONSIDERATIONS IN SFY 2022 RATE DEVELOPMENT

As of the time of this report, the impact on SFY 2022 capitation rates due to COVID-19 is difficult to predict. As such, a risk corridor will be in effect in SFY 2022 to reflect the uncertainty in the capitation rates due to COVID-19. The risk corridor is described in more detail in Section IV.

In addition, explicit adjustments for COVID-19 are made in the rate development for the following, as described in Section IV:

- Utilization trend assumptions from CY 2019 to CY 2020 are set to 0%. The application of a 0% utilization trend from CY 2019 to CY 2020, essentially assumes once services return to pre-pandemic levels they will not also reflect additional utilization trend in CY 2020.
- Medicaid enrollment is projected to remain elevated through the end of the Department of Health and Human Services (HHS) declared PHE. This change in enrollment is anticipated to impact the average acuity of beneficiaries. For rate cells modeled to have significant enrollment differences due to the PHE, the rate development includes an acuity adjustment. This acuity adjustment may be retrospectively updated after enrollment for SFY 2022 is known, including the transitioning of members who would otherwise lose Medicaid status to FFS in advance of the end of the PHE.
- The capitation rates include provisions for expected vaccination administration fees related to COVID-19 in SFY 2022.

The SFY 2022 capitation rates do not include any explicit adjustments for the following:

- **COVID-19 Testing and Treatment Cost:** The infection rate for COVID-19 in SFY 2022 is dependent on many variables that are difficult to predict, limiting our ability to include an estimate for the cost of testing for and treating individuals with COVID-19. Some of the variables under consideration include, but are not limited to:
 - The take-up rate and timing of COVID-19 vaccinations.
 - The emergence of COVID-19 variants and the efficacy of vaccines upon these variants.
 - The implementation of social distancing measures.

To our knowledge, there is not a publicly-available model that includes COVID-19 infection rates or hospital admissions through June 2022. In addition, the publicly available models have materially changed short-term and long-term projections of COVID-19 prevalence in reaction to emerging data. Given the unpredictable patterns of COVID-19 prevalence to date in Mississippi and the changing national models there is a range of potential infection rates for the SFY 2022 rates.

Moreover, our review of the costs of testing and treating COVID-19 in March to October 2020 shows total costs for these services was approximately \$3.26 PMPM. We expect costs for testing and treatment services to decrease from these amounts across the SFY 2022 rate period.

- **Deferred and Foregone Services:** The most significant fiscal impact of COVID-19 to date has been the deferral of non-essential services, either through government-enacted policies, the impact of social distancing on the administration of services, or personal choice to defer services. We have reviewed MississippiCAN emerging data on claims incurred throughout CY 2020 by population type (to remove the impact of membership mix changes). As of December 2020, there was still measurable reductions in claim costs compared to the PMPMs for the given population in CY 2019, prior to the pandemic. However, it is difficult to use this historical data to project the impact of deferred services for SFY 2022 for many reasons.
 - We observed in the CY 2020 data that the change in service utilization has varied as the level of COVID-19 diagnoses and hospital admissions has changed in Mississippi over the course of the pandemic to date. Therefore, a key variable in predicting future service utilization changes relative to pre-pandemic levels is the future prevalence of COVID-19, which as noted above is unknown.
 - Limited data is available to date to understand how beneficiary behavior will change during and after the roll-out of the COVID-19 vaccination. As such, there could still be a wide range of answers as to when service utilization may return to pre-pandemic levels.
 - In the MississippiCAN data that we have reviewed it is difficult to isolate the impact of deferred services from changes in utilization due to other drivers, such as change in service mix.
 - Even if demand for deferred services is higher in SFY 2022, the amount of these services that can be provided is limited by the capacity of the state's medical infrastructure. Some delayed services may continue to be delayed or never performed if demand exceeds capacity.
- **Service Mix Changes:** In response to the pandemic, the mix of services used to treat patients has changed, such as the use of telehealth services. It is unknown if these provider and patient changes will persist after the end of the pandemic.

CAPITATION RATE CHANGE SUMMARY

Compared to SFY 2021 capitation rates, the SFY 2022 rates are 1.1% higher, excluding the impact of MHAP, when composited across all rate cells using CY 2019 membership. Excluding the impact of program changes (noted by footnote 2 in Table 2), which increase or decrease total program costs concurrently with revenue for the CCOs, the rates are 0.1% lower than SFY 2021. Excluding the impact of COVID-19 adjustments (noted by footnote 1 in Table 2), the rates are 2.6% higher than SFY 2021.

Table 2 shows a summary of the main drivers of the rate changes aggregated across all MississippiCAN capitation rate cells, excluding the impact of MHAP. All compositing is based upon CY 2019 membership.

Table 2
Mississippi Division of Medicaid
Summary of SFY 2022 Rate Change Components

	Aggregated with CY 2019 Membership³
SFY 2021 Capitation Rate	\$466.79
Base Period Data Update	1.011
Restated Assumptions	0.972
COVID-19 Population Acuity Adjustment - CY 2019 to SFY 2021 ¹	0.987
Restated SFY 2021 Rate	0.969
SFY 2021 to SFY 2022 Trends	1.029
PDL CY 2020 to CY 2021 Adjustment ²	1.001
COVID-19 Vaccine Administration Adjustment ¹	1.004
COVID-19 Population Acuity Adjustment - SFY 2021 to SFY 2022 ¹	0.995
Removal of 5% Assessment ²	1.010
Dental Reimbursement Change ²	1.000
Update Admin	1.004
SFY 2022 Rate Change Prior to MHAP	1.011
SFY 2022 Rate Change - Excluding Program Changes²	0.999
SFY 2022 Rate Change - Excluding COVID-19 Adjustments¹	1.026

¹ COVID-19 adjustments include the COVID-19 vaccine administration expense and the COVID-19 population acuity adjustments.

² Program change that increases or decreases total program costs outside of the control of the CCOs.

³ Rate change excludes the impact the quality withhold, both components of MHAP, and MAPS.

The values quoted below are all based on CY 2019 membership composites.

- The development of SFY 2022 capitation rates is a ground-up approach where the base data and each assumption is evaluated separate from the SFY 2021 capitation rates. However, for the purposes of explaining the rate change from SFY 2021 to SFY 2022, we isolate the impact of rebasing the data and assumptions that result in a change in the projected SFY 2021 values. Overall, this rebasing decreased the projection of SFY 2021 costs by 3.1%, excluding MHAP, from costs projected in the SFY 2021 capitation rates. This 3.1% decrease contains the following three sub-components:
 - CY 2019 base data was 1.1% higher than projected in SFY 2021 rate setting. This is reflected in the "Base Period Data Update" row of Table 2 above.
 - Emerging CY 2019 experience was used to inform the trend assumptions used in SFY 2021 capitation rates. Therefore, now that CY 2019 (which was known to be emerging higher than expected at the time) largely forms the base period experience, the annualized trend assumptions from CY 2019 to SFY 2021 are lower than those in SFY 2021 rates. Additionally, CY 2019 to CY 2020 utilization trends were set to 0% to reflect the impact on utilization related to the COVID-19 pandemic. These items jointly contributed to the 2.8% decrease shown in the "Restated Assumptions" row of Table 2 above.
 - Medicaid enrollment has increased during the COVID-19 pandemic. We anticipate the PHE will continue into SFY 2022 and, thus, that enrollment increases caused by enhanced federal funding requirements will likely continue at least until December 31, 2021. Therefore, we have included an acuity adjustment to reflect the increase in enrollment (and resulting decrease in average population acuity) for the MA Adult, MA Children, and Quasi-CHIP rate cells.

Membership from an average CY 2019 enrollment level (base period) to the projected enrollment level in SFY 2021 reflects enrollment increases of approximately 17% for the MA Adult rate cell and 13% for the combined MA Children and Quasi-CHIP rate cells. This results in acuity adjustments of approximately -7.2% and -2.4% for these groups, respectively, which aggregates to approximately -1.3% across all rate cells combined. This change is reflected in the "COVID-19 Population Acuity Adjustment - CY 2019 to SFY 2021" row of Table 2 above.

- Composite utilization and unit cost trend assumptions from SFY 2021 to SFY 2022 increase projected costs 2.9%, excluding MHAP.
- The impact of preferred drug list (PDL) updates effective January 1, 2021 is estimated to increase gross pharmacy costs prior to DOM rebate collection approximately 0.7% resulting in an overall 0.1% increase to capitation rates.
- MississippiCAN CCOs will be responsible for expenses related to the administration of the COVID-19 vaccine. Across all rate cells, vaccine administration expenses are estimated to increase physician expenses by approximately 1.6%, resulting in an overall 0.4% increase to capitation rates.
- The 5% assessment on all applicable providers will be removed effective July 1, 2021. Impacted claims will increase from a 95% payment rate to a 100% payment rate. Across all rate cells, this reimbursement change increases rates by approximately 0.8%.
- For SFY 2022, MississippiCAN preventive and diagnostic dental services will be reimbursed at a rate 5% greater than in SFY 2021. Preventive and diagnostic dental services applicable for the 5% assessment removal are capped at a cumulative 5% rate increase across both adjustments, and thus, are not impacted by this reimbursement change. Across the dental COS, this amounts to a 0.1% rate increase above and beyond the 5% assessment removal.
- Membership from an average SFY 2021 enrollment level to the projected enrollment level in SFY 2022 (assuming the PHE continues until the end of CY 2021) reflects enrollment increases of approximately 6.7% for the MA Adult rate cell and 5.4% for the combined MA Children and Quasi-CHIP rate cells. This results in acuity adjustments of approximately -3.1% and -1.0% for these groups, respectively, which aggregates to approximately -0.5% across all rate cells combined. This change is reflected in the “COVID-19 Population Acuity Adjustment – SFY 2021 to SFY 2022” row of Table 2 above.
- Overall non-service expenses increased approximately 2.5% on a PMPM basis from SFY 2021 to SFY 2022 resulting in an increase to rates of approximately 0.4%. Fixed non-service expenses increased from \$10.00 PMPM in SFY 2021 rates to \$10.25 PMPM in SFY 2022 rates, and variable non-service expenses increased from 5.11% of SFY 2021 rates to 5.39% of SFY 2022 rates.

The total MHAP payment across all MississippiCAN members remains unchanged in SFY 2022 from SFY 2021 at \$533.11 million. Please see Section IV of this report for more information on changes to the MHAP structure for SFY 2022.

CAPITATION RATE CHANGE BY RATE CELL

Rate changes vary by capitation rate cell as shown in Table 3, which compares SFY 2022 capitation rates to SFY 2021 capitation rates, on a similar basis as Table 2. The level of detail for the rate change included in Table 2 above is shown by rate cell in Exhibit 5.

Table 3
MississippiCAN Capitation Rates
Summary of Statewide SFY 2022 Rate Change¹

Rate Cell	Overall Rate Change	Excluding Program Changes²	Excluding COVID-19 Adjustments³
Non-Newborn SSI / Disabled	1.8%	0.8%	1.8%
Breast and Cervical Cancer	3.6%	3.3%	3.6%
MA Adult	-6.8%	-7.5%	1.6%
Pregnant Women	0.3%	-0.1%	0.2%
SSI / Disabled Newborn	-5.2%	-5.6%	-5.2%
Non-SSI Newborns 0 to 2 Months	-0.1%	-0.3%	-0.1%
Non-SSI Newborns 3 to 12 Months	0.2%	-0.9%	0.2%
Foster Care	9.9%	8.6%	9.6%
MYPAC	2.3%	-1.5%	2.2%
MA Children	3.3%	1.5%	5.5%
Quasi-CHIP	4.3%	2.4%	6.6%
Total - Aggregated with CY 2019 MMs	1.1%	-0.1%	2.6%

¹ Rate changes exclude both components of MHAP, MAPS, and the quality withhold.

² The CY 2020 to CY 2021 PDL program change has been excluded from this calculation.

³ The COVID-19 vaccine administration adjustment and the COVID-19 population acuity adjustments have been removed from this calculation.

After accounting for program and COVID-19 related changes, the remainder of the rate change for each rate cell is driven by changes in the base data. This is especially evident for smaller rate cells that fluctuate more year over year, such as the Breast and Cervical Cancer, SSI / Disabled Newborn, and Foster Care rate cells.

DATA RELIANCE AND IMPORTANT CAVEATS

Milliman has developed certain models to estimate the values included in this report. The intent of the models was to estimate SFY 2022 capitation rates. We reviewed the models, including their inputs, calculations, and outputs for consistency, reasonableness, and appropriateness to the intended purpose and in compliance with generally accepted actuarial practice and relevant actuarial standards of practice (ASOP).

The models rely on data and information as input to the models. We used CCO encounter data and CCO financial reporting from January 2018 to December 2020 with runout through February 2021, FFS cost and eligibility data from January 2017 to December 2018, historical and projected reimbursement information, TPL recoveries, fee schedules, pharmacy and dispensing fee pricing, and other information from DOM, MississippiCAN CCOs, Myers and Stauffer, Change Healthcare, and CMS to calculate the preliminary MississippiCAN capitation rates shown in this report. If the underlying data used is inadequate or incomplete, the results will be likewise inadequate or incomplete. Please see Appendix J for a full list of the data relied upon to develop the SFY 2022 capitation rates.

Differences between the capitation rates 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 review preliminary MississippiCAN capitation rates for SFY 2022. The report and the models used to develop the values in this report may not be appropriate for other purposes. We anticipate the report will be shared with contracted CCOs, CMS and other interested parties. Milliman does not intend to service, and assumes no duty or liability to, other parties who receive this work. It should only be distributed and reviewed in its entirety. These capitation rates may not be appropriate for all CCOs. Any CCO considering participating in MississippiCAN should consider their unique circumstances before deciding to contract under these rates.

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 a Senior Consulting 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, 2020, apply to this report and its use.

II. MISSISSIPPICAN BACKGROUND

MississippiCAN, a Coordinated Care Program for Mississippi Medicaid beneficiaries, was designed to address the following goals:

- Improve access to needed medical services – This goal is accomplished by connecting the targeted beneficiaries with a medical home, increasing access to providers, and improving beneficiaries' use of primary and preventive care services
- Improve quality of care – This goal is accomplished by providing systems and supportive services, including disease state management and other programs that will allow beneficiaries to take increased responsibility for their health care
- Improve efficiencies and cost effectiveness – This goal is accomplished by contracting with CCOs on a capitated basis to provide services through an efficient, cost effective system of care

TARGET POPULATION

MississippiCAN was implemented in all 82 counties in the State of Mississippi for all eligible beneficiaries beginning January 1, 2011 for targeted, high cost Medicaid beneficiaries defined by these categories of eligibility (COEs):

- COE001 – SSI via SDX
- COE019 – Disabled children at home
- COE025 – Working Disabled
- COE026 – DHS CWS Foster Care
- COE027 – Breast-Cervical

On December 1, 2012 the eligible population of MississippiCAN was expanded to include all Foster Care children, Non-SSI Newborns 0 to 12 months, MA Adults, and Pregnant Women, as defined by the following categories of eligibility and age requirements:

- COE003 – DHS-IV-E-Medicaid
- COE075 – Parents / Caretakers of minor children
- COE088 – Pregnant Women, 185% FPL – Ages 8+
- Non-SSI Newborns – Ages 0 to 12 months
 - COE003 – DHS IV-E Medicaid
 - COE026 – DHS Foster Care
 - COE071 – Newborn age 0 to 1 with income at or below 185% FPL
 - COE088 – Pregnant Women, 185% FPL

Effective December 1, 2012, all MississippiCAN populations were mandatory enrolled except SSI children, disabled children at home, Foster Care children, and members of the Mississippi Band of Choctaw Indians.

Between December 2014 and July 2015, the eligible population of MississippiCAN was expanded again to include children as defined by the following categories of eligibility, age, and income requirements:

- COE072 – Children age 1 to 5 with income at or below 133% FPL
- COE073 – Children age 6 to 19 with income at or below 100% FPL
- COE074 – Children age 6 to 19 with income between 100% and 133% FPL who would have qualified for CHIP under pre-Affordable Care Act rules

Effective January 1, 2014, COE074 children previously eligible for CHIP with income eligibility between 100% and 133% FPL became Medicaid eligible rather than CHIP eligible due to income eligibility outlined in the Affordable Care Act. These children were moved into MississippiCAN effective December 1, 2014, and referred to as "Quasi-CHIP" children.

The children covered under the above COEs previously covered in the Medicaid program are called “MA Children.” DOM phased in enrollment from FFS into MississippiCAN by July 2015, with the majority of children transitioned between May 2015 and July 2015.

Effective December 1, 2015, in conjunction with the movement of inpatient services into MississippiCAN, enrollment procedures were changed to enroll newborns in MississippiCAN on the day of their birth. Previously, newborns were not enrolled until, on average, their second month of life due to a delay in assigning a Medicaid identification number and the process to enroll them in a CCO.

Starting October 1, 2018, Severely Emotionally Disturbed (SED) Children were covered by MississippiCAN. These children are identified with the lock-in code of “SED,” which is effective for one year after determination. In order to receive Mississippi Youth Program Around the Clock (MYPAC) services, a child must have a SED lock-in code. This population was referred to as “SED Children” prior to SFY 2021. Starting in SFY 2021, this population is referred to as the “MYPAC” rate cell.

Throughout this report, we frequently apply the same adjustments to rate cells with similar demographics. The rate cell groups summarized in Table 4 identify the rate cells contained within each grouping referenced throughout this report.

Table 4 Mississippi Division of Medicaid Rate Cell Groupings	
Rate Cells	Rate Cell Grouping
Non-Newborn SSI / Disabled	SSI
Breast and Cervical Cancer	SSI
MA Adult	Adults
Deliveries - MA Adult	Deliveries
Pregnant Women	Adults
Deliveries - Pregnant Women	Deliveries
SSI / Disabled Newborn	Children
Non-SSI Newborns 0 to 2 Months	Children
Non-SSI Newborns 3 to 12 Months	Children
Foster Care	Children
MYPAC	Children
MA Children	Children
Quasi-CHIP	Children

COVERED SERVICES

When MississippiCAN was first established in January 2011, three key services were initially excluded from the program. Over time, each has been moved from being covered by FFS to MississippiCAN as follows:

- Behavioral health services – Rolled into MississippiCAN effective December 1, 2012
- Non-emergent transportation services – Rolled into MississippiCAN effective July 1, 2014
- Inpatient services – Rolled into MississippiCAN effective December 1, 2015

Effective October 1, 2018, MississippiCAN included costs for psychiatric residential treatment facility (PRTF) stays. Historically, these costs were carved out of MississippiCAN, although members were not dis-enrolled from MississippiCAN.

Starting July 1, 2019, services provided at institutions for mental disease (IMD) are covered as part of the MississippiCAN program.

CCOs historically have not provided services not covered under MississippiCAN “in lieu of” covered services.

ENROLLMENT PERIOD

All beneficiaries have the ability to choose the CCO in which to enroll. Enrolled beneficiaries will have an open enrollment period during the 90 days following their initial enrollment in a CCO, during which they can enroll in a different CCO “without cause” and an open enrollment period from October to December of each year. During this time period, beneficiaries may choose to change their CCO.

Various “for cause” reasons for disenrollment at other times incorporate federal requirements, such as: Providers that do not (for religious or moral reasons) offer needed services; not all related services are available in the plan’s network; or the plan lacks providers experienced in dealing with the enrollee’s health care needs.

Eligibility criteria for MississippiCAN are the same as the eligibility criteria for Mississippi Medicaid. To receive enhanced federal funding during the COVID-19 PHE, DOM paused disenrollment of members from the Mississippi Medicaid program who normally would no longer be eligible for Medicaid services. Where readily identifiable (e.g., individuals aging out of the program eligibility requirements or pregnant women reaching 60 days post-partum), individuals who would have lost normal Medicaid eligibility in the MississippiCAN program were transitioned to FFS for the remainder of the PHE. Individuals that may have lost eligibility during a routine redetermination remain in MississippiCAN in absence of redeterminations occurring. After the end of the PHE, DOM will begin disenrolling individuals no longer eligible for Medicaid services.

The CCOs do not have the ability to directly market to targeted beneficiaries. DOM provides information about choice of CCOs and enrolls the beneficiaries into their chosen CCO. The Medicaid Fiscal Agent provides some specific services of an enrollment broker to accomplish these tasks.

III. BASE DATA DEVELOPMENT

This section of the report describes the development of the base data used for the preliminary SFY 2022 MississippiCAN capitation rates.

METHODOLOGY OVERVIEW

For the SFY 2022 capitation rates, CY 2019 experience forms the primary base data. For smaller MississippiCAN populations that were not credible based on CY 2019 experience alone (using a threshold of 150,000 member months), we blended CY 2018 and CY 2019 experience to form the base data. The rate cells where two years of data was used are the Foster Care, Breast and Cervical Cancer, Pregnant Women (including related delivery costs), SSI / Disabled Newborn, Non-SSI Newborns 0 to 2 Months, and MYPAC rate cells.

The base data for the SFY 2022 capitation rates was developed using the following steps:

1. Summarize eligibility, encounter claims, and financial claim data for CY 2019 MississippiCAN enrollees.
2. Summarize eligibility, encounter claims, and financial claim data for CY 2018 MississippiCAN enrollees, excluding the MYPAC rate cell. This information is only used for low-credibility rate cells.
3. Summarize Q1 to Q3 2018 FFS and encounter data for the MYPAC rate cell. This data is then adjusted to be on a CY 2018 basis.
4. Blend 2018 and 2019 data (if applicable).

Each of the steps above is described in detail in the remainder of this section.

Appendix C contains databooks summarizing encounter data for CY 2018 and CY 2019 for all rate cells except MYPAC. For MYPAC, the databooks include the same metrics summarized from FFS and encounter data for Q1 to Q3 2018 and CY 2019, respectively.

- Appendices C.1 and C.5 summarize total paid amounts for each MississippiCAN rate cell.
- Appendices C.2 and C.6 summarize PMPM paid amounts for each MississippiCAN rate cell.
- Appendices C.3 and C.7 summarize the percentage of total paid amounts within each specific service grouping for each MississippiCAN rate cell.
- Appendices C.4 and C.8 summarize utilization and average charge for services within the inpatient and pharmacy categories of service for each MississippiCAN rate cell. Utilization metrics for other categories of service are not shown in these appendices due to differences in reporting methods for utilization metrics by the CCOs in the encounter data.

Please note, the total and PMPM costs shown in the 2019 databook tie to the starting totals on Exhibit 1A, excluding missing data. However, the 2018 databook values will not tie exactly to the starting totals on Exhibit 1B, since Exhibit 1B blends region-specific PMPM values using regional membership distributions from the 2019 enrollment data, whereas the 2018 databook uses the actual distribution by region seen in 2018 enrollment.

Step 1: Summarize CY 2019 Data

A high-level description of the processing for eligibility, encounter claim data, and financial claim data for CY 2019 MississippiCAN enrollees is included in this section. In addition, any adjustments made to the raw data are discussed in this section and shown in Exhibit 1A. Please refer to Appendices A and B of this report for additional information on the validation and processing of these data sources.

Membership

Member months by rate cell and region in CY 2019 were summarized from the detailed Medicaid eligibility data, excluding populations not covered by MississippiCAN and individuals that opted out of the program (where applicable). These enrollment counts were validated against enrollment information provided by the CCOs. In total, the enrollment in the eligibility files is 0.01% lower than reported by the CCOs.

Row (a) of Exhibit 1A includes the CY 2019 member months included in base data development. Note, the delivery components of the MA Adult and Pregnant Women rate cells use member months for the members in the underlying rate cell rather than delivery counts. The count of deliveries is included for informational purposes as a footnote in Exhibit 1A.

Claim Data

DOM and Milliman go through extensive data validation processes to review CCO submitted encounter data. DOM regularly monitors encounter claims compared to cash disbursement journals (CDJs) to ensure the timeliness and completeness of submitted encounters and works with Myers and Stauffer to identify the correct original or final claim to keep in each claim string. Milliman relied on this claim status identification process to remove duplicates and identify denied claims that are anticipated to be resubmitted and accepted, as described in Appendix A.

As part of rate development, Milliman requests financial reporting data from each CCO. This financial reporting data is reconciled to each CCO's 2019 audited NAIC financial statement. After several rounds of questions to clarify, adjust, and confirm understanding of the reported financial information, Milliman compared the encounter data to the financial reporting data, together for paid claims and subcapitated claims. This comparison excludes estimates for incurred but not reported (IBNR) claims, but already reflects adjustments for expanded services, CCO pharmacy rebates and any other claims that were identified as missing from the processed encounter data. The following items were noted:

- Overall, the paid amounts in the encounters reconcile reasonably well to the paid amounts shown in the CCO financial reporting for the MississippiCAN populations. Encounter data is 0.9% lower than financial data, including costs for subcapitated services.
- At a category of service and rate cell level, there is a greater variance between encounter data and financial reporting due to inconsistencies in allocations between the three CCOs in the financial reporting. Therefore, we grouped the encounter data consistently for all CCOs using the 2019 Milliman *Health Cost Guidelines (HCGs)* grouper in order to use the encounter data as the base data.
- As Table 5 shows, we note larger variances between encounter data for subcapitated services than for non-subcapitated services. Costs associated with subcapitated vendors account for approximately 8.6% of the financial reporting.

Table 5
Mississippi Division of Medicaid
SFY 2022 MississippiCAN Capitation Rate Development
Comparison of CY 2019 Financial and Encounter Data

	Non-Subcapitated Services	Subcapitated Services	All Services
Difference of Encounters and Financials (% of Encounters)			
IP / OP / Phys / Dental / Other Services	0.47%	5.71%	1.01%
Drug Services	0.45%	N/A	0.45%
All Services	0.46%	5.71%	0.89%
Portion of Adjustment Applied			
IP / OP / Phys / Dental / Other Services	50.00%	100.00%	79.36%
Drug Services	50.00%	N/A	50.00%
All Services	50.00%	100.00%	76.16%
Applied Adjustment			
IP / OP / Phys / Dental / Other Services	0.23%	5.71%	0.80%
Drug Services	0.23%	N/A	0.23%
All Services	0.23%	5.71%	0.68%

Table 6 provides additional detail regarding the claims found in encounters and the financial reporting by the CCOs, after adjusting both data sources to be on a consistent basis. As shown in Table 6, we only reflect a portion of the difference between encounter data and financial reporting. Given the larger difference between encounter data and financial reporting for subcapitated claims, we adjust subcapitated costs to align with financial reporting. We place equal weight on the encounter and financial data for non-subcapitated services. These weights and the aggregate weight applied to all financial reporting on Table 6 are shown in Table 5.

Table 6
Mississippi Division of Medicaid
SFY 2022 MississippiCAN Capitation Rate Development
Comparison of Financial and Encounter Data

	a	b	c = (a / b) - 1	d	e = 1 + c × d
Category of Service	Adjusted Financials	Adjusted Encounters	% Difference	% of Adjustment Applied	Encounter to Financial Adjustment
Inpatient Hospital Services	\$481,817,128	\$479,626,826	0.46%		1.0080
Outpatient Hospital Services	\$375,488,669	\$372,255,718	0.87%		1.0080
Physician Services	\$501,087,436	\$579,825,819	-13.58%		1.0080
Dental Services	\$105,461,891	\$103,196,943	2.19%		1.0080
Other Services	\$164,126,588	\$76,741,529	113.87%		1.0080
Subtotal - IP / OP / Phys / Dental / Other	\$1,627,981,711	\$1,611,646,835	1.01%	79.36%	1.0080
Drug Services	\$441,545,002	\$439,550,736	0.45%	50.00%	1.0023
Total - All Categories of Service	\$2,069,526,713	\$2,051,197,571	0.89%	76.16%	1.0068

Encounter data for all three CCOs is combined to summarize CY 2019 claim experience for MississippiCAN enrollees. Row (b) of Exhibit 1A includes the CY 2019 total service costs from the encounter data. Row (c) converts the total service costs to a PMPM basis. Claim data is summarized with runout through April 30, 2020. To reflect the differences between claims in the financial reporting and the encounter data, the adjustments shown in Table 6 are applied on row (d) of Exhibit 1A.

The financial reporting expenditures for all CCOs were combined to perform the encounter validation outlined above, as well as to develop the following adjustments to apply to the encounter data:

- Removal of services offered by CCOs that are not MississippiCAN-covered services
- Removal of costs that would be paid or recouped through provider settlements outside the encounter data
- Removal of pharmacy rebates collected by CCOs
- Addition of claims paid by the CCOs that are not yet reflected in the encounter system
- Addition of IBNR expenses not yet included in encounters as of April 20, 2020

Non-Covered Services

The value of expanded services beyond state plan covered limits offered to plan members that were not state plan covered services during the base data period are excluded from the base data. These services, which totaled approximately 0.3% of CY 2019 MississippiCAN service costs, were removed from CY 2019 base data at the rate cell and region level of detail. Service limits do not apply to the children rate cells and, thus, base period costs were not adjusted for these members.

The costs of expanded services were identified from CCO financial reporting for pharmacy scripts and physician visits above state plan covered limits. Since the definition of home health visits used by DOM differed from that used by the CCOs, we queried encounter data using the definition of home health visits provided by DOM to determine the cost of home health visits above Mississippi Medicaid limits.

For the purposes of this adjustment, we removed services that were enhanced relative to the state plan at the time of service. During CY 2019, state plan covered service limits to monthly pharmacy scripts and annual home health visits were increased. The expansion of these services is reflected as a separate program change adjustment in Section IV.

This adjustment is shown in Exhibit 1A in row (e).

Provider Reimbursement Adjustment

An adjustment was made to physician encounters to reflect the total provider settlements collected by CCOs in CY 2019 as reflected in the CCO financial templates. These costs were converted to a percentage of base period physician costs and allocated across rate cell and region. These adjustments totaled approximately \$5.8 million in increased CY 2019 physician expenses.

We similarly adjusted physician encounters by rate cell for enhanced payments paid by CCOs to primary care providers outside the encounter system in CY 2019. These claims totaled approximately \$1.6 million during CY 2019. Going forward these enhanced payments are expected to be included in the encounter data and not paid as a settlement.

Both adjustments sum to approximately a \$7.4 million increase in costs not reflected in CY 2019 encounters. The combined adjustment is shown on Exhibit 1A in row (f).

Zolgensma Carveout

On May 24, 2019, the FDA approved the drug Zolgensma, a gene therapy drug for children less than two years old with spinal muscular atrophy. Zolgensma will be carved out of capitation rates for SFY 2022, and the CCOs will be reimbursed outside of the capitation rate for costs associated with administering Zolgensma to approved members.

Zolgensma was administered to three patients in CY 2019 (all within the Non-Newborn SSI / Disabled rate cell) with expenses totaling approximately \$6.4 million. We removed these expenses from CY 2019 encounter data in row (g) of Exhibit 1A.

ER Leveling Policy Adjustment

Beginning in July 2019, one CCO instituted an emergency room (ER) leveling policy under which certain ER claims were down coded relative to the initial claim submission and paid according to the revised CPT code assigned. DOM never approved this ER leveling policy, however, and as a result many ER claims were underpaid relative to approved billing standards.

As a result of this, CY 2019 encounter data reflects lower ER payment patterns than we anticipate for SFY 2022. Impacted encounters were identified using a summary of the ER leveling policy provided by the relevant CCO, which we reviewed at a high-level for reasonability. We added back the total amount of the reduced payments (approximately \$1.2 million in CY 2019) in row (h) of Exhibit 1A.

Third Party Liability Recoveries

DOM provided Milliman with a summary of recoveries for third party liability (TPL) payments related to claims incurred in CY 2019. These recoveries were collected by DOM and not reflected in CY 2019 base data. We assume the CCOs will be able to avoid paying or recover these additional amounts for claims incurred in SFY 2022, and removed the recovered amounts from the CY 2019 base data. We removed the TPL amounts as a percentage of total paid claims across all rate cells and categories of service from the CY 2019 base data. Across all rate cells, these TPL recoveries amounted to a 0.1% reduction to CY 2019 base data.

This adjustment is shown in Exhibit 1A in row (i).

5% Assessment - Provider Adjustment

During the development of SFY 2019 capitation rates, DOM learned that CCOs were not applying the 5% assessment on non-inpatient services consistently with DOM's expectations. DOM and Milliman worked closely with each CCO to identify the services and provider types to which the 5% assessment historically had been applied (or since had encounter data resubmitted to reflect recoupments of the 5% assessment), and which had not. We used this mapping to identify encounter claims in the CY 2019 base period data where the 5% assessment was not applied, but will be going forward.

Appendix D includes the mapping of each service and provider type into the high-level category of service used for rate development. In addition, Appendix D shows the percentage of base data identified where the 5% assessment was not applied in the CY 2019 encounter data, but should have been. The identified claims were reduced by 5%, resulting in the adjustments across all rate cells at a category of service level shown in Table 7. These adjustments align CY 2019 encounters for all CCOs and all non-outpatient services with how the 5% assessment should have been applied.

An adjustment of 1.000 in Table 7 indicates that no change in provider reimbursement between the base period data and rating period is expected as a result of implementing the 5% provider assessment, whereas an adjustment of 0.950 would indicate that the 5% provider assessment is applicable to all services within the category of service, but the assessment was not applied in the base period encounter data.

Table 7 Mississippi Division of Medicaid 5% Assessment Adjustment by Category of Service	
Category of Service	5% Assessment Adjustment
Inpatient Hospital Services	1.000
Outpatient Hospital Services	0.998
Physician Services	0.993
Drug Services	1.000
Dental Services	0.987
Other Services	0.989
Total	0.997

Note, an adjustment of less than 1.000 is appropriate for outpatient hospital services, even though those services are exempt from the provider assessment effective July 1, 2018. The CCOs did not apply the assessment to certain services grouped into the outpatient hospital category of service that are reimbursed outside of the APC system, such as ambulatory surgical centers, during the base period and will have the 5% provider assessment applied in the contract period. Therefore, we apply an adjustment to rates in this report to reflect the application of the assessment to those services.

The adjustment was calculated separately by rate cell, reflecting the mix of services and the applicability of the 5% provider assessment specific to the given population.

A separate adjustment will be applied in Section IV to reflect the removal of the 5% assessment from all providers in SFY 2022.

The inclusion of the 5% assessment on services not previously receiving the assessment is shown in row (j) in Exhibit 1A.

[340B Pharmacy Pricing Adjustment](#)

In CY 2019, some pharmacy claims dispensed by 340B-eligible providers were priced at an amount greater than the customary lesser-of pricing methodology used by the Medicaid program. This overpricing totaled approximately \$175,000 in CY 2019.

These costs were removed in row (k) of Exhibit 1A.

[IMD \(Institution for Mental Disease\) Stays Beyond 15 Days](#)

Per CMS regulations, services rendered at an IMD beyond 15 days in a given month for individuals aged 21 to 64 cannot be covered by Medicaid. CMS requires all non-covered IMD claims incurred by members and the enrollment records for those same months be removed from base data. The enrollment shown in row (a) of Exhibit 1A reflects the removal of these member months. An additional adjustment was made to remove claims for these members in the impacted months, which totaled approximately \$86,000, from the CY 2019 encounter data.

This adjustment is shown in row (l) of Exhibit 1A.

[IMD Unit Cost Adjustment](#)

Some IMD stays for 15 days or fewer for individuals aged 21 to 64 will be covered under MississippiCAN effective July 1, 2019. We adjusted the unit cost for similar claims in the CY 2019 experience to use DOM's fee schedule for these services. These unit cost adjustments resulted in a cost increase of approximately \$71,000 in total.

This adjustment is shown in row (m) of Exhibit 1A.

[SSI Children Formerly Moved to FFS Due to PRTF Stay](#)

Beginning in October 2018, DOM moved certain SSI children from COE 001 to COE 005 due to a PRTF stay. In SFY 2022, these members will remain in COE 001 during their PRTF stay, and thus MississippiCAN CCOs will be responsible for expenses incurred during these stays.

We reviewed the CY 2019 data and found 22 members totaling 51 member months which were moved to COE 005. The enrollment shown in row (a) of Exhibit 1A reflects the inclusion of these member months. An additional adjustment was made to add claims for these members in the impacted months to the Non-Newborn SSI / Disabled rate cell, which totaled approximately \$760,000, from the CY 2019 FFS data.

This adjustment is shown in row (n) of Exhibit 1A.

[Drug Services Rebate Adjustment](#)

An adjustment was made to pharmacy claims to reflect the average rebate collected by the CCOs in CY 2019 and not reflected in encounter data. Rebate costs were summarized by rate cell from the financial reporting. These rebates were then converted to a percentage of base period pharmacy costs and applied as a reduction to base period encounter pharmacy claims data at the regional level.

This adjustment is shown in Exhibit 1A in row (o).

[Missing Data Adjustment](#)

A separate adjustment was made to account for payments made by the CCOs that are not yet submitted to the encounter system or were denied due to a known issue with edits in the MMIS system. These claim amounts are not

included in the detailed encounter data after the processing outlined in Appendix B.

Each CCO provided separate financial reporting and claim extracts to support and validate the amounts reported for claims not appearing in encounters. Milliman also performed a detailed review of the extracts to line the data up against the encounter data and remove any claims already included in the processed encounter data. The detailed claims extracts provided by the CCOs included splits by region and rate cell, which were used to allocate missing data on Exhibit 1A.

Overall, the base data is increased 0.03% on a PMPM basis for missing data. The aggregate adjustment for all missing data described above is shown in Exhibit 1A in row (p).

IBNR Adjustment

The adjustment for IBNR claims as of April 30, 2020 uses the best estimate IBNR claims provided by each of the CCOs in their financial reporting. We performed the following high-level reasonability checks to validate these estimates:

- Data, including IBNR estimates, was reported on a quarterly basis by each CCO. We reviewed the reported IBNR by quarter to determine that there was a reasonable pattern throughout the year (i.e., IBNR amounts held for Q1 2019 were significantly lower than Q4 2019).
- IBNR estimates among the CCOs were reviewed to validate that they were approximately the same as a percentage of total claims, where appropriate.
- IBNR estimates by category of service are approximately the same as a percentage of total claims as IBNR adjustments applied to the MississippiCAN data in prior years after accounting for differences in runout period between years.

This adjustment is shown in Exhibit 1A in row (q).

Adjusted CY 2019 PMPM Costs

Total 2019 base period PMPM costs by rate cell are shown in the final row of Exhibit 1A.

Step 2: Summarize CY 2018 Data (if Applicable)

For smaller MississippiCAN populations that were not credible based on CY 2019 experience alone (using a threshold of 150,000 member months), we used two years of base period data. These rate cells are the Foster Care, Breast and Cervical Cancer, Pregnant Women (including related delivery costs), SSI / Disabled Newborn, Non-SSI Newborns 0 to 2 Months, and MYPAC rate cells. The development of the CY 2018 base data for the MYPAC rate cell from FFS data is described in Step 3 below.

As the second year of base period data, we used restated CY 2018 encounter and eligibility data and applied similar adjustments from the SFY 2021 rates for program changes and trend between CY 2018 and CY 2019 to put the experience on a comparable basis to the CY 2019 base period data.

Row (a) of Exhibit 1B includes the CY 2018 member months summarized from the detailed Medicaid eligibility data. As noted above, the delivery components of the Pregnant Women rate cells use member months for all members in the underlying rate cell rather than delivery counts. The counts of deliveries are included for informational purposes as a footnote in Exhibit 1B.

Row (b) of Exhibit 1B includes the CY 2018 total service costs from the encounter data. This data has been validated using the same process described above for the CY 2019 encounter data.

Row (c) converts the total service costs to a PMPM basis.

Rows (d) through (k) of Exhibit 1B replicate the adjustments made to CY 2018 base data used for SFY 2021 capitation rates. The row labeled "Subtotal: CY 2018 Adjusted Costs" in Exhibit 1B shows adjusted CY 2018 base data costs.

Factors in rows (l) through (u) of Exhibit 1B further adjust CY 2018 costs to a CY 2019 basis. All adjustments are described below.

Non-Covered Services

The value of expanded services beyond Mississippi Medicaid limits offered to plan members that were not state plan covered services during the base data period are excluded from the base data. Service limits do not apply to the children rate cells and, thus, base period costs were not adjusted for these members. The costs of expanded services were excluded from paid claims in CCO financial reporting. These services are equivalent to approximately 0.5% of total reported MississippiCAN CY 2018 service costs. Corresponding amounts were removed from the encounter data, as reported at the rate cell and region level by the CCOs.

For the purposes of this adjustment, we removed services that were enhanced relative to the state plan effective for CY 2018. We used the value of these services as reported by the CCOs in their CY 2018 financial templates, which were validated similarly to the CY 2019 financial templates as part of SFY 2021 capitation rate development. During CY 2019, some of these expanded services were incorporated into the state plan covered services. The expansion of these services is reflected as a separate program change below on Exhibit 1B (to put these services on a CY 2019 basis) and coverage changes from CY 2019 to SFY 2022 are accounted for in Section IV below.

This adjustment is shown in Exhibit 1B in row (d).

Drug Services Rebate Adjustment

An adjustment was made to pharmacy claims to reflect the average rebate collected by the CCOs in CY 2018 and not reflected in encounter data. Rebate costs were summarized by rate cell from the financial reporting. These rebates were then converted to a percentage of base period pharmacy costs and applied as a reduction to base period encounter pharmacy claims data at the regional and rate cell level.

This adjustment is shown in Exhibit 1B in row (e).

Provider Reimbursement Adjustment

An adjustment was made to physician encounters to reflect the total provider settlements collected by CCOs in CY 2018 and not reflected in the encounter data. These costs were provided in the CCO's CY 2018 financial reporting and converted to a percentage of base period physician costs and allocated across rate cell and region. These adjustments totaled approximately \$3.1 million in reduced CY 2018 physician expenses.

We similarly adjusted physician encounters by rate cell for enhanced payments paid by CCOs to primary care providers outside the encounter system in CY 2018. These claims totaled approximately \$4.4 million during CY 2018.

Both adjustments netted to approximately a \$1.3 million increase in costs not reflected in CY 2018 encounters. The combined adjustment is shown on Exhibit 1B in row (f).

HPE Newborn Adjustment

Prior to 2019, hospital presumptive eligibility (HPE) newborns were covered by DOM temporarily (up to two months) until they were enrolled with a CCO. DOM paid for these members under FFS until they were enrolled with a CCO and then collected a recoupment from the CCO for these costs. This recoupment was paid outside of the encounter system. These costs totaled approximately \$700,000 in 2018, split across the SSI / Disabled Newborn and Non-SSI Newborns 0 to 2 Months rate cells. Services for these newborns were identified using a list of impacted newborns and enrollment months provided by DOM. DOM changed how claims for these members are processed, so this recoupment is reflected in the encounter system in the CY 2019 data developed in Step 1.

This adjustment is shown on Exhibit 1B in row (g).

IBNR Adjustment

During our review of CY 2018 IBNR estimates provided by the CCOs, we determined IBNR estimates provided by one

CCO may be lower than expected due to the potential inclusion of provider settlement amounts in IBNR estimates. We used estimates of IBNR as a percentage of reported costs for the other CCO in operation for all of CY 2018 to revise the IBNR estimate for the impacted CCO.

This adjustment is shown in Exhibit 1B in row (h).

5% Assessment - Provider Adjustment

As described in Step 1, some payments to providers by CCOs did not historically reflect the 5% assessment consistently with DOM's payment methodology. We applied a similar methodology to that applied in Step 1 to develop adjustments to reflect the overpayment of claims due to not applying the 5% assessment for CY 2018 claims, as shown in Table 8. These adjustments align CY 2018 encounters for all CCOs and all non-outpatient services with how the 5% assessment should have been applied. An adjustment will be applied in Section IV to reflect the removal of the 5% assessment in SFY 2022.

Table 8 Mississippi Division of Medicaid 5% Assessment Adjustment by Category of Service	
Category of Service	5% Assessment Adjustment
Inpatient Hospital Services	1.000
Outpatient Hospital Services	0.996
Physician Services	0.984
Drug Services	1.000
Dental Services	0.961
Other Services	0.979
Total	0.992

The inclusion of the 5% assessment on services not previously receiving the assessment is shown in row (i) in Exhibit 1B.

5% Assessment - OPPS Adjustment

Based on discussions with the CCOs, we determined that some hospital outpatient spend during the first half of 2018 did not correctly reflect the application of the 5% assessment. We developed an adjustment to dampen these overpayments to 95% of the actual payment amounts, consistent with how these claims should have been paid.

Senate Bill 2836, signed into law April 12, 2018, "Exempts outpatient services from the 5% rate reduction established in Miss. Code Ann. § 43-13-117 (B)." As a result, the 5% assessment applied to hospital outpatient services will be removed. We determined that CCOs correctly implemented this exemption from July to December 2018, so no additional adjustments were needed for that time period.

The adjustment developed for January to June 2018 is shown in row (j) of Exhibit 1B.

Third Party Liability Recoveries

As described above, DOM provided Milliman with a summary of TPL recoveries for claims incurred in CY 2019 recovered by DOM outside the encounter system. Due to a lack of detailed TPL recovery data for CY 2018, we assume a comparable amount of the CY 2018 base data could be recovered on a percentage of paid claims basis. We reduced the CY 2018 base data to reflect TPL payments expected to be recovered or avoided by the CCOs in SFY 2022.

This adjustment is shown in Exhibit 1B in row (k).

CY 2018 to CY 2019 Trends

Tables 9 and 10 show the annual utilization and unit cost trends applied to the CY 2018 adjusted experience data to put it on a CY 2019 basis. The CY 2018 experience is trended from the base period midpoint, July 1, 2018, to the midpoint of the second year of base data, July 1, 2019. These trends are consistent with trends used for SFY 2021 rate setting.

The overall adjustment for the given months of trend are shown in Exhibit 1B in rows (l) and (m).

Table 9
Mississippi Division of Medicaid
CY 2018 to CY 2019 Utilization and Unit Cost Trends

COS	Annualized Utilization Trend				Annualized Unit Cost Trend		
	SSI	Adults	Children	Delivery	MYPAC	Excluding MYPAC	MYPAC
Inpatient Hospital	3.50%	1.50%	3.50%	1.00%	3.50%	0.00%	0.00%
Outpatient Hospital	3.00%	1.00%	1.00%	1.00%	1.00%	0.98%	0.98%
Physician	3.50%	0.00%	6.50%	1.00%	0.24%	0.12%	0.00%
Dental	0.00%	0.00%	0.00%	1.00%	0.00%	0.00%	0.00%
Other	3.50%	0.00%	6.50%	1.00%	6.50%	0.12%	0.12%

Table 10
Mississippi Division of Medicaid
Pharmacy Trends for CY 2018 to CY 2019

	SSI	MA	Children	Delivery
Annualized Utilization Trend	-0.50%	-0.50%	3.00%	1.00%
Annualized Unit Cost Trend	10.00%	9.50%	0.50%	9.50%

[PRTF Services Adjustment](#)

Historically, costs associated with member stays at psychiatric residential treatment facilities (PRTFs) were carved out of the MississippiCAN program and covered under FFS. Members receiving these services maintained enrollment in MississippiCAN during their stay at a PRTF to allow for better coordination of care when members were discharged from a PRTF. Effective October 1, 2018, services received at a PRTF are covered under MississippiCAN, rather than under FFS. Thus, CY 2018 base data contains only three months of PRTF expenses, while CY 2019 base data contains a full year PRTF expenses.

Row (n) on Exhibit 1B adds nine months of PRTF expenses from FFS to CY 2018 base data to put it on the same basis as CY 2019 costs.

[Preferred Drug List \(PDL\) Revisions](#)

Major updates are made to the state PDL annually and take effect on January 1 of each year. We estimated the impact of these changes using detailed modeling provided by Change Healthcare, who is contracted by DOM to regularly update and maintain the state PDL. The modeling provided by Change Healthcare included drug level analyses of expected utilization and cost shifts due to updates to the PDL on January 1, 2019, for the entirety of the Mississippi Medicaid program. We applied the change in allowed costs on a percentage basis by therapeutic class to MississippiCAN encounter data to develop program specific impacts of PDL revisions. Table 11 shows the estimated impact of PDL revisions. In our reliance on the PDL modeling performed by Change Healthcare we reviewed the output of the models for reasonableness, but did not audit their analyses.

Table 11
Mississippi Division of Medicaid
PDL Adjustment

Rate Cell Grouping	2018 to 2019
SSI	0.989
Adults	0.998
Children	1.003
Deliveries	0.999

The adjustment for CY 2018 to CY 2019 PDL revisions is shown in column (o) of Exhibit 1B.

Increase to Medicaid-Covered Service Limits

Effective January 1, 2019, the physician visit limit currently in place for certain adult populations was increased from 12 visits to 16 visits. CY 2019 base data thus includes the coverage of up to 16 physician visit per month, while CY 2018 base data only includes the coverage of up to 12 physician visits per month.

As part of their CY 2018 financial reporting, each CCO reported the cost of physician visits 13 through 16. Row (p) on Exhibit 1B adds the cost of these visits to CY 2018 base data to put it on the same basis as CY 2019 costs.

Effective July 1, 2019, the home health limit for certain adult populations was increased from 25 to 36 visits per year and the pharmacy script limit per member per month was increased from five to six scripts. As a result, CY 2019 base data contains half a year with these increased service limits, while CY 2018 base data excludes these services entirely.

As part of their CY 2018 financial reporting, each CCOs reported the cost of the sixth pharmacy script prescribed each quarter and the cost of annual home health visits 26 through 36. Rows (q) and (r) on Exhibit 1B, respectively, add the cost of six months of these service increases to CY 2018 base data to put it on the same basis as CY 2019 costs.

Service limits do not apply to the children rate cells and no adjustment was applied to these rate cells.

OP Dental Reimbursement Change

Effective July 1, 2019, a multiple discounting policy applies to dental procedures billed on a hospital outpatient claim to price the highest allowed dental procedure at 100% of the allowed amount or published fee and to price all subsequent dental procedures at 25% of the allowed amount or published fee. CY 2019 base data contains half a year with this dental reimbursement change, while CY 2018 base data contains none of this change.

We used simulations provided by Conduent estimating the impact on outpatient dental claims to be a decrease of 58.1% from CY 2018 to July 1, 2021 as a result of this reimbursement change. This reduction was applied to only outpatient claims related to dental services. The resulting adjustment applied to all outpatient claims varies by rate cell according to the mix of dental vs. other services in the outpatient service category.

Row (s) on Exhibit 1B applies this adjustment to six months of CY 2018 base data to put it on the same basis as CY 2019 costs.

NET Reimbursement Adjustment

Beginning in CY 2018, one CCO used a subcapitated vendor for NET services with considerably higher experience than the vendors used by other CCOs. In August 2019, that CCO switched to a different vendor with experience in line with that of other CCOs. As a result, CY 2019 base data contains five months of experience that reflect the lower cost for NET services that we anticipate going forward, while CY 2018 base data contains increased costs for the entire period.

We used NET encounter data from the other CCOs to remove the impact of this higher cost vendor from the base data. Row (t) on Exhibit 1B adjusts five months of CY 2018 base data to put it on the same basis as CY 2019 costs.

GME Carve Out

Effective October 1, 2019, all GME payments will be made through FFS rather than being paid by the CCOs per discharge for MississippiCAN utilization at applicable hospitals. As a result, CY 2019 base data contains three months of experience that reflect the carve out of GME services, while CY 2018 base data contains GME expenses for the entire period.

DOM provided a split of historical GME payments made by the CCOs on a SFY basis, which we reviewed for reasonability. We took the average of SFY 2018 and SFY 2019 CCO GME payments to estimate the GME amount paid in CY 2018 of \$23,448,991. Lastly, we compared the estimated CY 2018 GME to the CY 2018 inpatient costs to develop the adjustment to apply to inpatient services to remove GME from the capitation rates, as shown in Table 12.

Table 12 Mississippi Division of Medicaid GME Removal Adjustment Development		
CY 2018 GME	CY 2018 IP	GME Adjustment
\$23,448,991	\$472,689,188	0.950

Data for GME payments at a rate cell level was not available to calculate the adjustment at a more granular level. Since the adjustment is only applied to inpatient services, it will, however, have a bigger impact on rate cells with a higher proportion of inpatient services.

Row (u) on Exhibit 1B removes GME expenses from three months of CY 2018 base data to put it on the same basis as CY 2019 costs.

IMD Adjustments

Per CMS regulations, services rendered at an IMD beyond 15 days for individuals aged 21 to 64 cannot be covered by Medicaid. Additionally, Some IMD stays for 15 days or fewer for individuals aged 21 to 64 will be covered under MississippiCAN effective July 1, 2019. No applicable claims of either type occurred during CY 2018 for rate cells using two years of data in SFY 2022 rates and, thus, no IMD adjustments were made on Exhibit 1B.

Adjusted CY 2018 PMPM Costs

Total CY 2018 base period PMPM costs on a CY 2019 basis by rate cell (if applicable) are shown in the final row of Exhibit 1B.

Step 3: Summarize CY 2018 FFS and Encounter Data for MYPAC Members

Since the MYPAC rate cell is not credible based on CY 2019 experience alone (using a threshold of 150,000 member months), we used two years of base period data.

From January 2018 through September 2018, MYPAC members were enrolled in FFS Medicaid. Effective October 1, 2018, members with a SED waiver lock-in code were transitioned to the MississippiCAN program. Upon enrollment in MississippiCAN the count of MYPAC members significantly decreased from September 2018 to October 2018 and then rebounded to historical FFS levels in 2019. Therefore, the Q4 2018 encounter data may not be representative of the acuity level of anticipated SFY 2022 MYPAC members. Due to data and credibility concerns for the encounter data for Q4 2018, we elected to continue to use FFS data for Q1 to Q3 2018 and CY 2019 encounter data as the base period for SFY 2022 MYPAC rates.

Prior to October 2018, some MYPAC rate cell eligible members were enrolled in MississippiCAN for part of a month before receiving a SED lock-in code. For these members, some incurred claims during that month may be reported as encounters from the CCOs. As these encounters represent valid claims for these individuals, we include these encounters with FFS data when developing the MYPAC base data.

As the second year of base period data, we used the same CY 2018 FFS, encounter, and eligibility data used for SFY 2021 capitation rates and applied similar adjustments from the SFY 2021 rates for program changes and trend between CY 2018 and CY 2019 to put the experience on a comparable basis to the CY 2019 base period data.

Row (a) of Exhibit 1C includes the Q1 to Q3 2018 MYPAC member months included in capitation rate development.

Row (b) of Exhibit 1C includes the Q1 to Q3 2018 total claim costs from the FFS and encounter data.

Row (c) converts the total costs to a PMPM basis.

Rows (d) through (k) of Exhibit 1C replicate the adjustments made to CY 2018 base data used for SFY 2021 capitation rates. The row labeled "Subtotal: CY 2018 Adjusted Costs" in Exhibit 1C restates CY 2018 base data costs. Factors in rows (l) through (q) of Exhibit 1C further adjust CY 2018 costs to a CY 2019 basis. All adjustments are described below.

[Drug Services Rebate Adjustment](#)

An adjustment was made to pharmacy claims to reflect the average rebate collected by the CCOs. Since no experience was available to develop an assumption specific to the MYPAC rate cell, we used the regional average rebate across all MississippiCAN rate cells from the financial reporting.

This adjustment is shown in Exhibit 1C row (d).

[IBNR Adjustment](#)

For Q1 to Q3 2018 the encounter data includes runout through June 30, 2019. The adjustment for IBNR claims uses completion factors developed based on DOM's historical claims payment patterns for MYPAC children.

We used the Milliman CREW® model, which employs the classical chain-ladder approach by building claim lag triangles by category of service, to develop the IBNR adjustments separately for inpatient, pharmacy, and all other services. We reviewed all historical payment patterns and results for outliers and adjusted when appropriate.

We calculated these adjustments on a statewide basis. Due to the limited number of members, more granular splits would likely generate variable and non-credible results.

This adjustment is shown in Exhibit 1C in row (e).

[Third Party Liability Recoveries](#)

DOM provided us with a summary of the aggregate third party liability (TPL) recoveries that are not reflected in the claims data. We summarized paid claims data by state fiscal year (SFY) for all Mississippi Medicaid FFS programs to develop a TPL adjustment factor, which averaged 0.80% in the most recent time periods. We assume that the CCOs will be at least as aggressive in capturing TPL recoveries as occurs in FFS, since they retain financial incentive to do so. Therefore, we used a downward adjustment of 0.80% to allowed costs in our capitation rate calculation.

This adjustment is shown in Exhibit 1C in row (f).

[Q1 to Q3 2018 to CY 2018 Trends](#)

As the data used for the MYPAC rate cell is for Q1 to Q3 2018, we applied an additional 1.5 months of trend to adjust the trend from the midpoint in the data (May 15, 2018) to the midpoint of CY 2018 (July 1, 2018). Table 13 shows the annualized utilization and unit cost trends applied for this adjustment.

Table 13 Mississippi Division of Medicaid Additional Annualized MYPAC Trends		
Category of Service	Utilization Trend	Charge Trend
Inpatient Hospital	3.50%	0.00%
Outpatient Hospital	1.00%	3.26%
Physician	6.75%	0.00%
Drug	1.88%	-0.84%
Dental	0.00%	0.00%
Other	6.75%	0.00%

The overall adjustment for the given months of trend are shown in Exhibit 1C in rows (g) and (h).

[5% Assessment - OPPS Adjustment](#)

As discussed in Step 1 above, as of July 1, 2018, the 5% assessment was no longer applicable to outpatient hospital claims. The MYPAC base data includes six months of 2018 outpatient hospital data paid at the 95% level, and three months paid at the 100% level. The entire year of 2018 data contained three additional months paid at the 100% level.

The adjustment in row (i) of Exhibit 1C reflects the payment level that would have been present over the full CY 2018 compared to the nine months of data in the base data.

PRTF Services Adjustment

As noted in Step 2 above, services received at a PRTF are covered under MississippiCAN, rather than FFS, effective October 1, 2018. While the MYPAC rate cell uses FFS data for January to September 2018, claims for PRTF services were excluded from the underlying base data to be consistent with the MississippiCAN covered services for this time period. To put the Q1 to Q3 2018 experience on a CY 2018 basis it is appropriate to include PRTF costs for October to December 2018 once these services were moved to MississippiCAN. Thus, we adjusted the MYPAC data to include three months of PRTF services, estimated using actual PRTF services costs from January to September 2018.

This adjustment is seen in row (j) of Exhibit 1C.

MYPAC Seasonality Adjustment

The Q1 to Q3 2018 base data for the MYPAC rate cell includes claims for nine months, whereas the capitation rate will be effective for the entire SFY 2022 time period. Upon review of SFY 2017 and SFY 2018 MYPAC experience, we determined that MYPAC costs on a PMPM basis incurred throughout an entire SFY were approximately 1.1% lower than MYPAC costs incurred from January to September (after adjusting for trend and program changes). Table 14 displays the seasonal PMPM patterns by quarter for the MYPAC population for SFY 2017 and SFY 2018. Similar patterns were observed separately for each SFY. To calculate the seasonality to apply for Q4 the two SFYs were blended together to increase credibility.

Table 14 Mississippi Division of Medicaid MYPAC Seasonality Factor Development MYPAC Costs - SFY 2017 and SFY 2018			
Step	Time Period	Member Months	Average PMPM
<i>a</i>	Q1	3,424	\$3,474.59
<i>b</i>	Q2	3,559	\$3,412.12
<i>c</i>	Q3	3,321	\$3,540.27
<i>d</i>	Q4	3,319	\$3,311.88
<i>e = member month-weighted total of a through d</i>	All	13,623	\$3,434.64
<i>f = member month-weighted total of a through c</i>	All Excluding Q4	10,304	\$3,474.18
<i>g = e / f</i>	Seasonality Factor		0.989

The seasonality adjustment is applied on row (k) of Exhibit 1C. Due to variance in seasonality factors year to year by category of service, the MYPAC seasonality factor was applied in aggregate across all service categories.

CY 2018 to CY 2019 Trends

Tables 9 and 10 above show the annual utilization and unit cost trends applied to the CY 2018 adjusted experience data to put it on a CY 2019 basis. The CY 2018 experience is trended from the base period midpoint, July 1, 2018, to the midpoint of the second year of base data, July 1, 2019.

The overall adjustment of the given months of trend are shown in Exhibit 1C in rows (l) and (m).

PRTF Services Adjustment

As described in Step 2 above, costs associated with member stays at psychiatric residential treatment facilities (PRTFs) were historically carved out of the MississippiCAN program and covered under FFS. Effective October 1, 2018, services received at a PRTF are covered under MississippiCAN, rather than under FFS.

Row (n) on Exhibit 1C adds nine months of FFS PRTF expenses to CY 2018 base data to put it on the same basis as CY 2019 costs.

Preferred Drug List Revisions

Major updates are made to the state PDL annually and take effect on January 1 of each year. As described in Step 2 above, we used a drug-level analysis from Change Healthcare to estimate expected utilization and cost shifts due to updates to the PDL on January 1, 2019 for the entirety of the Mississippi Medicaid program.

The adjustment for CY 2018 to CY 2019 PDL revisions is shown in column (o) of Exhibit 1C.

OP Dental Reimbursement Change

As described in Step 2 above, a change in dental reimbursement policy effective July 1, 2019, resulted in a significant decrease to the cost of outpatient dental claims. As a result, CY 2019 base data contains half a year with this dental reimbursement change, while CY 2018 base data does not include this reimbursement change.

Row (p) on Exhibit 1C applies this adjustment to six months of CY 2018 base data to put it on the same basis as CY 2019 costs.

GME Carve Out

As described in Step 2 above, all GME payments will be made through FFS rather than being paid by the CCOs per discharge for MississippiCAN utilization at applicable hospitals effective October 1, 2019. As a result, CY 2019 base data contains three months of experience that reflect the exclusion of GME services, while CY 2018 base data contains GME expenses for the entire period.

Row (q) on Exhibit 1C removes GME expenses from three months of CY 2018 base data to put it on the same basis as CY 2019 costs.

Adjusted CY 2018 PMPM Costs

Total CY 2018 base period PMPM costs for the MYPAC rate cell are shown in the bottom row of Exhibit 1C.

Step 4: Blend CY 2018 and CY 2019 Data (if Applicable)

For rate cells using two years of base period data, the final adjusted CY 2019 PMPM cost from Exhibit 1A is blended with the final adjusted CY 2018 PMPM cost from Exhibit 1B (Non-MYPAC) or 1C (MYPAC) based on member months within each time period.

This final base period PMPM is shown in Exhibit 2A in row (a).

IV. PROJECTED SFY 2022 CAPITATION RATES

Many adjustments must be applied to the base period data to develop SFY 2022 capitation rates. This section describes the adjustments applied to the base period data described in Section III to develop SFY 2022 capitation rates. These adjustments are applied in eight steps:

1. Apply prospective adjustments for utilization and cost trends, population changes, program changes, and reimbursement changes to develop the estimated cost of medical services for SFY 2022.
2. Include an allowance for CCO non-service expenses.
3. Adjust rates to reflect differences in geographic area by rate cell.
4. Apply quality withhold.
5. Add MHAP fee schedule adjustment.
6. Adjust for CCO specific risk scores (if applicable).
7. Retrospectively adjust for directed payments.
8. Calculate risk corridor settlements.

Step 1: Develop SFY 2022 Medical Costs

Starting with the blended base data developed in Section III, we adjust costs to reflect known changes from the base period to SFY 2022. Below, we describe each adjustment shown on Exhibit 2A.

Non-Pharmacy Utilization and Charge Trend

Our general approach to trend development for non-pharmacy categories of service is to consider known recent changes in provider reimbursement, along with historical PMPM trend values. We then develop utilization / service mix trends that produce targeted PMPM trends. We utilize this approach because it is frequently difficult to directly measure changes in utilization for services other than inpatient hospital and pharmacy over time due to differences in counting utilization “units.”

Table 15 shows the annual utilization trends and Table 16 shows the annual unit cost trends applied to the adjusted base period data for all services except pharmacy services to put the data on a SFY 2022 basis. Table 20 shows the annual utilization and unit cost trends applied to the adjusted base period data for drug services. The experience is trended from the base period midpoint of July 1, 2019 to the January 1, 2022 midpoint of the projection period (30 months).

We note the utilization trends in Table 15 apply for CY 2020 to SFY 2022. For CY 2019 to CY 2020, a 0% utilization trend was applied to all services for all populations. We applied 0% utilization trend from CY 2019 to CY 2020 to reflect utilization of services returning to pre-pandemic levels. As noted above, there is a wide range of possible scenarios for the impact of COVID-19 on SFY 2022. Maintaining utilization at pre-pandemic levels for CY 2020 and projecting prospective utilization trend from CY 2020 to SFY 2022 strikes a balance between assuming an increase in utilization due to pent-up demand (assuming a full return to normal) and assuming the decreased utilization seen in CY 2020 persists through SFY 2022 (assuming additional waves of infections and / or permanent changes to utilization patterns). We have insufficient information to suggest which is more likely, and are therefore assuming no increase in secular utilization between CY 2019 and CY 2020.

For the MYPAC rate cell, utilization and unit cost trends for physician services are dampened relative to the trends shown in Tables 15 and 16 for other children rate cells to reflect the high proportion of physician services obtained through the MYPAC facilities, for which flat utilization and unit cost trends were assumed.

Table 15
Mississippi Division of Medicaid
CY 2020 to SFY 2022 Utilization Trends

Annualized Utilization Trend					
COS	SSI	Adults	Children	Delivery	MYPAC
Inpatient Hospital Services	3.00%	-1.00%	3.00%	2.00%	3.00%
Outpatient Hospital Services	2.00%	0.00%	1.00%	1.00%	1.00%
Physician Services	5.00%	0.00%	3.00%	1.00%	3.00%
Dental Services	0.00%	0.00%	0.00%	1.00%	0.00%
Other Services	5.00%	0.00%	3.00%	1.00%	3.00%

Table 16
Mississippi Division of Medicaid
CY 2019 to SFY 2022 Unit Cost Trends

Annualized Unit Cost Trend					
COS	SSI	Adults	Children	Delivery	MYPAC
Inpatient Hospital Services	-0.56%	0.82%	-0.09%	0.82%	-0.09%
Outpatient Hospital Services	-0.31%	0.05%	0.58%	0.05%	0.58%
Physician Services	-0.07%	-0.03%	-0.02%	-0.03%	0.00%
Dental Services	0.00%	0.00%	0.00%	0.00%	0.00%
Other Services	0.80%	0.80%	0.80%	0.80%	0.80%

The development of the trend assumptions in Tables 15 and 16 is described below.

Utilization Trend for Non-Pharmacy Costs

Utilization trend reflects expected changes in:

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

The following data sources were used to develop the PMPM and utilization trend assumptions.

- Encounter data and financial reporting experience for MississippiCAN members was reviewed to analyze PMPM and utilization trends by major service categories from CY 2017 through CY 2019. While we reviewed CY 2020 experience, it was not directly used to select the trend assumptions applied from CY 2020 to SFY 2022.
- Exhibits 8A to 8E include a historical trend summary of PMPM costs from January 2017 through December 2019 for each high-level population type and in total for all of MississippiCAN. This data has been normalized for the following to put it on a consistent basis across time:
 - IBNR from the financial templates was added to the encounter data to review PMPM trends on a completed basis.
 - Estimates of the impact of the following material program or reimbursement changes were removed for the applicable time periods. These changes are accounted for in separate adjustments in this report and, therefore, should not be included in data analyzed for trends.
 - Removal of Zolgensma claims
 - 5% assessment removal for OPPS services
 - Implementation of 5% assessment on non-OPPS services
 - OPPS reimbursement changes not related to the 5% assessment
 - PAD reimbursement changes

- PDL changes
 - AAC pharmacy reimbursement changes
 - PRTF services
 - OP dental reimbursement change
 - GME carve out
 - NET reimbursement adjustment
 - Provider settlements
 - Financial to encounter adjustments
- PMPMs at a rate cell level were aggregated using December 2019 membership to composite rate cells into higher level population groupings and MississippiCAN in total. This removes the impact of membership mix changes across rate cells over time on the aggregate PMPMs.
 - Costs were adjusted for the MA Adult, MA Children, and Quasi-CHIP rate cells to remove the impact of average acuity changes resulting from membership changes.

As shown in Table 17, the PMPM trend on a normalized basis was 0.5% from CY 2017 to CY 2018 and 4.5% from CY 2018 to CY 2019.

Table 17 Mississippi Division of Medicaid MississippiCAN Annualized PMPM Trends January 2017 to December 2019		
Category of Service	CY 2017 to CY 2018	CY 2018 to CY 2019
Inpatient Hospital	3.3%	6.5%
Outpatient Hospital	-0.5%	1.9%
Physician	0.8%	5.7%
Dental	-8.9%	-2.3%
Other	1.0%	6.2%
Non-Pharmacy Total	0.5%	4.5%

Observed non-pharmacy trends on a normalized basis vary among the high-level populations, as shown in Table 18. Therefore, we varied our utilization trends by these populations.

Table 18 MississippiCAN Capitation Rates MississippiCAN Annualized Non-Pharmacy PMPM Trends January 2017 to December 2019		
Population	CY 2017 to CY 2018	CY 2018 to CY 2019
SSI	2.1%	5.6%
Adults	-4.1%	-1.0%
Children	0.7%	5.6%
Deliveries ¹	0.4%	2.2%
Total	0.5%	4.5%

¹ Delivery trends shown per delivery.

Given the impact of COVID-19 on recent plan experience we were not able to review Medical loss ratio (MLR) reports or emerging experience for the first three quarters of CY 2020, as we have done for prior rating setting periods.

- We implemented 0% utilization trends from CY 2019 to CY 2020 to reflect the impact of COVID-19. The above methodology was used to inform the utilization trends applied from CY 2020 to SFY 2022. This 0% trend from CY 2019 to CY 2020 is reflected in the estimated annual projected changes in utilization shown in Table 15 above.

- Experience from similar programs in other states.

The adjustment resulting from these utilization trends is shown in Exhibit 2A in row (b).

Unit Charge Trends for Non-Pharmacy Costs

The hospital inpatient, hospital outpatient, physician, and dental Medicaid FFS fee schedules are updated on July 1 of each year consistent with the following sources. DOM does not mandate provider reimbursement levels other than to require that reimbursement be at least as great as FFS for network providers. We assume that CCO reimbursement levels will move in tandem with changes to FFS reimbursement. Pursuant to SB2799 that was passed into Mississippi law on April 19, 2021, changes in reimbursement after July 1, 2021 will require legislative action. Therefore, no fee schedule changes are assumed for physician, dental, or other services as noted below. However, coverage for new codes and prohibition for billing on discontinued codes is allowed. We assumed the net impact of these latter two issues will be budget neutral, but will reevaluate once data is available and adjust capitation rates if needed. Unless otherwise noted, the fee schedule changes for prior years remained unchanged.

- **Inpatient:** DOM reimburses hospital inpatient claims using an APR-DRG methodology based upon the 3M grouper. Updates, if applicable, are implemented on July 1 of each year. Conduent performed a simulation of changes in the APR-DRG methodology effective July 1, 2021, and estimated reimbursement will remain flat across all rate cells in MississippiCAN and FFS combined. We reviewed Conduent's simulation, but did not audit the results. However, this impact differs by rate cell as shown in Table 16 above and amounts to a 0.43% trend impact across all MississippiCAN rate cells combined as shown in Table 19 below.
- **Outpatient:** DOM reimburses hospital outpatient claims using the Medicare APC methodology and the Jackson area conversion factor. Conduent performed a simulation of changes in the APC methodology effective July 1, 2021 and estimated the resulting reimbursement changes for the MississippiCAN program. This impact differs by rate cell as shown by Table 16 above, but aggregates to a 0.93% trend across all MississippiCAN rate cells combined as shown in Table 19 below.
- **Physician:** DOM formerly reimbursed many physician services as a percentage of Mississippi Medicare fee schedules. For these services, consistent with SB2799, DOM is implementing no changes to reimbursement rates from SFY 2021 to SFY 2022.

The per-encounter FQHC and RHC reimbursement is included in the MississippiCAN capitation rates to provide a steadier cash flow to the RHCs and FQHCs that serve the MississippiCAN population. The CCOs are expected to reimburse FQHCs and RHCs at DOM's per-encounter rates. DOM will monitor the utilization of services at FQHCs and RHCs under MississippiCAN to ensure services are not diverted from FQHCs and RHCs to other providers.

Effective January 1, 2021 a 1.7% rate increase was implemented on FQHC and RHC per-encounter rates. We assumed a similar level of increase for July 1, 2021. In the CY 2019 base period experience approximately 12% of costs in the high-level physician category of service are for FQHCs and RHCs. Table 19 below displays the blended fee schedule changes across all physician services. Combined unit cost trends for physician services provided at FQHCs and RHCs, and those services provided elsewhere are shown in Table 16 above.

- **Dental:** We assume no material change to the dental fee schedule effective July 1, 2021. Dental reimbursement changes as a result of SB2799 are incorporated as a separate adjustment to rates.
- **Other:** No adjustment was made for changes to the fee schedule effective July 1, 2021.

Table 19 includes the historical and projected fee schedule changes assumed for each category of service.

Table 19 Mississippi Division of Medicaid Fee Schedule Changes					
Effective Date	Inpatient	Outpatient	Physician	Dental	Other
7/1/2017	0.10%	1.20%	0.00%	0.00%	0.00%
7/1/2018	0.00%	2.43%	0.00%	0.00%	0.00%
7/1/2019	0.00%	-0.44%	0.00%	0.00%	0.00%
7/1/2020	-0.50%	-0.39%	-0.42%	0.00%	1.88%
7/1/2021	0.43%	0.93%	0.21%	0.00%	0.00%

Row (c) in Exhibit 2A includes the aggregate unit cost adjustment factors from CY 2019 to SFY 2022.

PRTF-Specific Charge Trends

Based on a review of the PRTF per diem payment rates for 2017 to 2020, we estimate an annual 2.0% increase to PRTF reimbursement. Since PRTF stays are excluded from the inpatient charge trend analysis discussed above, that inpatient charge trend should only apply to non-PRTF services.

For each rate cell, we looked at the relative distribution of base period inpatient costs split into PRTF and non-PRTF subcomponents. We trended the PRTF component at a 2% annual trend and the non-PRTF component at the rate discussed above and determined the blended trend across both components. The ratio of this blended inpatient cost trend and the non-PRTF unit cost trend is shown in row (d) of Exhibit 2A.

Prescription Drug Utilization and Unit Cost Trend

We developed pharmacy trends using the following sources:

- **MississippiCAN-Specific Data** – We analyzed March 2017 to February 2020 pharmacy experience for the eligible population and developed utilization and cost summaries by brand and generic drug types for the 25 top therapeutic classes for non-specialty prescriptions, and the 5 top therapeutic classes for specialty prescriptions. We developed cost projections for CY 2018 to SFY 2022 using those summaries, giving consideration for script utilization per 1,000 increases and average script cost increases for brand, generic, and specialty drugs.

Considerations were made when reviewing prescription drug experience for the estimated impacts of changes in annual updates to the state's uniform PDL.

- **Industry Research** – We reviewed recent drug trend reports from PBMs to benchmark the prospective list price and utilization trends used in our detailed modeling of MississippiCAN-specific data. Additionally, we compared the nationwide trends in these PBM reports to recent trends in the MississippiCAN program by calculating the state-specific NADAC trends. These state-specific NADAC trends were estimated by creating a market basket of products from recent MississippiCAN drug encounters. Historical NADAC prices were applied to this fixed market basket to determine the historical unit cost trends for the MississippiCAN program.
- **FDA Drug Approvals** – When developing prospective drug trends, we consider the FDA approval of various new therapies. Some of the therapies we expect to have higher frequency and / or cost include:
 - Adakveo
 - Oxbryta
 - Reblozl
 - Givlaari
 - Vyondys 53
 - Koselugo
 - Trodelvy
 - Sogroya
 - Danyelza
 - Retevmo

However, building explicit additional trend into capitation rates for these products is difficult due to a lack of information on expected pricing and uptake among the various populations. Therefore, we build in modest additional trend to reflect the addition of new approvals for each population. We note the historical experience reviewed in trend development also reflects the impact of FDA approvals that were new during those period.

Based on our analyses, we estimate annualized utilization and unit cost trends from CY 2020 to SFY 2022 shown in Table 20. Difference in aggregate trends by population in Table 20 are due to each population's mix of brand and generic products. The utilization trends shown in Table 20 include the indirect impact of the change in mix of products due to pure utilization trends. Similar to the utilization trends for non-pharmacy services, we assumed a 0% utilization trend from CY 2019 to CY 2020 for pharmacy services. The utilization trends in Table 20 only apply to the CY 2020 to SFY 2022 time period.

Table 20 Mississippi Division of Medicaid Pharmacy Trends for CY 2020 to SFY 2022				
	SSI	Adult	Children	Delivery
Annualized Utilization Trend ¹	1.00%	5.77%	2.78%	1.00%
Annualized Unit Cost Trend ²	6.00%	4.00%	3.50%	4.00%

¹ Utilization trends apply for CY 2020 to SFY 2022. No utilization trend was applied from CY 2019 to CY 2020.

² Unit cost trends apply for CY 2019 to SFY 2021. No unit cost trend was applied after July 1, 2021.

SB2799 stipulates all changes in reimbursement for any service after July 1, 2021 require legislative action. Consequently, DOM is required to freeze the unit cost for pharmacy products at the July 1, 2021 level. New products can be added to pharmacy coverage and discontinued therapies will be prohibited from future billing. We assume the net impact of new and discontinued therapies will be budget neutral, but will evaluate emerging experience and adjust capitation rates if needed. Therefore, the unit cost trends in Table 20 only apply to the CY 2019 to July 1, 2021 time period.

When developing prospective drug trends, no consideration was given for expected brand to generic shifts. These shifts are reflected separately as a change in the state PDL.

Rows (b) and (c) in Exhibit 2A include the aggregate utilization and cost adjustments from CY 2019 to SFY 2022 for the drug services.

Additional information on the development of utilization and unit cost trends is summarized below. Exhibits 9A through 9C show the CY 2019 experience and prospective utilization and unit cost trends applied by therapeutic class at a generic, brand, and specialty level. This exhibit is shown separately by the high-level population groupings: SSI, Adult, and Children.

Unit Cost Trends

The cost per script trends are based on an analysis of historical MississippiCAN data from March 2017 to February 2020 repriced to NADAC plus the Mississippi Medicaid dispensing fees of \$11.29 per script for brand and generic scripts and \$61.14 for specialty scripts. We mapped NADACs from CMS by NDC and analyzed the annual trends using a fixed market basket of drugs from the pharmacy data by population type. Reviewing the trends for a fixed market basket of drugs helps to normalize for PDL changes that have been implemented over time, which are adjusted for separately in the capitation rate development.

Based upon the results of log-normal regressions, the unit cost trends were selected by population grouping and therapeutic class. If results were not informative for a given therapeutic class, the "Other Classes" trend assumption was used. Table 21 displays the aggregated unit cost trend across all therapeutic classes. The specific therapeutic class trends are included in Exhibits 9A through 9C.

Table 21 Mississippi Division of Medicaid Annualized Prospective Unit Cost Pharmacy Trends				
Generic	SSI	Adult	Children	Delivery
Traditional	0.0%	-2.0%	1.0%	-2.0%
Specialty	9.9%	-2.0%	0.0%	-2.0%
Brand				
Traditional	4.4%	4.4%	2.9%	4.4%
Specialty	9.0%	7.1%	9.5%	7.1%

As noted above, DOM is unable to modify the unit cost of products after July 1, 2021 as a requirement of SB2799. Thus, the unit cost trends shown in Table 21 only apply from CY 2019 to July 1, 2021.

Utilization Trends

Similar to the unit cost trends, utilization trends were calculated using log-normal regressions for each population and therapeutic class. Given PDL changes over time, utilization trends were selected at a therapeutic class level in aggregate across brand and generic utilization. If results were not informative for a given therapeutic class, the “Other Classes” trend assumption was used. Table 22 displays the aggregated utilization trend across all therapeutic classes. The specific therapeutic class trends are included in Exhibits 9A through 9C. The utilization trends shown in Table 22 and Exhibits 9A through 9C are for CY 2020 to SFY 2022. No utilization trend was applied for CY 2019 to CY 2020.

Table 22 Mississippi Division of Medicaid Annualized Prospective Utilization Pharmacy Trends				
Generic	SSI	Adult	Children	Delivery
Traditional	-1.1%	-0.6%	1.0%	1.0%
Specialty	3.3%	13.3%	4.8%	1.0%
Brand				
Traditional	2.0%	2.1%	2.5%	1.0%
Specialty	-2.4%	8.7%	6.2%	1.0%

As noted above, an indirect change in costs for pharmacy services is caused by changes in the mix of therapeutic classes induced by the pure utilization trends. This mix component of trends is shown in Table 23. Similar to Table 22, the trends in Table 23 only apply for CY 2020 to SFY 2022. The trends shown in Tables 22 and Table 23 comprise the total utilization trends applied.

Table 23 Mississippi Division of Medicaid Annualized Prospective Utilization Pharmacy Trends – Mix Component				
Generic	SSI	Adult	Children	Delivery
Traditional	0.5%	0.9%	0.6%	0.0%
Specialty	-1.6%	-5.5%	0.1%	0.0%
Brand				
Traditional	0.4%	2.5%	-0.7%	0.0%
Specialty	2.6%	2.4%	1.8%	0.0%

Population, Program, and Reimbursement Methodology Changes

The following adjustments are applied to reflect changes in expected costs due to changes between the base period and rating period.

- Population Changes: Change in the mix of individuals already enrolled in MississippiCAN
- Program Changes: Changes to populations and / or services included in MississippiCAN

- Reimbursement Methodology Changes: Updates to Medicaid FFS reimbursement methodologies (assumes a parallel impact to MississippiCAN reimbursement) or changes in CCO reimbursement

Appendix E summarizes the program, population, and reimbursement changes discussed in this section, the impacted rate cells for each change, and where the change is reflected in the rate development.

At the time of release, the Mississippi state legislative session is ongoing. Consequently, legislative changes impacting the MississippiCAN program in SFY 2022 may be forth coming. Any material impacts will be considered in an updated rate report and certification.

COVID-19 Population Acuity Change

Due to the COVID-19 PHE, CMS increased the Federal match percentage (FMAP) to state Medicaid agencies provided these agencies halted their standard disenrollment procedures, among other requirements. This caused enrollees whom DOM would otherwise disenroll from the MississippiCAN program to remain in the program, as well as new enrollment to Medicaid due to economic conditions. Specifically, the MA Adult, MA Children, and Quasi-CHIP rate cells have experienced considerable increases in membership relative to CY 2019, since the PHE began in January 2020, and we anticipate this enrollment increase will continue into SFY 2022.

Analyses developed for prior MississippiCAN rates have shown population acuity decreases as enrollment increases. Exhibit 7A outlines such an analysis of the relationship between changes in enrollment and member acuity, as measured by raw risk score. Risk scores for MississippiCAN are calculated on a semi-annual basis. For the last four iterations of risk scores prior to the COVID-19 pandemic, we reviewed the differential in risk scores before and after membership changes since the last set of risk scores (enrollment difference of six months).

As shown in Exhibit 7A, for each set of risk scores the risk scores increased as a result of membership changes (generally less costly members exiting the program, or, conversely, lower cost members joining the program). We developed regression models to predict the change in risk score associated with the change in membership for each time period. For our regression models, we assumed a power model of the form

$$(\text{Change in Risk Score}) = A \times (\text{Change in Membership})^B$$

where the variables A and B are estimated constants.

We created two regression models. One model used the experience of the MA Adult rate cell. The second model used the combined experience of the MA Children and Quasi-CHIP rate cells, as these two populations are similar, and the Quasi-CHIP experience is not sufficiently credible to develop a regression model specific to that population. The resulting regression models had R^2 values of 0.67 and 0.54 for the MA Adult and MA Children / Quasi-CHIP rate cells, respectively.

Using these regression models, we predicted the change in risk score from CY 2019 to SFY 2022 beyond normal changes in member acuity in two steps. We first looked at changes in enrollment from CY 2019 to SFY 2021 based on enrollment through February 2021 projected to the end of SFY 2021. We then looked at changes in enrollment from SFY 2021 to SFY 2022, based on projected enrollment through SFY 2022. The development for both these adjustments is shown in Exhibit 7a. Table 24 summarizes the change in acuity for the two time periods. When developing the rate change components shown in Table 2, the CY 2019 to SFY 2021 acuity impact is reflected in the line labeled "COVID-19 Population Acuity Adjustment – CY 2019 to SFY 2021," while the SFY 2021 to SFY 2022 acuity impact is reflected in the "COVID-19 Population Acuity Adjustment – SFY 2021 to SFY 2022" row. Exhibit 7B shows graphs of the historical data underlying our analysis, the fitted regression model, and our estimated acuity adjustment for populations and time periods shown in Table 24.

Table 24 Mississippi Division of Medicaid Summary of COVID-19 Acuity Adjustments			
Rate Cell	CY 2019 to SFY 2021	SFY 2021 to SFY 2022	Total
MA Adult	-7.2%	-3.1%	-10.0%
MA Children / Quasi-CHIP	-2.4%	-1.0%	-3.4%

We estimated future membership assuming the PHE ends in December 2021, consistent with the letter HHS sent to State Governors dated January 22, 2021. During the PHE, where readily identifiable (e.g., individuals aging out of the program eligibility requirements or pregnant women reaching 60 days post-partum), individuals who would have lost normal Medicaid eligibility in the MississippiCAN program were transitioned to FFS for the remainder of the PHE. Beginning July 1, 2021, DOM will additionally resume redeterminations of Medicaid eligibility for all other members in MississippiCAN. From this time through the remainder of the PHE, members who would normally be disenrolled from Medicaid will instead be transitioned to FFS. However, at this time we do not have an estimate of MississippiCAN to FFS transitions. Following the conclusion of SFY 2022, we will retrospectively adjust rates using the acuity model described above using actual SFY 2022 MississippiCAN enrollment, if materially different than the assumed membership underlying the acuity adjustment.

After the PHE concludes, members deemed no longer eligible for Medicaid will be fully disenrolled from Medicaid. These redeterminations will take time to perform and, therefore, elevated levels of enrollment are expected to persist beyond the PHE end date. Exhibit 7C shows the historical and projected enrollment underlying the acuity adjustments.

The combined population acuity adjustment is shown in Exhibit 2A in row (e).

[Addition of ASD Services](#)

Starting in January 2017, MississippiCAN began offering additional screening and treatment services for MississippiCAN members with autism spectrum disorder (ASD). The ramp up of these services has been slow while a provider network is established to handle the additional services. To help establish the necessary providers for these services, in SFY 2020, a §438.6(c) directed payment was first introduced in MississippiCAN capitation rates to establish a minimum fee schedule on ASD services effective July 1, 2019. In addition, DOM updated the Medicaid FFS fee schedule for certain ASD services effective July 1, 2019.

ASD expenses totaled approximately \$490,000 in CY 2019. However, monthly costs for ASD services increased throughout the year into CY 2020, after the implementation of the fee schedule increase and directed payment. We anticipate expenses for ASD services will stabilize near the levels seen in Q4 2019 to February 2020. We increased costs for ASD services in the SFY 2022 by approximately \$210,000 to bring CY 2019 expenses up to this higher level of monthly costs. We calculated adjustments to include the additional costs for these services by allocating the estimated costs between the Non-Newborn SSI / Disabled, Foster Care, MA Children, and Quasi-CHIP rate cells proportional to CY 2019 ASD claims for these members.

Row (f) in Exhibit 2A shows the adjustment for these additional costs.

The SFY 2022 ASD preprint is expected to be approved by CMS and the adjustment made in this report is consistent with the information included in that preprint.¹

[Increase to Medicaid-Covered Service Limits](#)

Effective July 1, 2019, the pharmacy script limit per member per month was increased from five to six scripts and the home health limit for certain adult populations was increased from 25 to 36 visits per year.

We used detailed information regarding the cost of the sixth monthly script as reported in the CY 2019 financial templates to estimate the additional cost of the sixth pharmacy script each month. Since the definition of home health visits used by DOM differed from that used by the CCOs, we queried encounter data using the definition of home health visits provided by DOM to determine the cost of home health visits 25 to 36 per year.

Service limits do not apply to the children rate cells and, thus, costs were not adjusted for these members.

An adjustment reflecting these service limit increases is shown in Exhibit 2A in rows (g) and (h).

[Preferred Drug List \(PDL\) Revisions](#)

Major updates are made to the state PDL annually and take effect on January 1 of each year. We estimated the impact of these changes using detailed modeling provided by Change Healthcare, who is contracted by DOM to regularly

¹ This preprint is filed under the CMS control name "MS_Fee_Other_Renewal_202100701-20220630"

update and maintain the state PDL. In our reliance on the PDL modeling performed by Change Healthcare, we reviewed the output of the models for reasonableness, but did not audit their analyses.

The modeling provided by Change Healthcare included drug-level analyses of expected utilization shifts and resulting changes to pharmacy expenditures on a gross of rebate basis. This modeling uses data from both FFS and MississippiCAN populations, so we cannot directly use the output for rate development. Therefore, we applied the change in gross costs on a percentage basis by therapeutic class to MississippiCAN encounter data to develop program-specific impacts of PDL revisions. Separate PDL adjustments were developed for each population to account for the different mix of drugs used for each group.

Table 25 shows the estimated impact of PDL revisions. The CY 2019 to CY 2020 PDL changes shown below include the impact of significant May 2020 PDL changes in addition to January 2020 PDL changes. The full adjustment applied is a combination of the PDL changes from CY 2019 to SFY 2022.

Table 25 Mississippi Division of Medicaid PDL Adjustment		
Rate Cell Grouping	2019 to 2020	2020 to 2021
SSI	0.964	1.006
Adults	0.982	1.006
Children	0.977	1.008
Deliveries	0.999	1.001

PDL changes effective January 1, 2021, were minor and only impacted five therapeutic classes. Table 26 displays all five classes and outlines the shifting assumptions modeled by Change Healthcare for each class.

Table 26 Mississippi Division of Medicaid January 2021 PDL Adjustments					
Therapeutic Class	Utilization Shifts From	Utilization Shifts To	Modeled Shift	Estimated Increase (Decrease) in Gross Costs	% of Total PDL Change
BRONCHODILATORS - BETA AGONISTS	ALBUTEROL HFA	PROAIR RESPICLICK	70%	41.0%	85.7%
	ALBUTEROL HFA	VENTOLIN HFA			
GLUCOCORTICOIDS - INHALED	FLUTICASONE-SALMETEROL DISKUS	ADVAIR DISKUS	70%	34.4%	25.2%
CYTOKINE MODULATORS - PSA	COSENTYX	TALTZ	50%	1.8%	6.6%
MOVEMENT DISORDER	TETRABENAZINE	AUSTEDO	20%	1.1%	3.2%
STIMULANTS & RELATED AGENTS	APTENSIO XR	MPH ER 24	50%	(3.6%)	-20.7%
	APTENSIO XR	MPH CD			
	APTENSIO XR	MPH LA			

The shifting assumptions developed by Change Healthcare are meant to reflect the best estimate for how utilization will shift as certain products change preferred status effective January 1, 2021, recognizing that a full shift will not happen immediately. The estimated change in gross cost assumes the ultimate modeled shift shown in Table 26 is achieved two quarters after the PDL changes take effect and, therefore, the January 2021 PDL updates will be applicable to all of SFY 2022.

The adjustment for PDL revisions is shown in row (i) of Exhibit 2A.

OP Dental Reimbursement Change

Effective July 1, 2019, a multiple discounting policy applies to dental procedures billed on a hospital outpatient claim to price the highest allowed dental procedure at 100% of the allowed amount or published fee and to price all subsequent dental procedures at 25% of the allowed amount or published fee.

We used simulations provided by Conduent that estimated the impact on outpatient dental claims to be a decrease of 58.1% from Q1 and Q2 2019 to July 1, 2022, as a result of this reimbursement change. This reduction was applied to only outpatient claims related to dental services. The resulting adjustment applied to all outpatient claims varies by rate cell according to the mix of dental vs. other services in the outpatient service category.

This adjustment is shown in row (j) on Exhibit 2A.

NET Reimbursement Adjustment

Beginning in CY 2018, one CCO used a subcapitated vendor for NET services with considerably higher experience than the vendors used by other CCOs. In August 2019, that CCO switched to a different vendor with experience in line with that of other CCOs. For SFY 2022, this higher-cost vendor will not be used. As a result, CY 2019 base data contains seven months of experience that reflects a higher cost of NET services than we anticipate in SFY 2022.

We used NET costs from August to December 2019 as reported in the CCO financial templates to remove the impact of this higher cost vendor from January to July 2019 data.

This adjustment is on Exhibit 2A in row (k).

GME Carve Out

Effective October 1, 2019, all GME payments are made through FFS rather than being paid by the CCOs per discharge for MississippiCAN utilization at applicable hospitals. Thus, CY 2019 base data contains nine months of GME expenses that will not be incurred by the CCOs in SFY 2022.

DOM provided a summary of historical GME payments made by the CCOs from January through September 2019. As shown in Table 27, we calculated CY 2019 GME costs as a percentage of inpatient costs to remove GME from the capitation rates.

Table 27 Mississippi Division of Medicaid GME Removal Adjustment Development		
CY 2019 GME	CY 2019 IP	GME Adjustment
\$18,380,362	\$499,496,408	0.963

Data for GME payments at a rate cell level was not available to calculate the adjustment at a more granular level. Since the adjustment is only applied to inpatient services, it does, however, have a bigger impact on rate cells with a higher proportion of inpatient services.

The adjustment used to remove GME payments for inpatient services is shown in row (l) in Exhibit 2A.

Emergency Ambulance Payment Increase

Effective July 1, 2020, DOM increased reimbursement for emergency transportation services. This increase reimburses these services at 100% of the Medicare fee schedule, while these services were historically reimbursed at 70% of Medicare. We estimated the impact of this reimbursement change in SFY 2022 by applying the reimbursement change to emergency transportation services in CY 2019.

The adjustment to increase reimbursement for emergency transportation services is shown in row (m) in Exhibit 2A.

COVID-19 Vaccine Administration Expenses

Per CMS guidance, the cost of the COVID-19 vaccine for Medicaid recipients will be fully reimbursed by the federal government, and, thus, the CCOs will not be at risk for these costs. However, the CCOs will be responsible for expenses related to the administration of the COVID-19 vaccine. Consistent with DOM's provider bulletin issued on March 15, 2021, these expenses are set equal to the Mississippi adjusted Medicare rate of \$35.87 for each of the first and second dose, if applicable. Following the end of the PHE (assumed to be December 31, 2021), expenses will reduce to 90% of the Medicare rate.

We consulted with DOM and an epidemiologist to estimate the following vaccine-related assumptions for MississippiCAN enrollees:

- The percentage of members likely to receive the vaccine
- For members likely to receive the vaccine, the period over which the vaccine will be administered
- The relative distribution of single dose vs. multi dose vaccines

The attached Exhibit 10A shows the total cost per vaccination in each half of SFY 2022. Exhibit 10B details the calculation of vaccine administration expenses by age grouping, pregnancy status, and disability status, using the vaccine expenses shown in Exhibit 10A. Exhibit 10C shows the calculation of the vaccine administration expenses for each MississippiCAN rate cell using the relative mix of members within each group from Exhibit 10B.

Given the uncertainty surrounding COVID-19 vaccine availability and uptake rates, Milliman and DOM will monitor vaccination rates and adjust the methodology if necessary.

The COVID-19 vaccine administration expenses are shown in row (n) in Exhibit 2A.

Removal of 5% Assessment

Per SB2799, the 5% rate reduction previously established in in Miss. Code Ann. § 43-13-117 (B) will be removed from all providers. This exemption, effective July 1, 2021, results in an increase from a 95% payment rate to a 100% payment rate for those services previously eligible for the 5% assessment.

Appendix D lists all services previously eligible for the 5% assessment. For each of these services not performed at a UMMC-affiliated provider (which had already been exempt from the 5% assessment), we re-priced the CY 2019 experience from the 95% payment rate to the 100% payment rate. The overall adjustments by category of service are shown in Table 28.

An adjustment of 1.000 in Table 28 indicates that no change in provider reimbursement between the base period data and rating period is expected as a result of implementing the 5% provider assessment whereas an adjustment of 1.053 (=1.000 / 0.950) would indicate the 5% provider assessment is applicable to all services within the category of service.

Table 28 MississippiCAN Capitation Rates 5% Assessment Removal Adjustment by Category of Service	
Category of Service	5% Assessment Adjustment
Inpatient Hospital Services	1.000
Outpatient Hospital Services	1.006
Physician Services	1.023
Drug Services	1.000
Dental Services	1.049
Other Services	1.038
Total	1.012

Additionally, the reimbursement increase for certain preventive or diagnostic dental services was capped at 5% of the prior payment rate, as described in the "Dental Reimbursement Change" section below. For these services, reimbursement was increased by 5% over the prior 95% payment rate to a new payment rate of 99.75% to comply with that requirement. Non-diagnostic and non-preventative dental services, along with all non-dental services, were increased from 95% to 100%.

The adjustment was calculated separately by rate cell, reflecting the mix of services and the applicability of the 5% provider assessment specific to the given population.

The removal of the 5% assessment is shown in row (o) in Exhibit 2A.

Dental Reimbursement Change

Per SB2799, DOM will increase the payment rate for diagnostic and preventive dental services by 5% effective July 1, 2021. For dental services identified as diagnostic or preventive (defined as procedure codes D0100 through D1999) to which the 5% assessment were also applicable, this adjustment was already applied in the “Removal of 5% Assessment” section above. DOM provided guidance around how these two initiatives would be implemented.

For those diagnostic or preventive services not impacted by the 5% assessment, we determined the percentage of CY 2019 dental spend identified as diagnostic or preventive within each rate cell. We calculated the overall dental reimbursement change within each rate cell as a blend of a 5% reimbursement adjustment on the diagnostic and preventive services with a 0% reimbursement adjustment on other dental services.

The application of the dental reimbursement change is shown in row (p) in Exhibit 2A.

Immaterial Program, Population, and Reimbursement Methodology Changes

There are several program, population and reimbursement changes between the base period experience and SFY 2022 that we did not build an explicit adjustment into rates for, given the projected budget neutral or immaterial impact. These changes are described below.

- Dental and Orthodontic Reimbursement – Effective March 1, 2019, the reimbursement methodology for dental and orthodontic services was revised to be the lesser of: a) The provider’s usual and customary charge, b) A fee from the Mississippi Medicaid statewide uniform dental fee schedule in effect July 1, 2018, or c) The fiftieth (50th) percentile fee reflected in the 2019 National Dental Advisory Service (NDAS) Fee Report. Overall, this reimbursement change is expected to have an immaterial impact to dental reimbursement and no adjustment was made in the SFY 2022 capitation rates.
- IMD Services – Effective July 1, 2019, services provided at IMDs will be covered under MississippiCAN. Any material new utilization at these facilities is expected to represent shifting from general hospitals rather than new utilization in the system. No explicit adjustment is made for the additional utilization of these services in the SFY 2022 capitation rates. However, if long term stays transition from other facilities to IMDs we will revisit the materiality of the additional costs associated with these stays.
- U&C Overpayments – One CCO’s PBM did not originally apply pharmacy reimbursement logic to account for usual and customary (U&C) pricing correctly. The CY 2018 encounter data supporting this report does not reflect the ongoing recoupments to correct this issue. We reviewed claims impacted by this, and determined the impact of this overpayment on capitation rates was immaterial.
- DRG Overpayments – Similar to the U&C Overpayments, one CCO applied a higher fee schedule than allowed for certain DRGs. The CY 2018 and CY 2019 claims impacted by this overpayment do not have a material impact on capitation rates.
- ICORT Reimbursement changes – per Medicaid State Plan Amendment (SPA) 20-0022 for Community Mental Health Services, DOM is revising the service definition and reimbursement for Intensive Community Outreach and Recovery Teams (ICORT) services effective April 1, 2021. We reviewed the fiscal estimates of this change and determined that the impact on capitation rates is projected to be immaterial.

[Incorporate Delivery Costs into MA Adult and Pregnant Women Rate Cells](#)

Effective July 1, 2020, MississippiCAN no longer paid maternity deliveries using a kick payment methodology and instead included these costs in the MA Adult and Pregnant Women rate cells. To provide more transparency on this transition, we projected the costs historically covered by the delivery kick payment separately on Exhibits 1A, 1B, and 2A. These costs are also shown separately for the MA Adult and Pregnant Women rate cells. Exhibit 2B combines the costs for these deliveries into the MA Adult or Pregnant Women rate cell, as appropriate.

Step 2: Non-Service Expense Allowance

[Administrative Expenses, Premium Tax, and Targeted Margin](#)

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

- Case management
- Utilization management
- Claim processing and other IT functions
- Customer service
- Provider contracting and credentialing
- TPL 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)

Exhibit 3 shows the build-up of the non-service expenses, comprised of the following components for SFY 2022:

- \$10.25 PMPM for fixed administrative costs
- 5.39% of non-MHAP revenue for variable administrative costs
- 1.80% of non-MHAP revenue for target underwriting margin and cost of capital
- 3.00% for the Mississippi premium tax

The target underwriting margin and variable expense portions of the non-service expense assumptions are applied to revenue excluding the MHAP FSA, which is ultimately not at risk to the CCOs.

Table 29 displays the non-service expense allowance included in the SFY 2022 rates. The overall non-service expense PMPM is 5.3% higher than the PMPM included in SFY 2021 capitation rates, when blending the SFY 2021 assumptions using the projected SFY 2022 membership mix. The increase projected in membership for the lower cost rate cells (MA Children, MA Adult, and Quasi-CHIP), however, reduces this increase on a PMPM basis. All percentages of revenue are shown for non-MHAP (i.e., excluding FSA and QIPP payments) and MAPS revenue.

Table 29 Mississippi Division of Medicaid SFY 2022 MississippiCAN Non-Benefit Expenses		
	% of Revenue	PMPM
Fixed Costs ¹	2.31%	\$10.25
Variable Costs ²	5.39%	\$23.92
Premium Tax ²	3.00%	\$13.32
Margin ²	1.80%	\$7.99
Total	12.50%	\$55.48

¹ Included in the rate as a PMPM, equivalent % of revenue shown.

² Included in the rate as a % of Revenue, equivalent PMPM is shown.

We developed the administration allowance based on an analysis of the actual CY 2019 MississippiCAN CCO administrative expenses reported in the financial templates with the following adjustments:

- Administrative costs for subcapitated claims were reported separately by the CCOs in the financial templates and combined with other administrative expenses
- Administrative costs not allowable per the CCO contract with DOM were separately reported by the CCOs in the financial templates and removed from the costs used to develop the SFY 2022 administrative allowance

The adjusted CY 2019 reported administrative costs, excluding taxes and fees, were compared to national benchmarks released by the Sherlock Company and Milliman's annual analysis of administrative costs for Medicaid managed care plans. We applied a 2.0% trend to actual CY 2019 CCO administrative expenses to estimate administrative expenses for SFY 2022, based upon recent changes in the consumer price index (CPI) for employment and labor published by the Bureau of Labor and Statistics. We estimated a split of fixed vs. variable expenses across all populations equal to 70% variable and 30% fixed, consistent with detail provided by the CCOs in their financial templates.

Step 3: Adjust for Geographic Area

CCO capitation payments will vary based on their members' county of residence. We assigned each county to one of the following regions (as defined in Appendix A): North, Central, or South. Table 30 shows the geographic area factor adjustments that are applied based on a beneficiary's region.

Table 30 Mississippi Division of Medicaid Area Factors			
Region	Area Factors		
	SSI	Adults and Deliveries	Children
North	0.898	0.943	0.976
Central	1.052	1.049	1.022
South	1.055	1.003	0.998

We developed the geographic area factors on a budget-neutral basis by blending projected claims PMPM across rate cell groupings weighted upon the statewide rate cell distribution for each region and reviewing the relative difference in PMPM cost for each region. We created three different rate cell groups to aggregate experience for similar rate cells so that we could adequately reflect area factor differences among rate cells and still maintain credibility.

Exhibit 4 includes the resulting capitation rates for each region using these area factors.

Step 4: Adjust for Quality Withhold

Continuing in SFY 2022, a 1% quality withhold will be placed on capitation rates for the MississippiCAN program. The terms of the withhold arrangement are outlined in the contract with the CCOs. In order to earn back the withhold the CCOs must achieve HEDIS scores for the following conditions that are greater than or equal to 2.0% above the baseline HEDIS scores, with a percentage of the withhold assigned to each category. The benchmarks for SFY 2022 will be set based on the average of Magnolia and United's reported scores from calendar years 2018 and 2019.

- Well-Child First 30 months (W15 and W30, W30 is reporting only for SFY 2022):
 - Six or more visits for children 15 months of age
 - Two or more visits for children 30 months of age
- Immunization for Adolescents (IMA):
 - Combination 2: Meningococcal, Tdap, and HPV
- Anti-Depressant Management-Acute (AMM-AD):
 - Effective Acute Phase Treatment
 - Effective Continuation Phase Treatment

- Comprehensive Diabetes Care:
 - HbA1c Testing
 - Statin Therapy
- Adult and Children Asthma Control – Ages 5 to 64
- Prenatal and Postpartum Care (PPC-AD): Timeliness of Prenatal Care
- Adults Pharmacotherapy Management of COPD Exacerbation: Systemic Corticosteroid

DOM will be monitoring readmission rates reported as part of the QIPP in SFY 2022. For SFY 2022, this will be included as a scored metric for the quality withhold.

The quality withhold will be based on CCO performance relative to HEDIS measures. **If a CCO does not have sufficient data to consider its HEDIS scores credible, DOM will not hold the CCO liable for not meeting the measurement.** In this case, the portion of the incentive withheld related to that measurement will be returned to the CCO. After discussions with DOM about the metric development and expectations, we believe that a return of 100% of the withhold is reasonably achievable by the CCOs.

The COVID-19 pandemic may hinder the CCOs ability to report the metrics scored by the quality withhold. Similar to SFY 2021, DOM intends to adjust the quality measure reporting if needed. This may include revisions, such as:

- Evaluating each quality measure to determine its COVID-19 sensitivity and ranking them for expected level of reporting
- Considering dropping quality measures significantly affected by the pandemic
- Considering a pay-for-reporting structure
- Permitting prior rates to apply for quality measures the CCOs are not able to report
- May allow for proration of the results for certain or all quality measures

Exhibit 4 includes the resulting capitation rates for each region net of the quality withhold.

Step 5: Apply MHAP Fee Schedule Adjustment

Concurrent with the inclusion of inpatient hospital services in MississippiCAN capitation rates effective December 1, 2015, MHAP was established. This program helps to ensure sufficient access to inpatient hospital services for the Medicaid population by including enhanced hospital reimbursement in the capitation rates.

MHAP is funded through a broad-based hospital assessment for facilities in Mississippi and an intergovernmental transfer (IGT) for a facility in Memphis (located within a county contiguous to Mississippi). This provider assessment is outlined in Miss. Code Ann §43-13-145.

Per CMS's approval on January 12, 2018, beginning in SFY 2018 MHAP began to transition to directed payments according to the specifications and requirements of 42 CFR 438.6 et seq. Table 31 displays the three components of MHAP; Transitional Payment Pool (TPP), FSA, and QIPP and the total dollars in each component from SFY 2019 to SFY 2022.

Table 31 Mississippi Division of Medicaid MHAP Distribution by SFY				
SFY	MHAP-TPP	MHAP-FSA	MHAP-QIPP	Total MHAP
2019	\$380,017,469	\$153,093,487	\$0	\$533,110,956
2020	\$215,886,793	\$275,000,000	\$42,224,163	\$533,110,956
2021	\$0	\$317,886,793	\$215,224,163	\$533,110,956
2022	\$0	\$285,603,168	\$247,507,788	\$533,110,956

For SFY 2022, a directed payment of \$285.60 million is included in MississippiCAN capitation rates as a directed FSA on inpatient and outpatient claims.

The FSA is incorporated into capitation rates in column (f) of Exhibit 4, consistent with the program design that 70% of the \$285.60 million will be paid for inpatient hospital services, and 30% will be paid for outpatient hospital services using projected SFY 2022 membership. These calculations were performed across all MississippiCAN rate cells with each of the inpatient and outpatient FSA percentage impacts applied uniformly. This results in a larger proportion of the FSA funding included in capitation rate cells with higher inpatient and outpatient utilization.

The estimated FSA is based on projected SFY 2022 membership and estimated inpatient and outpatient claim utilization. Due to actual vs. projected MississippiCAN membership and claim utilization, this estimated capitation adjustment may result in an overpayment or underpayment of the FSA in SFY 2022 if no adjustments are made. If membership and / or utilization is higher than expected, payments will be capped at the \$285.60 million funding amount. If membership and / or utilization is lower than expected, the final payments will be grossed up proportionally to meet the \$285.60 million funding amount. This reconciliation will be done on a PMPM basis at the end of SFY 2022, and the appropriate documentation will be provided to CMS.

The MHAP FSA additive adjustments are shown in column (f) in Exhibit 4. An additional allowance for premium tax on the MHAP FSA is included in column (g) in Exhibit 4.

The SFY 2022 FSA preprint was submitted to CMS for approval². The adjustments to capitation rates are consistent with the preprint.

Step 6: Adjust For CCO-Specific Risk Score (if Applicable)

Risk Adjustment for the Non-Newborn SSI / Disabled, MA Adult, MA Children, and Quasi-CHIP Rate Cells

The capitation rates for the Non-Newborn SSI / Disabled, MA Adult, MA Children, and Quasi-CHIP rate cells will be further adjusted for each CCO using the combined Chronic Illness and Disability Payment System and Medicaid Rx risk adjuster (CDPS + Rx). Costs for the Breast and Cervical Cancer, Foster Care, and Pregnant Women populations are less variable, since they tend to utilize similar services across each population. In addition, some of the population sizes are too small from which to develop custom weights specific to the covered services and MississippiCAN reimbursement levels. Therefore, we do not risk adjust these populations. Since the risk adjustment is prospective, there is no historical diagnosis information from which to develop a risk score for newborns.

The CDPS + Rx risk adjuster will be used to adjust for the acuity differences between the enrolled populations of each CCO. Risk adjustment will be budget-neutral to DOM. This risk sharing mechanism is developed in accordance with generally accepted actuarial principles and practices.

To establish these risk scores, the CDPS + Rx risk adjuster will be run with risk weights consistent with services covered in MississippiCAN for the given time period. These risk weights are calculated using Mississippi FFS and encounter data for the Non-Newborn SSI / Disabled, MA Adult, MA Children, and Quasi-CHIP populations. In addition, a beneficiary must have at least six months of eligibility in the data year to be scored. If a beneficiary does not have enough data, they will receive a score based on demographic information, such as age and gender. We will monitor the percentage of CCO enrollees who are not scored and adjust the methodology if necessary.

Risk adjustment for SFY 2022 capitation payments will be based on CY 2020 or SFY 2021 FFS and encounter diagnosis data. Each CCO's adjusted risk factor will be prospectively set using April 2021 as a proxy for the enrollment for July 1, 2021 to December 31, 2021 and October 2021 as a proxy for the enrollment from January 1, 2022 to June 30, 2022. The planned schedule for risk score data sources and calculations is shown in Table 32. In light of the COVID-19 pandemic, the diagnosis and enrollment dates stated below may change. We will continue to monitor the development of this pandemic and adjust these dates as needed.

² This preprint is filed under the CMS control name "MS_Fee_IPH.OPH_Renewal_20210701-202206530"

Table 32
Mississippi Division of Medicaid
CCO Capitation Rate Risk Adjustment Schedule
SFY 2022 Capitation Payments

Rate Cell	Capitation Payments	Diagnosis Source Data	Enrollment Source
Non-Newborn SSI / Disabled, MA Adult, MA Children, and Quasi-CHIP	July 2021 to December 2021	CY 2020 FFS and Encounters with runout through April 2021	April 2021
Non-Newborn SSI / Disabled, MA Adult, MA Children, and Quasi-CHIP	January 2022 to June 2022	SFY 2021 FFS and Encounters with runout through October 2021	October 2021

Risk Adjustment for the Foster Care Rate Cell

Starting in SFY 2021, the Foster Care rate cell is concurrently risk adjusted. The Foster Care rate cell will be risk adjusted using a custom risk adjustment model that does not depend on the CDPS + Rx risk adjuster. After testing the predictive ability of several potential models, we determined the member's eligibility for either state or federal financial assistance was the most accurate indicator of the member's risk score. This status is captured by the money code field on DOM's enrollment records. Risk factors associated with a member's money code were estimated using CY 2017 and CY 2018 experience for the Foster Care rate cell, consistent with the data used to support the SFY 2021 capitation rates for this rate cell.

Unlike the other risk-adjusted populations, risk adjustment for the Foster Care rate cell will be applied concurrently. Starting in early 2020, we noticed material changes in the composition of each CCO's membership by eligibility group, reflecting changes to how members are assigned to CCOs by DOM. The change in member mix has persisted through early 2021. As such, prospectively estimating the mix of members for each CCO will not be feasible in SFY 2022. Moreover, given the small size of the Foster Care rate cell, small fluctuations in membership could have a material impact on risk adjustment if applied prospectively. Therefore, we intend to concurrently risk adjust the Foster Care rate cell in SFY 2022.

Application of Risk Scores

A CCO's capitation rate will be determined based upon the following formula:

$$CCO \text{ Capitation Rate} = \text{Base Capitation Rate} \times CCO \text{ Normalized Risk Factor}$$

The base capitation rates are found in Exhibit 4.

The CCO normalized risk factor will equal the average risk factor across all beneficiaries that a CCO enrolls divided by the average risk factor for the rate cell's population. Regional risk scores will be normalized to ensure the risk adjustment process is revenue neutral across both CCOs.

Step 7: Retrospective Directed Payments

DOM will process the capitation rate adjustments for two directed payments outside of the monthly capitation rate payment system in the form of quarterly payments to the CCOs for the actual amount paid to providers and the associated premium tax impact related to these payments. We will calculate and certify adjusted CCO-specific capitation rates at the same time as the retrospective adjustments for the MHAP FSA. This recertification is expected to be completed by February 2023.

MHAP QIPP

Beginning in SFY 2020, a quality incentive payment program (QIPP) will be a component of MHAP. Consistent with the preprint submitted to CMS, the QIPP will be paid as a uniform payment arrangement for SFY 2022. The goal of the QIPP is to utilize state and federal investments to improve the quality of care and health status of the Mississippi Medicaid population. The QIPP is envisioned to be a multi-year process with an increasing percentage of the payments linked to performance improvements achieved and maintained by the hospital industry.

For SFY 2022, the QIPP will consist of approximately \$247.51 million, which will be paid outside of the capitation rates on a quarterly basis. DOM will determine the payments made to facilities based on agreed upon performance measures. Capitation rates will be retroactively adjusted once actual membership and utilization is known for SFY 2022 to include a QIPP PMPM for each CCO, which will include a provision for premium tax. This program is consistent with the preprint submitted to CMS for SFY 2022.

Mississippi MAPS Program

Beginning in SFY 2020, the Mississippi Medicaid Access to Physician Services (MAPS) program will enhance payments to physicians and other eligible professional service practitioners who are employed by a qualifying hospital or who assigned Mississippi Medicaid payments to a qualifying hospital. The term “qualifying hospital” means a Mississippi state-owned academic health science center with a Level 1 trauma center, Level 4 neonatal intensive care nursery, an organ transplant program, and more than a four hundred (400) physician multispecialty practice group.

DOM will require that CCOs provide the same supplemental percentage increase, equal to 58.8% of Medicare rates, to all qualifying providers. Payments in SFY 2022 are expected to be \$38,783,002. Similar to the QIPP, capitation rates will be retroactively adjusted for SFY 2022 to include a MAPS PMPM including a provision for premium tax for each CCO and rate cell based on actual membership and utilization. The appropriate documentation will be submitted to CMS at the time of this retroactive adjustment. This program is being made under a \$438.6(c) payment arrangement consistent with the preprint submitted to CMS³.

Step 8: Calculate Risk Corridor Settlements

Subject to CMS approval, DOM will implement a symmetrical risk corridor to address the uncertainty of medical costs given the COVID-19 pandemic for SFY 2022.

The capitation rates in this report reflect a target medical loss ratio (MLR), which measures the projected medical service costs as a percentage of the total capitation rates paid to the CCOs. The risk corridor would limit CCO gains and losses if the actual MLR is different than the target MLR. Table 33 summarizes the share of gains and losses relative to the target MLR for each party.

Table 33 Mississippi Division of Medicaid Proposed Risk Corridor Parameters		
MLR Claims Corridor	CCO Share of Gain / Loss in Corridor	DOM Share of Gain / Loss in Corridor
Less than Target MLR -2.0%	0%	100%
Target MLR -2.0% to Target MLR +2.0%	100%	0%
Greater than Target MLR +2.0%	0%	100%

For the purposes of the SFY 2022 risk corridor, a different definition of MLR will be used than the Federal MLR definition.

Exhibit 13 illustrates the calculation of the target MLR for each CCO. The final target MLR will vary for each CCO and will depend on several currently unknown factors, including the final risk scores for each risk-adjusted rate cell, the amount of the quality withhold returned to each CCO, and the results of the final settlements for MHAP and MAPS. **Exhibit 13 does not reflect the actual target MLR to be used for any CCO, but is shown for illustrative purposes.** Moreover, Exhibit 13 does not reflect regional variations in capitation rates and risk scores (for applicable rate cells), which will be considered in the final risk corridor calculation. More detailed templates will be provided to the CCOs demonstrating the actual calculation to be used when developing risk corridor settlements.

The risk corridor will be implemented using the following provisions:

- Actual and target MLRs will be calculated separately for each CCO based on their actual enrollment mix

³ This preprint is filed under the CMS control name “MS_Fee_AMC.PC.SP.OTH_Renewal_20210701-20220630”

- The numerator of each CCO's actual MLR will include all services incurred during the period of SFY 2022 with payments made to providers as defined in Exhibit C of the CCO Contract, including fee for-service payments, subcapitation payments, and settlement payments
- Payments and revenue related to MHAP and MAPS will be included from the numerator and denominator of each CCO's actual MLR
- The 85% minimum MLR provision (Federal MLR definition) in the CCO contract will apply after the risk corridor settlement calculation

The risk corridor settlement will occur after the contract year is closed, using six months of runout. An initial calculation will occur, but the final calculation will occur once the MLR audit has been completed. MLR audits are usually completed 12 to 18 months after the close of the SFY.

Other Program Considerations

The program includes a minimum federal MLR requirement of 87.5% of revenue. The sum of medical expenses and HCQI expenses must meet or exceed 87.5% of revenue. Revenue for premium taxes is excluded from the MLR calculation. If the 87.5% threshold is not met, CCOs return revenue to DOM until the threshold is met. This mechanism will be calculated after the application of the risk corridor. Due to the implementation of a 2% risk corridor for SFY 2022, the minimum MLR will be greater than 87.5% and not trigger any additional payments as of a result of this provision.

EXHIBITS 1 THROUGH 8

Capitation Rate Development Exhibits

This report assumes the reader is familiar with the State of Mississippi's MississippiCAN program, its benefits, and rate setting principles. The report was prepared solely to provide assistance to DOM to set SFY 2022 capitation rates for the MississippiCAN 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.

State of Mississippi Division of Medicaid
SFY 2022 MississippiCAN Preliminary Rate Calculation and Certification

April 21, 2021

EXHIBIT 1A

CY 2019 Encounter Data

This report assumes the reader is familiar with the State of Mississippi's MississippiCAN program, its benefits, and rate setting principles. The report was prepared solely to provide assistance to DOM to set SFY 2022 capitation rates for the MississippiCAN 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.

State of Mississippi Division of Medicaid
SFY 2022 MississippiCAN Preliminary Rate Calculation and Certification

April 21, 2021

Exhibit 1A
Mississippi Division of Medicaid
All Regions SFY 2022 MississippiCAN Capitation Rate Development
CY 2019 Encounter Data

Non-Newborn SSI / Disabled Rate Cell								
Calculation Step	PMPM Development	Category of Service						Total
		Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other	
	CY 2019 PMPM Cost Development							
<i>a</i>	CY 2019 Member Months	764,943	764,943	764,943	764,943	764,943	764,943	764,943
<i>b</i>	Total Allowed Dollars	\$147,765,684	\$156,146,630	\$168,940,862	\$235,604,188	\$7,106,507	\$46,835,245	\$762,399,114
<i>c = b / a</i>	CY 2019 PMPM Costs	\$193.17	\$204.13	\$220.85	\$308.00	\$9.29	\$61.23	\$996.67
<i>d</i>	Encounter to Financial Adjustment	1.008	1.008	1.008	1.002	1.008	1.008	1.006
<i>e</i>	Non-Covered Services	1.000	1.000	0.992	0.988	1.000	1.000	0.994
<i>f</i>	Provider Reimbursement Adjustment	1.000	1.000	1.025	1.000	1.000	1.000	1.005
<i>g</i>	Zolgensma Carveout	1.000	1.000	0.963	1.000	1.000	1.000	0.992
<i>h</i>	ER Leveling Policy Adjustment	1.000	1.000	1.002	1.000	1.000	1.000	1.000
<i>i</i>	TPL Adjustment	0.999	0.999	0.999	0.999	0.999	0.999	0.999
<i>j</i>	5% Assessment - Provider Adjustment	1.000	0.998	0.993	1.000	0.986	0.989	0.997
<i>k</i>	340B Pharmacy Pricing Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>l</i>	IMD Removal	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>m</i>	IMD Additions	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>n</i>	SSI Children - COE Change	1.004	1.000	1.000	1.000	1.000	1.000	1.001
<i>o</i>	Drug Services Rebate Adjustment	1.000	1.000	1.000	0.997	1.000	1.000	0.999
<i>p</i>	Missing Data	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>q</i>	IBNR Adjustmt	1.032	1.003	1.003	1.000	1.001	1.003	1.008
<i>Product of c through q</i>	Adjusted CY 2019 PMPM Costs	\$201.49	\$205.75	\$217.27	\$303.71	\$9.24	\$61.20	\$998.65

Breast and Cervical Cancer Rate Cell								
Calculation Step	PMPM Development	Category of Service						Total
		Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other	
	CY 2019 PMPM Cost Development							
<i>a</i>	CY 2019 Member Months	1,190	1,190	1,190	1,190	1,190	1,190	1,190
<i>b</i>	Total Allowed Dollars	\$244,232	\$1,862,278	\$1,206,122	\$627,925	\$9,848	\$49,649	\$4,000,054
<i>c = b / a</i>	CY 2019 PMPM Costs	\$205.24	\$1,564.94	\$1,013.55	\$527.67	\$8.28	\$41.72	\$3,361.39
<i>d</i>	Encounter to Financial Adjustment	1.008	1.008	1.008	1.002	1.008	1.008	1.007
<i>e</i>	Non-Covered Services	1.000	1.000	0.999	0.998	1.000	1.000	0.999
<i>f</i>	Provider Reimbursement Adjustment	1.000	1.000	1.008	1.000	1.000	1.000	1.002
<i>g</i>	Zolgensma Carveout	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>h</i>	ER Leveling Policy Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>i</i>	TPL Adjustment	0.999	0.999	0.999	0.999	0.999	0.999	0.999
<i>j</i>	5% Assessment - Provider Adjustment	1.000	1.000	0.999	1.000	0.976	0.993	0.999
<i>k</i>	340B Pharmacy Pricing Adjustment	1.000	1.000	1.000	0.993	1.000	1.000	0.999
<i>l</i>	IMD Removal	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>m</i>	IMD Additions	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>n</i>	SSI Children - COE Change	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>o</i>	Drug Services Rebate Adjustment	1.000	1.000	1.000	0.997	1.000	1.000	1.000
<i>p</i>	Missing Data	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>q</i>	IBNR Adjustmt	1.050	1.004	1.003	1.000	1.001	1.002	1.006
<i>Product of c through q</i>	Adjusted CY 2019 PMPM Costs	\$216.93	\$1,581.65	\$1,030.31	\$521.65	\$8.14	\$41.77	\$3,400.43

Exhibit 1A
Mississippi Division of Medicaid
All Regions SFY 2022 MississippiCAN Capitation Rate Development
CY 2019 Encounter Data

MA Adult Rate Cell - Non-Deliveries								
Calculation Step	PMPM Development	Category of Service						Total
		Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other	
	CY 2019 PMPM Cost Development							
<i>a</i>	CY 2019 Member Months	494,459	494,459	494,459	494,459	494,459	494,459	494,459
<i>b</i>	Total Allowed Dollars	\$21,758,034	\$55,199,634	\$60,204,176	\$56,838,826	\$3,409,467	\$6,199,885	\$203,610,022
<i>c = b / a</i>	CY 2019 PMPM Costs	\$44.00	\$111.64	\$121.76	\$114.95	\$6.90	\$12.54	\$411.78
<i>d</i>	Encounter to Financial Adjustment	1.008	1.008	1.008	1.002	1.008	1.008	1.006
<i>e</i>	Non-Covered Services	1.000	1.000	0.992	0.993	1.000	1.000	0.995
<i>f</i>	Provider Reimbursement Adjustment	1.000	1.000	1.006	1.000	1.000	1.000	1.002
<i>g</i>	Zolgensma Carveout	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>h</i>	ER Leveling Policy Adjustment	1.000	1.000	1.003	1.000	1.000	1.000	1.001
<i>i</i>	TPL Adjustment	0.999	0.999	0.999	0.999	0.999	0.999	0.999
<i>j</i>	5% Assessment - Provider Adjustment	1.000	1.000	0.995	1.000	0.988	0.990	0.998
<i>k</i>	340B Pharmacy Pricing Adjustment	1.000	1.000	1.000	0.999	1.000	1.000	1.000
<i>l</i>	IMD Removal	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>m</i>	IMD Additions	1.001	1.000	1.000	1.000	1.000	1.000	1.000
<i>n</i>	SSI Children - COE Change	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>o</i>	Drug Services Rebate Adjustment	1.000	1.000	1.000	0.997	1.000	1.000	0.999
<i>p</i>	Missing Data	1.001	1.000	1.000	1.000	1.000	1.000	1.000
<i>q</i>	IBNR Adjustment	1.040	1.004	1.004	1.000	1.002	1.002	1.007
<i>Product of c through q</i>	Adjusted CY 2019 PMPM Costs	\$46.14	\$112.85	\$122.62	\$113.81	\$6.87	\$12.52	\$414.81

MA Adult Rate Cell - Deliveries								
Calculation Step	PMPM Development	Category of Service						Total
		Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other	
	CY 2019 PMPM Cost Development							
<i>a</i>	CY 2019 Member Months	494,459	494,459	494,459	494,459	494,459	494,459	494,459
<i>b</i>	Total Allowed Dollars	\$16,077,374	\$59,613	\$4,240,826	\$79,632	\$323	\$87,498	\$20,545,265
<i>c = b / a</i>	CY 2019 PMPM Costs	\$32.52	\$0.12	\$8.58	\$0.16	\$0.00	\$0.18	\$41.55
<i>d</i>	Encounter to Financial Adjustment	1.008	1.008	1.008	1.002	1.008	1.008	1.008
<i>e</i>	Non-Covered Services	1.000	1.000	0.993	0.994	1.000	1.000	0.998
<i>f</i>	Provider Reimbursement Adjustment	1.000	1.000	1.005	1.000	1.000	1.000	1.001
<i>g</i>	Zolgensma Carveout	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>h</i>	ER Leveling Policy Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>i</i>	TPL Adjustment	0.999	0.999	0.999	0.999	0.999	0.999	0.999
<i>j</i>	5% Assessment - Provider Adjustment	1.000	0.999	0.998	1.000	0.986	0.991	1.000
<i>k</i>	340B Pharmacy Pricing Adjustment	1.000	1.000	1.000	0.999	1.000	1.000	1.000
<i>l</i>	IMD Removal	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>m</i>	IMD Additions	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>n</i>	SSI Children - COE Change	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>o</i>	Drug Services Rebate Adjustment	1.000	1.000	1.000	0.997	1.000	1.000	1.000
<i>p</i>	Missing Data	1.001	1.000	1.000	1.000	1.000	1.000	1.001
<i>q</i>	IBNR Adjustment	1.033	1.006	1.006	1.000	1.003	1.003	1.027
<i>Product of c through q</i>	Adjusted CY 2019 PMPM Costs	\$33.86	\$0.12	\$8.65	\$0.16	\$0.00	\$0.18	\$42.97

PMPM costs are calculated using allowed amounts for 3,433 MA Adult deliveries and total MA Adult rate cell membership.

Exhibit 1A
Mississippi Division of Medicaid
All Regions SFY 2022 MississippiCAN Capitation Rate Development
CY 2019 Encounter Data

Pregnant Women Rate Cell - Non-Deliveries								
Calculation Step	PMPM Development	Category of Service						Total
		Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other	
	CY 2019 PMPM Cost Development							
<i>a</i>	CY 2019 Member Months	137,293	137,293	137,293	137,293	137,293	137,293	137,293
<i>b</i>	Total Allowed Dollars	\$4,872,448	\$15,883,038	\$26,921,530	\$7,081,894	\$665,919	\$1,268,663	\$56,693,493
<i>c = b / a</i>	CY 2019 PMPM Costs	\$35.49	\$115.69	\$196.09	\$51.58	\$4.85	\$9.24	\$412.94
<i>d</i>	Encounter to Financial Adjustment	1.008	1.008	1.008	1.002	1.008	1.008	1.007
<i>e</i>	Non-Covered Services	1.000	1.000	1.000	0.997	1.000	1.000	1.000
<i>f</i>	Provider Reimbursement Adjustment	1.000	1.000	1.003	1.000	1.000	1.000	1.001
<i>g</i>	Zolgensma Carveout	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>h</i>	ER Leveling Policy Adjustment	1.000	1.000	1.001	1.000	1.000	1.000	1.000
<i>i</i>	TPL Adjustment	0.999	0.999	0.999	0.999	0.999	0.999	0.999
<i>j</i>	5% Assessment - Provider Adjustment	1.000	1.000	0.998	1.000	0.993	0.994	0.999
<i>k</i>	340B Pharmacy Pricing Adjustment	1.000	1.000	1.000	0.999	1.000	1.000	1.000
<i>l</i>	IMD Removal	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>m</i>	IMD Additions	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>n</i>	SSI Children - COE Change	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>o</i>	Drug Services Rebate Adjustment	1.000	1.000	1.000	0.997	1.000	1.000	1.000
<i>p</i>	Missing Data	1.000	1.002	1.000	1.000	1.000	1.000	1.001
<i>q</i>	IBNR Adjustment	1.028	1.006	1.006	1.000	1.002	1.005	1.007
<i>Product of c through q</i>	Adjusted CY 2019 PMPM Costs	\$36.76	\$117.44	\$199.01	\$51.24	\$4.86	\$9.29	\$418.60

Pregnant Women Rate Cell - Deliveries								
Calculation Step	PMPM Development	Category of Service						Total
		Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other	
	CY 2019 PMPM Cost Development							
<i>a</i>	CY 2019 Member Months	137,293	137,293	137,293	137,293	137,293	137,293	137,293
<i>b</i>	Total Allowed Dollars	\$62,493,673	\$206,616	\$16,904,923	\$316,401	\$270	\$191,961	\$80,113,845
<i>c = b / a</i>	CY 2019 PMPM Costs ¹	\$455.18	\$1.50	\$123.13	\$2.30	\$0.00	\$1.40	\$583.52
<i>d</i>	Encounter to Financial Adjustment	1.008	1.008	1.008	1.002	1.008	1.008	1.008
<i>e</i>	Non-Covered Services	1.000	1.000	1.000	0.997	1.000	1.000	1.000
<i>f</i>	Provider Reimbursement Adjustment	1.000	1.000	1.003	1.000	1.000	1.000	1.001
<i>g</i>	Zolgensma Carveout	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>h</i>	ER Leveling Policy Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>i</i>	TPL Adjustment	0.999	0.999	0.999	0.999	0.999	0.999	0.999
<i>j</i>	5% Assessment - Provider Adjustment	1.000	0.999	0.999	1.000	1.000	0.993	1.000
<i>k</i>	340B Pharmacy Pricing Adjustment	1.000	1.000	1.000	0.999	1.000	1.000	1.000
<i>l</i>	IMD Removal	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>m</i>	IMD Additions	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>n</i>	SSI Children - COE Change	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>o</i>	Drug Services Rebate Adjustment	1.000	1.000	1.000	0.997	1.000	1.000	1.000
<i>p</i>	Missing Data	1.000	1.001	1.000	1.000	1.000	1.000	1.000
<i>q</i>	IBNR Adjustment	1.028	1.007	1.006	1.000	1.004	1.005	1.023
<i>Product of c through q</i>	Adjusted CY 2019 PMPM Costs	\$471.16	\$1.53	\$124.93	\$2.29	\$0.00	\$1.40	\$601.31

¹PMPM costs are calculated using allowed amounts for 15,789 Pregnant Women deliveries and total Pregnant Women rate cell membership.

Exhibit 1A
Mississippi Division of Medicaid
All Regions SFY 2022 MississippiCAN Capitation Rate Development
CY 2019 Encounter Data

SSI / Disabled Newborn Rate Cell								
Calculation Step		Category of Service						Total
		Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other	
	CY 2019 PMPM Cost Development							
<i>a</i>	CY 2019 Member Months	6,339	6,339	6,339	6,339	6,339	6,339	6,339
<i>b</i>	Total Allowed Dollars	\$25,687,969	\$1,428,925	\$9,830,040	\$3,714,071	\$4,457	\$1,602,923	\$42,268,384
<i>c = b / a</i>	CY 2019 PMPM Costs	\$4,052.37	\$225.42	\$1,550.72	\$585.91	\$0.70	\$252.87	\$6,667.99
<i>d</i>	Encounter to Financial Adjustment	1.008	1.008	1.008	1.002	1.008	1.008	1.008
<i>e</i>	Non-Covered Services	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>f</i>	Provider Reimbursement Adjustment	1.000	1.000	1.009	1.000	1.000	1.000	1.002
<i>g</i>	Zolgensma Carveout	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>h</i>	ER Leveling Policy Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>i</i>	TPL Adjustment	0.999	0.999	0.999	0.999	0.999	0.999	0.999
<i>j</i>	5% Assessment - Provider Adjustment	1.000	1.000	0.998	1.000	0.990	0.988	0.999
<i>k</i>	340B Pharmacy Pricing Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>l</i>	IMD Removal	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>m</i>	IMD Additions	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>n</i>	SSI Children - COE Change	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>o</i>	Drug Services Rebate Adjustment	1.000	1.000	1.000	0.997	1.000	1.000	1.000
<i>p</i>	Missing Data	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>q</i>	IBNR Adjustmt	1.041	1.004	1.010	1.000	1.001	1.004	1.027
<i>Product of c through q</i>	Adjusted CY 2019 PMPM Costs	\$4,245.88	\$227.76	\$1,589.17	\$584.38	\$0.70	\$252.34	\$6,900.24

Non-SSI Newborns 0 to 2 Months Rate Cell								
Calculation Step		Category of Service						Total
		Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other	
	CY 2019 PMPM Cost Development							
<i>a</i>	CY 2019 Member Months	75,333	75,333	75,333	75,333	75,333	75,333	75,333
<i>b</i>	Total Allowed Dollars	\$101,313,396	\$3,981,052	\$25,221,363	\$668,672	\$49,024	\$1,046,566	\$132,280,072
<i>c = b / a</i>	CY 2019 PMPM Costs¹	\$1,344.87	\$52.85	\$334.80	\$8.88	\$0.65	\$13.89	\$1,755.94
<i>d</i>	Encounter to Financial Adjustment	1.008	1.008	1.008	1.002	1.008	1.008	1.008
<i>e</i>	Non-Covered Services	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>f</i>	Provider Reimbursement Adjustment	1.000	1.000	1.013	1.000	1.000	1.000	1.002
<i>g</i>	Zolgensma Carveout	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>h</i>	ER Leveling Policy Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>i</i>	TPL Adjustment	0.999	0.999	0.999	0.999	0.999	0.999	0.999
<i>j</i>	5% Assessment - Provider Adjustment	1.000	1.000	0.998	1.000	0.997	0.994	1.000
<i>k</i>	340B Pharmacy Pricing Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>l</i>	IMD Removal	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>m</i>	IMD Additions	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>n</i>	SSI Children - COE Change	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>o</i>	Drug Services Rebate Adjustment	1.000	1.000	1.000	0.997	1.000	1.000	1.000
<i>p</i>	Missing Data	1.002	1.000	1.000	1.001	1.000	1.000	1.001
<i>q</i>	IBNR Adjustmt	1.030	1.006	1.015	1.000	1.004	1.004	1.026
<i>Product of c through q</i>	Adjusted CY 2019 PMPM Costs	\$1,396.81	\$53.54	\$346.15	\$8.86	\$0.66	\$13.96	\$1,819.98

Exhibit 1A
Mississippi Division of Medicaid
All Regions SFY 2022 MississippiCAN Capitation Rate Development
CY 2019 Encounter Data

Non-SSI Newborns 3 to 12 Months Rate Cell								
Calculation Step		PMPM Development	Category of Service					
			Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other
		CY 2019 PMPM Cost Development						
<i>a</i>		CY 2019 Member Months	252,819	252,819	252,819	252,819	252,819	252,819
<i>b</i>		Total Allowed Dollars	\$9,051,350	\$14,650,877	\$26,754,442	\$6,010,791	\$249,144	\$1,329,414
<i>c = b / a</i>		CY 2019 PMPM Costs	\$35.80	\$57.95	\$105.82	\$23.78	\$0.99	\$5.26
<i>d</i>		Encounter to Financial Adjustment	1.008	1.008	1.008	1.002	1.008	1.008
<i>e</i>		Non-Covered Services	1.000	1.000	1.000	1.000	1.000	1.000
<i>f</i>		Provider Reimbursement Adjustment	1.000	1.000	1.015	1.000	1.000	1.000
<i>g</i>		Zolgensma Carveout	1.000	1.000	1.000	1.000	1.000	1.000
<i>h</i>		ER Leveling Policy Adjustment	1.000	1.000	1.003	1.000	1.000	1.000
<i>i</i>		TPL Adjustment	0.999	0.999	0.999	0.999	0.999	0.999
<i>j</i>		5% Assessment - Provider Adjustment	1.000	1.000	0.994	1.000	0.990	0.990
<i>k</i>		340B Pharmacy Pricing Adjustment	1.000	1.000	1.000	0.999	1.000	1.000
<i>l</i>		IMD Removal	1.000	1.000	1.000	1.000	1.000	1.000
<i>m</i>		IMD Additions	1.000	1.000	1.000	1.000	1.000	1.000
<i>n</i>		SSI Children - COE Change	1.000	1.000	1.000	1.000	1.000	1.000
<i>o</i>		Drug Services Rebate Adjustment	1.000	1.000	1.000	0.997	1.000	1.000
<i>p</i>		Missing Data	1.000	1.000	1.000	1.001	1.000	1.000
<i>q</i>		IBNR Adjustmt	1.036	1.004	1.013	1.000	1.002	1.004
<i>Product of c through q</i>		Adjusted CY 2019 PMPM Costs	\$37.34	\$58.60	\$109.20	\$23.74	\$0.98	\$5.26

Foster Care Rate Cell								
Calculation Step		PMPM Development	Category of Service					
			Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other
		CY 2019 PMPM Cost Development						
<i>a</i>		CY 2019 Member Months	78,894	78,894	78,894	78,894	78,894	78,894
<i>b</i>		Total Allowed Dollars	\$23,302,163	\$3,379,198	\$10,203,872	\$5,832,756	\$2,138,388	\$958,259
<i>c = b / a</i>		CY 2019 PMPM Costs	\$295.36	\$42.83	\$129.34	\$73.93	\$27.10	\$12.15
<i>d</i>		Encounter to Financial Adjustment	1.008	1.008	1.008	1.002	1.008	1.008
<i>e</i>		Non-Covered Services	1.000	1.000	1.000	1.000	1.000	1.000
<i>f</i>		Provider Reimbursement Adjustment	1.000	1.000	1.008	1.000	1.000	1.000
<i>g</i>		Zolgensma Carveout	1.000	1.000	1.000	1.000	1.000	1.000
<i>h</i>		ER Leveling Policy Adjustment	1.000	1.000	1.002	1.000	1.000	1.000
<i>i</i>		TPL Adjustment	0.999	0.999	0.999	0.999	0.999	0.999
<i>j</i>		5% Assessment - Provider Adjustment	1.000	0.990	0.981	1.000	0.976	0.976
<i>k</i>		340B Pharmacy Pricing Adjustment	1.000	1.000	1.000	0.999	1.000	1.000
<i>l</i>		IMD Removal	1.000	1.000	1.000	1.000	1.000	1.000
<i>m</i>		IMD Additions	1.000	1.000	1.000	1.000	1.000	1.000
<i>n</i>		SSI Children - COE Change	1.000	1.000	1.000	1.000	1.000	1.000
<i>o</i>		Drug Services Rebate Adjustment	1.000	1.000	1.000	0.997	1.000	1.000
<i>p</i>		Missing Data	1.001	1.000	1.000	1.000	1.000	1.000
<i>q</i>		IBNR Adjustmt	1.040	1.004	1.002	1.000	1.000	1.003
<i>Product of c through q</i>		Adjusted CY 2019 PMPM Costs	\$309.73	\$42.87	\$129.32	\$73.72	\$26.65	\$11.97

Exhibit 1A
Mississippi Division of Medicaid
All Regions SFY 2022 MississippiCAN Capitation Rate Development
CY 2019 Encounter Data

MYPAC Rate Cell								
Calculation Step		PMPM Development	Category of Service					Total
			Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	
		CY 2019 PMPM Cost Development						
<i>a</i>		CY 2019 Member Months	7,783	7,783	7,783	7,783	7,783	7,783
<i>b</i>		Total Allowed Dollars	\$3,839,438	\$419,914	\$22,056,517	\$1,281,341	\$244,109	\$27,983,890
<i>c = b / a</i>		CY 2019 PMPM Costs	\$493.31	\$53.95	\$2,833.94	\$164.63	\$31.36	\$3,595.51
<i>d</i>		Encounter to Financial Adjustment	1.008	1.008	1.008	1.002	1.008	1.008
<i>e</i>		Non-Covered Services	1.000	1.000	1.000	1.000	1.000	1.000
<i>f</i>		Provider Reimbursement Adjustment	1.000	1.000	1.001	1.000	1.000	1.000
<i>g</i>		Zolgensma Carveout	1.000	1.000	1.000	1.000	1.000	1.000
<i>h</i>		ER Leveling Policy Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
<i>i</i>		TPL Adjustment	0.999	0.999	0.999	0.999	0.999	0.999
<i>j</i>		5% Assessment - Provider Adjustment	1.000	0.999	0.987	1.000	0.986	0.989
<i>k</i>		340B Pharmacy Pricing Adjustment	1.000	1.000	1.000	0.998	1.000	1.000
<i>l</i>		IMD Removal	1.000	1.000	1.000	1.000	1.000	1.000
<i>m</i>		IMD Additions	1.000	1.000	1.000	1.000	1.000	1.000
<i>n</i>		SSI Children - COE Change	1.000	1.000	1.000	1.000	1.000	1.000
<i>o</i>		Drug Services Rebate Adjustment	1.000	1.000	1.000	0.997	1.000	1.000
<i>p</i>		Missing Data	1.000	1.000	1.000	1.000	1.000	1.000
<i>q</i>		IBNR Adjustment	1.059	1.004	1.002	1.000	1.001	1.010
<i>Product of c through q</i>		Adjusted CY 2019 PMPM Costs	\$525.92	\$54.48	\$2,823.34	\$164.07	\$31.17	\$3,617.29

MA Children Rate Cell								
Calculation Step		PMPM Development	Category of Service					Total
			Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	
		CY 2019 PMPM Cost Development						
<i>a</i>		CY 2019 Member Months	3,073,512	3,073,512	3,073,512	3,073,512	3,073,512	3,073,512
<i>b</i>		Total Allowed Dollars	\$57,560,942	\$109,880,457	\$188,010,159	\$106,948,542	\$78,513,331	\$556,093,515
<i>c = b / a</i>		CY 2019 PMPM Costs	\$18.73	\$35.75	\$61.17	\$34.80	\$25.55	\$180.93
<i>d</i>		Encounter to Financial Adjustment	1.008	1.008	1.008	1.002	1.008	1.007
<i>e</i>		Non-Covered Services	1.000	1.000	1.000	1.000	1.000	1.000
<i>f</i>		Provider Reimbursement Adjustment	1.000	1.000	1.008	1.000	1.000	1.003
<i>g</i>		Zolgensma Carveout	1.000	1.000	1.000	1.000	1.000	1.000
<i>h</i>		ER Leveling Policy Adjustment	1.000	1.000	1.002	1.000	1.000	1.001
<i>i</i>		TPL Adjustment	0.999	0.999	0.999	0.999	0.999	0.999
<i>j</i>		5% Assessment - Provider Adjustment	1.000	0.998	0.992	1.000	0.987	0.988
<i>k</i>		340B Pharmacy Pricing Adjustment	1.000	1.000	1.000	0.999	1.000	1.000
<i>l</i>		IMD Removal	1.000	1.000	1.000	1.000	1.000	1.000
<i>m</i>		IMD Additions	1.000	1.000	1.000	1.000	1.000	1.000
<i>n</i>		SSI Children - COE Change	1.000	1.000	1.000	1.000	1.000	1.000
<i>o</i>		Drug Services Rebate Adjustment	1.000	1.000	1.000	0.997	1.000	1.000
<i>p</i>		Missing Data	1.000	1.000	1.000	1.000	1.000	1.001
<i>q</i>		IBNR Adjustment	1.036	1.003	1.005	1.000	1.002	1.006
<i>Product of c through q</i>		Adjusted CY 2019 PMPM Costs	\$19.53	\$36.03	\$62.07	\$34.71	\$25.42	\$182.69

Exhibit 1A
Mississippi Division of Medicaid
All Regions SFY 2022 MississippiCAN Capitation Rate Development
CY 2019 Encounter Data

Quasi-CHIP Rate Cell								
Calculation Step		PMPM Development	Category of Service					Total
			Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	
		CY 2019 PMPM Cost Development						
<i>a</i>		CY 2019 Member Months	332,614	332,614	332,614	332,614	332,614	332,614
<i>b</i>		Total Allowed Dollars	\$5,446,512	\$9,073,755	\$19,105,747	\$14,472,984	\$10,780,970	\$60,719,518
<i>c = b / a</i>		CY 2019 PMPM Costs	\$16.37	\$27.28	\$57.44	\$43.51	\$32.41	\$182.55
<i>d</i>		Encounter to Financial Adjustment	1.008	1.008	1.008	1.002	1.008	1.007
<i>e</i>		Non-Covered Services	1.000	1.000	1.000	1.000	1.000	1.000
<i>f</i>		Provider Reimbursement Adjustment	1.000	1.000	1.010	1.000	1.000	1.003
<i>g</i>		Zolgensma Carveout	1.000	1.000	1.000	1.000	1.000	1.000
<i>h</i>		ER Leveling Policy Adjustment	1.000	1.000	1.001	1.000	1.000	1.000
<i>i</i>		TPL Adjustment	0.999	0.999	0.999	0.999	0.999	0.999
<i>j</i>		5% Assessment - Provider Adjustment	1.000	0.999	0.993	1.000	0.988	0.987
<i>k</i>		340B Pharmacy Pricing Adjustment	1.000	1.000	1.000	0.999	1.000	1.000
<i>l</i>		IMD Removal	1.000	1.000	1.000	1.000	1.000	1.000
<i>m</i>		IMD Additions	1.000	1.000	1.000	1.000	1.000	1.000
<i>n</i>		SSI Children - COE Change	1.000	1.000	1.000	1.000	1.000	1.000
<i>o</i>		Drug Services Rebate Adjustment	1.000	1.000	1.000	0.997	1.000	1.000
<i>p</i>		Missing Data	1.000	1.000	1.000	1.001	1.000	1.000
<i>q</i>		IBNR Adjustment	1.034	1.003	1.005	1.000	1.002	1.005
<i>Product of c through q</i>		Adjusted CY 2019 PMPM Costs	\$17.05	\$27.51	\$58.40	\$43.42	\$32.30	\$184.19

EXHIBIT 1B

CY 2018 Encounter Data

This report assumes the reader is familiar with the State of Mississippi's MississippiCAN program, its benefits, and rate setting principles. The report was prepared solely to provide assistance to DOM to set SFY 2022 capitation rates for the MississippiCAN 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.

State of Mississippi Division of Medicaid
SFY 2022 MississippiCAN Preliminary Rate Calculation and Certification

April 21, 2021

Exhibit 1B
Mississippi Division of Medicaid
All Regions SFY 2022 MississippiCAN Capitation Rate Development
CY 2018 Encounter Data

Breast and Cervical Cancer Rate Cell								
Calculation Step		Category of Service						
		Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other	Total
CY 2018 PMPM Cost Development								
<i>a</i>	CY 2018 Member Months	1,093	1,093	1,093	1,093	1,093	1,093	1,093
<i>b</i>	Total Allowed Dollars	\$216,751	\$1,566,900	\$1,018,873	\$423,712	\$8,385	\$53,640	\$3,288,261
<i>c = b / a</i>	CY 2018 PMPM Costs	\$198.31	\$1,433.58	\$932.18	\$387.66	\$7.67	\$49.08	\$3,008.47
<i>d</i>	Non-Covered Services	1.000	1.000	1.000	0.997	1.000	1.000	1.000
<i>e</i>	Drug Services Rebate Adjustment	1.000	1.000	1.000	0.997	1.000	1.000	1.000
<i>f</i>	Provider Reimbursement Adjustment	1.000	1.000	0.994	1.000	1.000	1.000	0.998
<i>g</i>	HPE Newborn Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>h</i>	IBNR Adjustment	1.040	1.000	1.001	1.000	1.000	1.008	1.003
<i>i</i>	5% Assessment - Provider Adjustment	1.000	1.000	0.998	1.000	0.959	0.994	0.999
<i>j</i>	5% Assessment - OPPS Adjustment	1.000	0.995	1.000	1.000	1.000	1.000	0.998
<i>k</i>	TPL Adjustment	0.999	0.999	0.999	0.999	0.999	0.999	0.999
<i>Product of c through k</i>	Subtotal: CY 2018 Adjusted Costs	\$206.04	\$1,424.81	\$924.16	\$385.16	\$7.34	\$49.10	\$2,996.62
CY 2018 to CY 2019 Trends								
<i>l</i>	Utilization Trend 2018 to 2019	1.035	1.030	1.035	0.995	1.000	1.035	1.027
<i>m</i>	Charge Trend 2018 to 2019	1.000	1.010	1.001	1.100	1.000	1.001	1.018
CY 2018 to CY 2019 Program Changes								
<i>n</i>	PRTF Services Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>o</i>	PDL Adjustment	1.000	1.000	1.000	0.989	1.000	1.000	0.998
<i>p</i>	Physician Limit Expansion Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>q</i>	Rx Limit Adjustment	1.000	1.000	1.000	1.003	1.000	1.000	1.000
<i>r</i>	Home Health Limit Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
CY 2018 to CY 2019 Reimbursement Methodology Changes								
<i>s</i>	OP Dental Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>t</i>	NET Reimbursement Adjustment	1.000	1.000	1.000	1.000	1.000	0.853	0.998
<i>u</i>	GME Adjustment	0.988	1.000	1.000	1.000	1.000	1.000	0.999
<i>Product of c through u</i>	CY 2018 PMPM Costs - Adjusted to CY 2019	\$210.59	\$1,481.91	\$957.70	\$418.10	\$7.34	\$43.40	\$3,119.03

Exhibit 1B
Mississippi Division of Medicaid
All Regions SFY 2022 MississippiCAN Capitation Rate Development
CY 2018 Encounter Data

Pregnant Women Rate Cell - Non-Deliveries								
Calculation Step		Category of Service						Total
		Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other	
	PMPM Development							
	CY 2018 PMPM Cost Development							
<i>a</i>	CY 2018 Member Months	135,342	135,342	135,342	135,342	135,342	135,342	135,342
<i>b</i>	Total Allowed Dollars	\$5,746,398	\$14,992,681	\$27,425,243	\$7,252,811	\$811,861	\$1,347,064	\$57,576,058
<i>c = b / a</i>	CY 2018 PMPM Costs	\$42.46	\$110.78	\$202.64	\$53.59	\$6.00	\$9.95	\$425.41
<i>d</i>	Non-Covered Services	1.000	1.000	1.000	0.997	1.000	1.000	0.999
<i>e</i>	Drug Services Rebate Adjustment	1.000	1.000	1.000	0.997	1.000	1.000	1.000
<i>f</i>	Provider Reimbursement Adjustment	1.000	1.000	0.997	1.000	1.000	1.000	0.998
<i>g</i>	HPE Newborn Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>h</i>	IBNR Adjustment	1.015	1.002	1.002	1.000	1.000	1.005	1.003
<i>i</i>	5% Assessment - Provider Adjustment	1.000	1.000	0.994	1.000	0.964	0.983	0.996
<i>j</i>	5% Assessment - OPPS Adjustment	1.000	0.990	1.000	1.000	1.000	1.000	0.997
<i>k</i>	TPL Adjustment	0.999	0.999	0.999	0.999	0.999	0.999	0.999
<i>Product of c through k</i>	Subtotal: CY 2018 Adjusted Costs	\$43.05	\$109.67	\$200.84	\$53.19	\$5.78	\$9.82	\$422.34
	CY 2018 to CY 2019 Trends							
<i>l</i>	Utilization Trend 2018 to 2019	1.015	1.010	1.000	0.995	1.000	1.000	1.003
<i>m</i>	Charge Trend 2018 to 2019	1.000	1.010	1.001	1.095	1.000	1.001	1.015
	CY 2018 to CY 2019 Program Changes							
<i>n</i>	PRTF Services Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>o</i>	PDL Adjustment	1.000	1.000	1.000	0.998	1.000	1.000	1.000
<i>p</i>	Physician Limit Expansion Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>q</i>	Rx Limit Adjustment	1.000	1.000	1.000	1.002	1.000	1.000	1.000
<i>r</i>	Home Health Limit Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	CY 2018 to CY 2019 Reimbursement Methodology Changes							
<i>s</i>	OP Dental Adjustment	1.000	0.999	1.000	1.000	1.000	1.000	1.000
<i>t</i>	NET Reimbursement Adjustment	1.000	1.000	1.000	1.000	1.000	0.985	1.000
<i>u</i>	GME Adjustment	0.988	1.000	1.000	1.000	1.000	1.000	0.999
<i>Product of c through u</i>	CY 2018 PMPM Costs - Adjusted to CY 2019	\$43.15	\$111.73	\$201.11	\$57.96	\$5.78	\$9.68	\$429.40

Pregnant Women Rate Cell - Deliveries								
Calculation Step		Category of Service						Total
		Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other	
	PMPM Development							
	CY 2018 PMPM Cost Development							
<i>a</i>	CY 2018 Member Months	135,342	135,342	135,342	135,342	135,342	135,342	135,342
<i>b</i>	Total Allowed Dollars	\$65,328,755	\$139,209	\$18,212,441	\$301,731	\$373	\$246,714	\$84,229,223
<i>c = b / a</i>	CY 2018 PMPM Costs ¹	\$482.69	\$1.03	\$134.57	\$2.23	\$0.00	\$1.82	\$622.34
<i>d</i>	Non-Covered Services	1.000	1.000	0.995	0.995	1.000	1.000	0.999
<i>e</i>	Drug Services Rebate Adjustment	1.000	1.000	1.000	0.998	1.000	1.000	1.000
<i>f</i>	Provider Reimbursement Adjustment	1.000	1.000	0.996	1.000	1.000	1.000	0.999
<i>g</i>	HPE Newborn Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>h</i>	IBNR Adjustment	1.017	1.002	1.001	1.000	1.000	1.004	1.014
<i>i</i>	5% Assessment - Provider Adjustment	1.000	0.996	0.995	1.000	0.956	0.982	0.999
<i>j</i>	5% Assessment - OPPS Adjustment	1.000	0.988	1.000	1.000	1.000	1.000	1.000
<i>k</i>	TPL Adjustment	0.999	0.999	0.999	0.999	0.999	0.999	0.999
<i>Product of c through k</i>	Subtotal: CY 2018 Adjusted Costs	\$490.49	\$1.01	\$132.64	\$2.21	\$0.00	\$1.79	\$628.15
	CY 2018 to CY 2019 Trends							
<i>l</i>	Utilization Trend 2018 to 2019	1.010	1.010	1.010	1.010	1.010	1.010	1.010
<i>m</i>	Charge Trend 2018 to 2019	1.000	1.010	1.001	1.095	1.000	1.001	1.001
	CY 2018 to CY 2019 Program Changes							
<i>n</i>	PRTF Services Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>o</i>	PDL Adjustment	1.000	1.000	1.000	0.999	1.000	1.000	1.000
<i>p</i>	Physician Limit Expansion Adjustment	1.000	1.000	1.002	1.000	1.000	1.000	1.000
<i>q</i>	Rx Limit Adjustment	1.000	1.000	1.000	1.003	1.000	1.000	1.000
<i>r</i>	Home Health Limit Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	CY 2018 to CY 2019 Reimbursement Methodology Changes							
<i>s</i>	OP Dental Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>t</i>	NET Reimbursement Adjustment	1.000	1.000	1.000	1.000	1.000	0.996	1.000
<i>u</i>	GME Adjustment	0.988	1.000	1.000	1.000	1.000	1.000	0.990
<i>Product of c through u</i>	CY 2018 PMPM Costs - Adjusted to CY 2019	\$489.20	\$1.03	\$134.45	\$2.45	\$0.00	\$1.81	\$628.95

PMPM costs are calculated using allowed amounts for 16,007 Pregnant Women deliveries and total Pregnant Women rate cell membership.

Exhibit 1B
Mississippi Division of Medicaid
All Regions SFY 2022 MississippiCAN Capitation Rate Development
CY 2018 Encounter Data

SSI / Disabled Newborn Rate Cell								
Calculation Step		Category of Service						
		Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other	Total
	PMPM Development							
	CY 2018 PMPM Cost Development							
<i>a</i>	CY 2018 Member Months	6,314	6,314	6,314	6,314	6,314	6,314	6,314
<i>b</i>	Total Allowed Dollars	\$32,924,454	\$2,515,547	\$9,028,474	\$3,086,322	\$3,396	\$2,316,202	\$49,874,395
<i>c = b / a</i>	CY 2018 PMPM Costs	\$5,214.52	\$398.41	\$1,429.91	\$488.81	\$0.54	\$366.84	\$7,899.02
<i>d</i>	Non-Covered Services	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>e</i>	Drug Services Rebate Adjustment	1.000	1.000	1.000	0.998	1.000	1.000	1.000
<i>f</i>	Provider Reimbursement Adjustment	1.000	1.000	1.029	1.000	1.000	1.000	1.005
<i>g</i>	HPE Newborn Adjustment	1.001	1.000	1.000	1.000	1.000	1.000	1.001
<i>h</i>	IBNR Adjustment	1.031	1.002	1.001	1.000	1.000	1.002	1.021
<i>i</i>	5% Assessment - Provider Adjustment	1.000	1.000	0.997	1.000	0.972	0.971	0.998
<i>j</i>	5% Assessment - OPPS Adjustment	1.000	0.996	1.000	1.000	1.000	1.000	1.000
<i>k</i>	TPL Adjustment	0.999	0.999	0.999	0.999	0.999	0.999	0.999
<i>Product of c through k</i>	Subtotal: CY 2018 Adjusted Costs	\$5,374.79	\$397.13	\$1,467.48	\$486.97	\$0.52	\$356.49	\$8,083.38
	CY 2018 to CY 2019 Trends							
<i>l</i>	Utilization Trend 2018 to 2019	1.035	1.010	1.065	1.030	1.000	1.065	1.040
<i>m</i>	Charge Trend 2018 to 2019	1.000	1.010	1.001	1.005	1.000	1.001	1.001
	CY 2018 to CY 2019 Program Changes							
<i>n</i>	PRTF Services Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>o</i>	PDL Adjustment	1.000	1.000	1.000	1.003	1.000	1.000	1.000
<i>p</i>	Physician Limit Expansion Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>q</i>	Rx Limit Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>r</i>	Home Health Limit Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	CY 2018 to CY 2019 Reimbursement Methodology Changes							
<i>s</i>	OP Dental Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>t</i>	NET Reimbursement Adjustment	1.000	1.000	1.000	1.000	1.000	0.990	1.000
<i>u</i>	GME Adjustment	0.988	1.000	1.000	1.000	1.000	1.000	0.992
<i>Product of c through u</i>	CY 2018 PMPM Costs - Adjusted to CY 2019	\$5,493.39	\$405.02	\$1,564.82	\$505.40	\$0.52	\$376.47	\$8,345.62

Exhibit 1B
Mississippi Division of Medicaid
All Regions SFY 2022 MississippiCAN Capitation Rate Development
CY 2018 Encounter Data

Non-SSI Newborns 0 to 2 Months Rate Cell								
Calculation Step		Category of Service						
		Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other	Total
	PMPM Development							
	CY 2018 PMPM Cost Development							
<i>a</i>	CY 2018 Member Months	76,083	76,083	76,083	76,083	76,083	76,083	76,083
<i>b</i>	Total Allowed Dollars	\$102,717,639	\$3,885,168	\$25,138,116	\$644,372	\$40,316	\$1,369,756	\$133,795,367
<i>c = b / a</i>	CY 2018 PMPM Costs	\$1,350.07	\$51.06	\$330.40	\$8.47	\$0.53	\$18.00	\$1,758.54
<i>d</i>	Non-Covered Services	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>e</i>	Drug Services Rebate Adjustment	1.000	1.000	1.000	0.997	1.000	1.000	1.000
<i>f</i>	Provider Reimbursement Adjustment	1.000	1.000	1.023	1.000	1.000	1.000	1.004
<i>g</i>	HPE Newborn Adjustment	1.006	1.001	1.002	1.000	1.001	1.004	1.005
<i>h</i>	IBNR Adjustment	1.011	1.005	1.002	1.000	1.000	1.004	1.009
<i>i</i>	5% Assessment - Provider Adjustment	1.000	1.000	0.992	1.000	0.988	0.985	0.998
<i>j</i>	5% Assessment - OPPS Adjustment	1.000	0.992	1.000	1.000	1.000	1.000	1.000
<i>k</i>	TPL Adjustment	0.999	0.999	0.999	0.999	0.999	0.999	0.999
<i>Product of c through k</i>	Subtotal: CY 2018 Adjusted Costs	\$1,370.72	\$50.88	\$336.04	\$8.43	\$0.52	\$17.86	\$1,784.45
	CY 2018 to CY 2019 Trends							
<i>l</i>	Utilization Trend 2018 to 2019	1.035	1.010	1.065	1.030	1.000	1.065	1.040
<i>m</i>	Charge Trend 2018 to 2019	1.000	1.010	1.001	1.005	1.000	1.001	1.001
	CY 2018 to CY 2019 Program Changes							
<i>n</i>	PRTF Services Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>o</i>	PDL Adjustment	1.000	1.000	1.000	1.003	1.000	1.000	1.000
<i>p</i>	Physician Limit Expansion Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>q</i>	Rx Limit Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>r</i>	Home Health Limit Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	CY 2018 to CY 2019 Reimbursement Methodology Changes							
<i>s</i>	OP Dental Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>t</i>	NET Reimbursement Adjustment	1.000	1.000	1.000	1.000	1.000	0.997	1.000
<i>u</i>	GME Adjustment	0.988	1.000	1.000	1.000	1.000	1.000	0.990
<i>Product of c through u</i>	CY 2018 PMPM Costs - Adjusted to CY 2019	\$1,400.96	\$51.89	\$358.33	\$8.75	\$0.52	\$18.98	\$1,839.44

Exhibit 1B
Mississippi Division of Medicaid
All Regions SFY 2022 MississippiCAN Capitation Rate Development
CY 2018 Encounter Data

Foster Care Rate Cell								
Calculation Step		Category of Service						
		Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other	Total
	PMPM Development							
	CY 2018 PMPM Cost Development							
<i>a</i>	CY 2018 Member Months	77,042	77,042	77,042	77,042	77,042	77,042	77,042
<i>b</i>	Total Allowed Dollars	\$8,338,494	\$3,384,995	\$9,015,602	\$5,597,316	\$2,264,242	\$675,674	\$29,276,323
<i>c = b / a</i>	CY 2018 PMPM Costs	\$108.23	\$43.94	\$117.02	\$72.65	\$29.39	\$8.77	\$380.00
<i>d</i>	Non-Covered Services	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>e</i>	Drug Services Rebate Adjustment	1.000	1.000	1.000	0.997	1.000	1.000	0.999
<i>f</i>	Provider Reimbursement Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>g</i>	HPE Newborn Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>h</i>	IBNR Adjustment	1.019	1.001	1.001	1.000	1.000	1.004	1.006
<i>i</i>	5% Assessment - Provider Adjustment	1.000	0.987	0.967	1.000	0.956	0.961	0.984
<i>j</i>	5% Assessment - OPPS Adjustment	1.000	0.989	1.000	1.000	1.000	1.000	0.999
<i>k</i>	TPL Adjustment	0.999	0.999	0.999	0.999	0.999	0.999	0.999
<i>Product of c through k</i>	Subtotal: CY 2018 Adjusted Costs	\$110.16	\$42.87	\$113.12	\$72.35	\$28.05	\$8.45	\$375.00
	CY 2018 to CY 2019 Trends							
<i>l</i>	Utilization Trend 2018 to 2019	1.035	1.010	1.065	1.030	1.000	1.065	1.038
<i>m</i>	Charge Trend 2018 to 2019	1.000	1.010	1.001	1.005	1.000	1.001	1.002
	CY 2018 to CY 2019 Program Changes							
<i>n</i>	PRTF Services Adjustment	2.401	1.000	1.000	1.000	1.000	1.000	1.409
<i>o</i>	PDL Adjustment	1.000	1.000	1.000	1.003	1.000	1.000	1.000
<i>p</i>	Physician Limit Expansion Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>q</i>	Rx Limit Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>r</i>	Home Health Limit Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	CY 2018 to CY 2019 Reimbursement Methodology Changes							
<i>s</i>	OP Dental Adjustment	1.000	0.985	1.000	1.000	1.000	1.000	0.999
<i>t</i>	NET Reimbursement Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>u</i>	GME Adjustment	0.988	1.000	1.000	1.000	1.000	1.000	0.994
<i>Product of c through u</i>	CY 2018 PMPM Costs - Adjusted to CY 2019	\$270.28	\$43.06	\$120.62	\$75.08	\$28.05	\$9.02	\$546.11

EXHIBIT 1C

Q1 to Q3 2018 FFS and Encounter Data for MYPAC Rate Cell

This report assumes the reader is familiar with the State of Mississippi's MississippiCAN program, its benefits, and rate setting principles. The report was prepared solely to provide assistance to DOM to set SFY 2022 capitation rates for the MississippiCAN 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.

State of Mississippi Division of Medicaid
SFY 2022 MississippiCAN Preliminary Rate Calculation and Certification

April 21, 2021

Exhibit 1C
Mississippi Division of Medicaid
All Regions SFY 2022 MississippiCAN Capitation Rate Development
CY 2018 FFS Data for MYPAC Rate Cell

MYPAC Rate Cell								
Calculation Step		Category of Service						
		Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other	Total
	PMPM Development							
	CY 2018 PMPM Cost Development							
<i>a</i>	CY 2018 Member Months	5,467	5,467	5,467	5,467	5,467	5,467	5,467
<i>b</i>	Total Allowed Dollars	\$1,542,026	\$345,252	\$16,278,579	\$920,784	\$178,101	\$140,209	\$19,404,950
<i>c = b / a</i>	CY 2018 PMPM Costs	\$282.06	\$63.15	\$2,977.61	\$168.43	\$32.58	\$25.65	\$3,549.47
<i>d</i>	Drug Services Rebate Adjustment	1.000	1.000	1.000	0.997	1.000	1.000	1.000
<i>e</i>	IBNR Adjustment	1.001	1.001	1.001	1.000	1.001	1.001	1.001
<i>f</i>	TPL Adjustment	0.992	0.992	0.992	0.992	0.992	0.992	0.992
<i>g</i>	Utilization Trend Q1 to Q3 2018 to CY 2018	1.004	1.001	1.008	1.002	1.000	1.008	1.007
<i>h</i>	Charge Trend Q1 to Q3 2018 to CY 2018	1.000	1.004	1.000	0.999	1.000	1.000	1.000
<i>i</i>	5% Assessment - OPPS Adjustment	1.000	1.004	1.000	1.000	1.000	1.000	1.000
<i>j</i>	PRTF Append Q4 2018 Experience	1.084	1.000	1.000	1.000	1.000	1.000	1.007
<i>k</i>	MYPAC Seasonality Adjustment	0.989	0.989	0.989	0.989	0.989	0.989	0.989
<i>Product of c through k</i>	Subtotal: CY 2018 Adjusted Costs	\$301.53	\$62.58	\$2,947.66	\$164.92	\$31.99	\$25.39	\$3,534.06
	CY 2018 to CY 2019 Trends							
<i>l</i>	Utilization Trend 2018 to 2019	1.035	1.010	1.002	1.030	1.000	1.065	1.007
<i>m</i>	Charge Trend 2018 to 2019	1.000	1.010	1.000	1.005	1.000	1.001	1.000
	CY 2018 to CY 2019 Program Changes							
<i>n</i>	PRTF Adjusting to CY 2019 Basis	1.211	1.000	1.000	1.000	1.000	1.000	1.018
<i>o</i>	PDL Adjustment	1.000	1.000	1.000	1.003	1.000	1.000	1.000
	CY 2018 to CY 2019 Reimbursement Methodology Changes							
<i>p</i>	OP Dental Adjustment	1.000	0.997	1.000	1.000	1.000	1.000	1.000
<i>q</i>	GME Adjustment	0.988	1.000	1.000	1.000	1.000	1.000	0.999
<i>Product of c through q</i>	CY 2018 PMPM Costs - Trended to CY 2019	\$373.19	\$63.61	\$2,954.99	\$171.16	\$31.99	\$27.07	\$3,622.01

EXHIBIT 2A

Final Base Data and Projection Assumptions

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State of Mississippi Division of Medicaid
SFY 2022 MississippiCAN Preliminary Rate Calculation and Certification

April 21, 2021

Exhibit 2A
Mississippi Division of Medicaid
All Regions SFY 2022 MississippiCAN Capitation Rate Development
Final Base Data and Projection Assumptions

		Non-Newborn SSI / Disabled Rate Cell						
		Category of Service						
Calculation Step	PMPM Development	Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other	Total
	Base Period Summaries							
<i>a</i>	CY 2019 PMPM Costs	\$201.49	\$205.75	\$217.27	\$303.71	\$9.24	\$61.20	\$998.65
	Trends							
<i>b</i>	Utilization Trend Factors CY 2019 to SFY 2022	1.051	1.025	1.077	1.013	1.000	1.077	1.041
<i>c</i>	Charge Trend Factors CY 2019 to SFY 2022	0.986	0.992	0.998	1.116	1.000	1.020	1.031
<i>d</i>	PRTF Specific Charge Trend CY 2019 to SFY 2022	1.001	1.000	1.000	1.000	1.000	1.000	1.000
	Population Changes							
<i>e</i>	COVID-19 Population Acuity Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	Program Changes							
<i>f</i>	ASD Adjustment	1.000	1.000	1.001	1.000	1.000	1.000	1.000
<i>g</i>	Rx Limit Adjustment	1.000	1.000	1.000	1.005	1.000	1.000	1.002
<i>h</i>	Home Health Limit Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>i</i>	PDL Adjustment	1.000	1.000	1.000	0.969	1.000	1.000	0.990
	Reimbursement Changes							
<i>j</i>	OP Dental Adjustment	1.000	0.999	1.000	1.000	1.000	1.000	1.000
<i>k</i>	NET Reimbursement Adjustment	1.000	1.000	1.000	1.000	1.000	0.972	0.998
<i>l</i>	GME Adjustment	0.963	1.000	1.000	1.000	1.000	1.000	0.993
<i>m</i>	Emergency Ambulance Payment Increase	1.000	1.000	1.000	1.000	1.000	1.072	1.004
<i>n</i>	COVID-19 Vaccine Administration Adjustment	1.000	1.000	1.003	1.000	1.000	1.000	1.001
<i>o</i>	5% Assessment Removal Adjustment	1.000	1.007	1.023	1.000	1.047	1.036	1.009
<i>p</i>	Dental Reimbursement Change	1.000	1.000	1.000	1.000	1.001	1.000	1.000
<i>Product of a through p</i>	Projected SFY 2022 PMPM Costs	\$201.24	\$210.55	\$239.80	\$334.37	\$9.68	\$72.49	\$1,068.13

		Breast and Cervical Cancer Rate Cell						
		Category of Service						
Calculation Step	PMPM Development	Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other	Total
	Base Period Summaries							
	CY 2018 MMs	1.093	1.093	1.093	1.093	1.093	1.093	1.093
	CY 2018 PMPM Costs - Trended to CY 2019	\$210.59	\$1,481.91	\$957.70	\$418.10	\$7.34	\$43.40	\$3,119.03
	CY 2019 MMs	1.190	1,190	1,190	1,190	1,190	1,190	1,190
	CY 2019 PMPM Costs	\$216.93	\$1,581.65	\$1,030.31	\$521.65	\$8.14	\$41.77	\$3,400.43
<i>a</i>	Blended CY 2018 & CY 2019 PMPM Costs	\$213.89	\$1,533.89	\$995.55	\$472.07	\$7.76	\$42.55	\$3,265.71
	Trends							
<i>b</i>	Utilization Trend Factors CY 2019 to SFY 2022	1.051	1.025	1.077	1.013	1.000	1.077	1.041
<i>c</i>	Charge Trend Factors CY 2019 to SFY 2022	0.986	0.992	0.998	1.116	1.000	1.020	1.012
<i>d</i>	PRTF Specific Charge Trend CY 2019 to SFY 2022	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	Population Changes							
<i>e</i>	COVID-19 Population Acuity Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	Program Changes							
<i>f</i>	ASD Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>g</i>	Rx Limit Adjustment	1.000	1.000	1.000	1.001	1.000	1.000	1.000
<i>h</i>	Home Health Limit Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>i</i>	PDL Adjustment	1.000	1.000	1.000	0.969	1.000	1.000	0.995
	Reimbursement Changes							
<i>j</i>	OP Dental Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>k</i>	NET Reimbursement Adjustment	1.000	1.000	1.000	1.000	1.000	0.993	1.000
<i>l</i>	GME Adjustment	0.963	1.000	1.000	1.000	1.000	1.000	0.998
<i>m</i>	Emergency Ambulance Payment Increase	1.000	1.000	1.000	1.000	1.000	1.042	1.001
<i>n</i>	COVID-19 Vaccine Administration Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>o</i>	5% Assessment Removal Adjustment	1.000	1.000	1.004	1.000	1.051	1.027	1.002
<i>p</i>	Dental Reimbursement Change	1.000	1.000	1.000	1.000	1.001	1.000	1.000
<i>Product of a through p</i>	Projected SFY 2022 PMPM Costs	\$213.48	\$1,561.00	\$1,074.64	\$517.44	\$8.16	\$49.65	\$3,424.36

Exhibit 2A
Mississippi Division of Medicaid
All Regions SFY 2022 MississippiCAN Capitation Rate Development
Final Base Data and Projection Assumptions

		MA Adult Rate Cell - Non-Deliveries						
		Category of Service						
Calculation Step	PMPM Development	Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other	Total
a	Base Period Summaries CY 2019 PMPM Costs	\$46.14	\$112.85	\$122.62	\$113.81	\$6.87	\$12.52	\$414.81
	Trends							
b	Utilization Trend Factors CY 2019 to SFY 2022	0.988	1.000	1.000	1.090	1.000	1.000	1.023
c	Charge Trend Factors CY 2019 to SFY 2022	1.021	1.001	0.999	1.077	1.000	1.020	1.025
d	PRTF Specific Charge Trend CY 2019 to SFY 2022	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	Population Changes							
e	COVID-19 Population Acuity Adjustment	0.900	0.900	0.900	0.900	0.900	0.900	0.900
	Program Changes							
f	ASD Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
g	Rx Limit Adjustment	1.000	1.000	1.000	1.003	1.000	1.000	1.001
h	Home Health Limit Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
i	PDL Adjustment	1.000	1.000	1.000	0.989	1.000	1.000	0.996
	Reimbursement Changes							
j	OP Dental Adjustment	1.000	0.999	1.000	1.000	1.000	1.000	1.000
k	NET Reimbursement Adjustment	1.000	1.000	1.000	1.000	1.000	0.964	0.999
l	GME Adjustment	0.963	1.000	1.000	1.000	1.000	1.000	0.996
m	Emergency Ambulance Payment Increase	1.000	1.000	1.000	1.000	1.000	1.126	1.004
n	COVID-19 Vaccine Administration Adjustment	1.000	1.000	1.004	1.000	1.000	1.000	1.001
o	5% Assessment Removal Adjustment	1.000	1.001	1.018	1.000	1.046	1.038	1.007
p	Dental Reimbursement Change	1.000	1.000	1.000	1.000	1.001	1.000	1.000
Product of a through p Projected SFY 2022 PMPM Costs		\$40.29	\$101.64	\$112.66	\$119.12	\$6.47	\$12.94	\$393.13

		MA Adult Rate Cell - Deliveries						
		Category of Service						
Calculation Step	PMPM Development	Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other	Total
a	Base Period Summaries CY 2019 PMPM Costs	\$33.86	\$0.12	\$8.65	\$0.16	\$0.00	\$0.18	\$42.97
	Trends							
b	Utilization Trend Factors CY 2019 to SFY 2022	1.025	1.013	1.013	1.013	1.013	1.013	1.023
c	Charge Trend Factors CY 2019 to SFY 2022	1.021	1.001	0.999	1.077	1.000	1.020	1.016
d	PRTF Specific Charge Trend CY 2019 to SFY 2022	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	Population Changes							
e	COVID-19 Population Acuity Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	Program Changes							
f	ASD Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
g	Rx Limit Adjustment	1.000	1.000	1.000	1.002	1.000	1.000	1.000
h	Home Health Limit Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
i	PDL Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	Reimbursement Changes							
j	OP Dental Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000
k	NET Reimbursement Adjustment	1.000	1.000	1.000	1.000	1.000	0.968	1.000
l	GME Adjustment	0.963	1.000	1.000	1.000	1.000	1.000	0.971
m	Emergency Ambulance Payment Increase	1.000	1.000	1.000	1.000	1.000	1.399	1.002
n	COVID-19 Vaccine Administration Adjustment	1.000	1.000	1.052	1.000	1.000	1.000	1.010
o	5% Assessment Removal Adjustment	1.000	1.003	1.008	1.000	1.051	1.045	1.002
p	Dental Reimbursement Change	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Product of a through p Projected SFY 2022 PMPM Costs		\$34.12	\$0.12	\$9.28	\$0.17	\$0.00	\$0.26	\$43.96

PMPM costs are calculated using allowed amounts for 3,433 MA Adult deliveries and total MA Adult rate cell membership in 2019.

Exhibit 2A Mississippi Division of Medicaid All Regions SFY 2022 MississippiCAN Capitation Rate Development Final Base Data and Projection Assumptions								
Pregnant Women Rate Cell - Non-Deliveries								
Calculation Step		PMPM Development	Category of Service					
			Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other
		Base Period Summaries						
		CY 2018 MMs	135,342	135,342	135,342	135,342	135,342	135,342
		CY 2018 PMPM Costs - Trended to CY 2019	\$43.15	\$111.73	\$201.11	\$57.96	\$5.78	\$9.68
		CY 2019 MMs	137,293	137,293	137,293	137,293	137,293	137,293
		CY 2019 PMPM Costs	\$36.76	\$117.44	\$199.01	\$51.24	\$4.86	\$9.29
a		Blended CY 2018 & CY 2019 PMPM Costs	\$39.93	\$114.60	\$200.06	\$54.58	\$5.31	\$9.48
		Trends						
b		Utilization Trend Factors CY 2019 to SFY 2022	0.988	1.000	1.000	1.090	1.000	1.000
c		Charge Trend Factors CY 2019 to SFY 2022	1.021	1.001	0.999	1.077	1.000	1.020
d		PRTF Specific Charge Trend CY 2019 to SFY 2022	1.000	1.000	1.000	1.000	1.000	1.000
		Population Changes						
e		COVID-19 Population Acuity Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
		Program Changes						
f		ASD Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
g		Rx Limit Adjustment	1.000	1.000	1.000	1.001	1.000	1.000
h		Home Health Limit Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
i		PDL Adjustment	1.000	1.000	1.000	0.989	1.000	1.000
		Reimbursement Changes						
j		OP Dental Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
k		NET Reimbursement Adjustment	1.000	1.000	1.000	1.000	1.000	0.993
l		GME Adjustment	0.963	1.000	1.000	1.000	1.000	1.000
m		Emergency Ambulance Payment Increase	1.000	1.000	1.000	1.000	1.000	1.181
n		COVID-19 Vaccine Administration Adjustment	1.000	1.000	1.002	1.000	1.000	1.000
o		5% Assessment Removal Adjustment	1.000	1.000	1.010	1.000	1.047	1.039
p		Dental Reimbursement Change	1.000	1.000	1.000	1.000	1.001	1.000
Product of a through p		Projected SFY 2022 PMPM Costs	\$38.76	\$114.74	\$202.36	\$63.37	\$5.57	\$11.78
Pregnant Women Rate Cell - Deliveries								
Calculation Step		PMPM Development	Category of Service					
			Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other
		Base Period Summaries						
		CY 2018 MMs	135,342	135,342	135,342	135,342	135,342	135,342
		CY 2018 PMPM Costs - Trended to CY 2019	\$489.20	\$1.03	\$134.45	\$2.45	\$0.00	\$1.81
		CY 2019 MMs	137,293	137,293	137,293	137,293	137,293	137,293
		CY 2019 PMPM Costs	\$471.16	\$1.53	\$124.93	\$2.29	\$0.00	\$1.40
a		Blended CY 2018 & CY 2019 PMPM Costs	\$480.12	\$1.28	\$129.66	\$2.37	\$0.00	\$1.60
		Trends						
b		Utilization Trend Factors CY 2019 to SFY 2022	1.025	1.013	1.013	1.013	1.013	1.013
c		Charge Trend Factors CY 2019 to SFY 2022	1.021	1.001	0.999	1.077	1.000	1.020
d		PRTF Specific Charge Trend CY 2019 to SFY 2022	1.000	1.000	1.000	1.000	1.000	1.000
		Population Changes						
e		COVID-19 Population Acuity Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
		Program Changes						
f		ASD Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
g		Rx Limit Adjustment	1.000	1.000	1.000	1.001	1.000	1.000
h		Home Health Limit Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
i		PDL Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
		Reimbursement Changes						
j		OP Dental Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
k		NET Reimbursement Adjustment	1.000	1.000	1.000	1.000	1.000	0.992
l		GME Adjustment	0.963	1.000	1.000	1.000	1.000	1.000
m		Emergency Ambulance Payment Increase	1.000	1.000	1.000	1.000	1.000	1.396
n		COVID-19 Vaccine Administration Adjustment	1.000	1.000	1.003	1.000	1.000	1.000
o		5% Assessment Removal Adjustment	1.000	1.004	1.008	1.000	1.047	1.048
p		Dental Reimbursement Change	1.000	1.000	1.000	1.000	1.000	1.000
Product of a through p		Projected SFY 2022 PMPM Costs	\$483.83	\$1.30	\$132.66	\$2.59	\$0.00	\$2.41

PMPM costs are calculated using allowed amounts for 15,789 Pregnant Women deliveries and total Pregnant Women rate cell membership in 2019.

Exhibit 2A
Mississippi Division of Medicaid
All Regions SFY 2022 MississippiCAN Capitation Rate Development
Final Base Data and Projection Assumptions

SSI / Disabled Newborn Rate Cell								
Calculation Step		PMPM Development	Category of Service					
			Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other
		Base Period Summaries						
		CY 2018 MMs	6,314	6,314	6,314	6,314	6,314	6,314
		CY 2018 PMPM Costs - Trended to CY 2019	\$5,493.39	\$405.02	\$1,564.82	\$505.40	\$0.52	\$376.47
		CY 2019 MMs	6,339	6,339	6,339	6,339	6,339	6,339
		CY 2019 PMPM Costs	\$4,245.88	\$227.76	\$1,589.17	\$584.38	\$0.70	\$252.34
a		Blended CY 2018 & CY 2019 PMPM Costs	\$4,868.40	\$316.21	\$1,577.02	\$544.97	\$0.61	\$314.28
		Trends						
b		Utilization Trend Factors CY 2019 to SFY 2022	1.051	1.013	1.051	1.038	1.000	1.051
c		Charge Trend Factors CY 2019 to SFY 2022	0.998	1.015	1.000	1.064	1.000	1.020
d		PRTF Specific Charge Trend CY 2019 to SFY 2022	1.000	1.000	1.000	1.000	1.000	1.000
		Population Changes						
e		COVID-19 Population Acuity Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
		Program Changes						
f		ASD Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
g		Rx Limit Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
h		Home Health Limit Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
i		PDL Adjustment	1.000	1.000	1.000	0.985	1.000	1.000
		Reimbursement Changes						
j		OP Dental Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
k		NET Reimbursement Adjustment	1.000	1.000	1.000	1.000	1.000	0.976
l		GME Adjustment	0.963	1.000	1.000	1.000	1.000	1.000
m		Emergency Ambulance Payment Increase	1.000	1.000	1.000	1.000	1.000	1.058
n		COVID-19 Vaccine Administration Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
o		5% Assessment Removal Adjustment	1.000	1.001	1.005	1.000	1.038	1.040
p		Dental Reimbursement Change	1.000	1.000	1.000	1.000	1.012	1.000
Product of a through p		Projected SFY 2022 PMPM Costs	\$4,916.77	\$325.22	\$1,665.04	\$592.33	\$0.64	\$361.85

Non-SSI Newborns 0 to 2 Months Rate Cell								
Calculation Step		PMPM Development	Category of Service					
			Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other
		Base Period Summaries						
		CY 2018 MMs	76,083	76,083	76,083	76,083	76,083	76,083
		CY 2018 PMPM Costs - Trended to CY 2019	\$1,400.96	\$51.89	\$358.33	\$8.75	\$0.52	\$18.98
		CY 2019 MMs	75,333	75,333	75,333	75,333	75,333	75,333
		CY 2019 PMPM Costs	\$1,396.81	\$53.54	\$346.15	\$8.86	\$0.66	\$13.96
a		Blended CY 2018 & CY 2019 PMPM Costs	\$1,398.90	\$52.71	\$352.27	\$8.81	\$0.59	\$16.49
		Trends						
b		Utilization Trend Factors CY 2019 to SFY 2022	1.051	1.013	1.051	1.038	1.000	1.051
c		Charge Trend Factors CY 2019 to SFY 2022	0.998	1.015	1.000	1.064	1.000	1.020
d		PRTF Specific Charge Trend CY 2019 to SFY 2022	1.000	1.000	1.000	1.000	1.000	1.000
		Population Changes						
e		COVID-19 Population Acuity Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
		Program Changes						
f		ASD Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
g		Rx Limit Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
h		Home Health Limit Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
i		PDL Adjustment	1.000	1.000	1.000	0.985	1.000	1.000
		Reimbursement Changes						
j		OP Dental Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
k		NET Reimbursement Adjustment	1.000	1.000	1.000	1.000	1.000	0.989
l		GME Adjustment	0.963	1.000	1.000	1.000	1.000	1.000
m		Emergency Ambulance Payment Increase	1.000	1.000	1.000	1.000	1.000	1.333
n		COVID-19 Vaccine Administration Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
o		5% Assessment Removal Adjustment	1.000	1.000	1.011	1.000	1.024	1.030
p		Dental Reimbursement Change	1.000	1.000	1.000	1.000	1.026	1.000
Product of a through p		Projected SFY 2022 PMPM Costs	\$1,412.80	\$54.15	\$373.93	\$9.57	\$0.62	\$23.98

Exhibit 2A
Mississippi Division of Medicaid
All Regions SFY 2022 MississippiCAN Capitation Rate Development
Final Base Data and Projection Assumptions

Non-SSI Newborns 3 to 12 Months Rate Cell								
Calculation Step		PMPM Development	Category of Service					
			Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other
		Base Period Summaries						
a		CY 2019 PMPM Costs	\$37.34	\$58.60	\$109.20	\$23.74	\$0.98	\$5.26
		Trends						
b		Utilization Trend Factors CY 2019 to SFY 2022	1.051	1.013	1.051	1.038	1.000	1.051
c		Charge Trend Factors CY 2019 to SFY 2022	0.998	1.015	1.000	1.064	1.000	1.020
d		PRTF Specific Charge Trend CY 2019 to SFY 2022	1.000	1.000	1.000	1.000	1.000	1.000
		Population Changes						
e		COVID-19 Population Acuity Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
		Program Changes						
f		ASD Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
g		Rx Limit Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
h		Home Health Limit Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
i		PDL Adjustment	1.000	1.000	1.000	0.985	1.000	1.000
		Reimbursement Changes						
j		OP Dental Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
k		NET Reimbursement Adjustment	1.000	1.000	1.000	1.000	1.000	0.980
l		GME Adjustment	0.963	1.000	1.000	1.000	1.000	1.000
m		Emergency Ambulance Payment Increase	1.000	1.000	1.000	1.000	1.000	1.184
n		COVID-19 Vaccine Administration Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
o		5% Assessment Removal Adjustment	1.000	1.001	1.021	1.000	1.036	1.041
p		Dental Reimbursement Change	1.000	1.000	1.000	1.000	1.013	1.000
Product of a through p		Projected SFY 2022 PMPM Costs	\$37.71	\$60.22	\$117.12	\$25.80	\$1.03	\$6.81

Foster Care Rate Cell								
Calculation Step		PMPM Development	Category of Service					
			Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other
		Base Period Summaries						
		CY 2018 MMs	77,042	77,042	77,042	77,042	77,042	77,042
		CY 2018 PMPM Costs - Trended to CY 2019	\$270.28	\$43.06	\$120.62	\$75.08	\$28.05	\$9.02
		CY 2019 MMs	78,894	78,894	78,894	78,894	78,894	78,894
		CY 2019 PMPM Costs	\$309.73	\$42.87	\$129.32	\$73.72	\$26.65	\$11.97
a		Blended CY 2018 & CY 2019 PMPM Costs	\$290.24	\$42.96	\$125.02	\$74.39	\$27.34	\$10.51
		Trends						
b		Utilization Trend Factors CY 2019 to SFY 2022	1.051	1.013	1.051	1.038	1.000	1.051
c		Charge Trend Factors CY 2019 to SFY 2022	0.998	1.015	1.000	1.064	1.000	1.020
d		PRTF Specific Charge Trend CY 2019 to SFY 2022	1.040	1.000	1.000	1.000	1.000	1.000
		Population Changes						
e		COVID-19 Population Acuity Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
		Program Changes						
f		ASD Adjustment	1.000	1.000	1.001	1.000	1.000	1.000
g		Rx Limit Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
h		Home Health Limit Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
i		PDL Adjustment	1.000	1.000	1.000	0.985	1.000	1.000
		Reimbursement Changes						
j		OP Dental Adjustment	1.000	0.996	1.000	1.000	1.000	1.000
k		NET Reimbursement Adjustment	1.000	1.000	1.000	1.000	1.000	0.998
l		GME Adjustment	0.963	1.000	1.000	1.000	1.000	1.000
m		Emergency Ambulance Payment Increase	1.000	1.000	1.000	1.000	1.000	1.053
n		COVID-19 Vaccine Administration Adjustment	1.000	1.000	1.017	1.000	1.000	1.000
o		5% Assessment Removal Adjustment	1.000	1.015	1.037	1.000	1.047	1.047
p		Dental Reimbursement Change	1.000	1.000	1.000	1.000	1.001	1.000
Product of a through p		Projected SFY 2022 PMPM Costs	\$304.74	\$44.60	\$138.59	\$80.86	\$28.67	\$12.40

Exhibit 2A
Mississippi Division of Medicaid
All Regions SFY 2022 MississippiCAN Capitation Rate Development
Final Base Data and Projection Assumptions

MYPAC Rate Cell								
Calculation Step		PMPM Development	Category of Service					
			Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other
		Base Period Summaries						
		CY 2018 MMs	5,467	5,467	5,467	5,467	5,467	5,467
		CY 2018 PMPM Costs - Trended to CY 2019	\$373.19	\$63.61	\$2,954.99	\$171.16	\$31.99	\$27.07
		CY 2019 MMs	7,783	7,783	7,783	7,783	7,783	7,783
		CY 2019 PMPM Costs	\$525.92	\$54.48	\$2,823.34	\$164.07	\$31.17	\$18.30
a		Blended CY 2018 & CY 2019 PMPM Costs	\$462.90	\$58.25	\$2,877.66	\$166.99	\$31.51	\$21.92
		Trends						
b		Utilization Trend Factors CY 2019 to SFY 2022	1.051	1.013	1.002	1.038	1.000	1.051
c		Charge Trend Factors CY 2019 to SFY 2022	0.998	1.015	1.000	1.064	1.000	1.020
d		PRTF Specific Charge Trend CY 2019 to SFY 2022	1.010	1.000	1.000	1.000	1.000	1.000
		Population Changes						
e		COVID-19 Population Acuity Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
		Program Changes						
f		ASD Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
g		Rx Limit Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
h		Home Health Limit Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
i		PDL Adjustment	1.000	1.000	1.000	0.985	1.000	1.000
		Reimbursement Changes						
j		OP Dental Adjustment	1.000	0.993	1.000	1.000	1.000	1.000
k		NET Reimbursement Adjustment	1.000	1.000	1.000	1.000	1.000	0.955
l		GME Adjustment	0.963	1.000	1.000	1.000	1.000	1.000
m		Emergency Ambulance Payment Increase	1.000	1.000	1.000	1.000	1.000	1.215
n		COVID-19 Vaccine Administration Adjustment	1.000	1.000	1.001	1.000	1.000	1.000
o		5% Assessment Removal Adjustment	1.000	1.001	1.050	1.000	1.048	1.039
p		Dental Reimbursement Change	1.000	1.000	1.000	1.000	1.001	1.000
Product of a through p		Projected SFY 2022 PMPM Costs	\$472.03	\$59.50	\$3,030.58	\$181.51	\$33.06	\$28.31
								\$3,805.00

MA Children Rate Cell								
Calculation Step		PMPM Development	Category of Service					
			Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other
		Base Period Summaries						
a		CY 2019 PMPM Costs	\$19.53	\$36.03	\$62.07	\$34.71	\$25.42	\$4.92
		Trends						
b		Utilization Trend Factors CY 2019 to SFY 2022	1.051	1.013	1.051	1.038	1.000	1.051
c		Charge Trend Factors CY 2019 to SFY 2022	0.998	1.015	1.000	1.064	1.000	1.020
d		PRTF Specific Charge Trend CY 2019 to SFY 2022	1.011	1.000	1.000	1.000	1.000	1.000
		Population Changes						
e		COVID-19 Population Acuity Adjustment	0.966	0.966	0.966	0.966	0.966	0.966
		Program Changes						
f		ASD Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
g		Rx Limit Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
h		Home Health Limit Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
i		PDL Adjustment	1.000	1.000	1.000	0.985	1.000	1.000
		Reimbursement Changes						
j		OP Dental Adjustment	1.000	0.989	1.000	1.000	1.000	1.000
k		NET Reimbursement Adjustment	1.000	1.000	1.000	1.000	1.000	0.987
l		GME Adjustment	0.963	1.000	1.000	1.000	1.000	1.000
m		Emergency Ambulance Payment Increase	1.000	1.000	1.000	1.000	1.000	1.094
n		COVID-19 Vaccine Administration Adjustment	1.000	1.000	1.034	1.000	1.000	1.000
o		5% Assessment Removal Adjustment	1.000	1.008	1.027	1.000	1.049	1.043
p		Dental Reimbursement Change	1.000	1.000	1.000	1.000	1.001	1.000
Product of a through p		Projected SFY 2022 PMPM Costs	\$19.26	\$35.63	\$66.89	\$36.44	\$25.77	\$5.74
								\$189.73

Exhibit 2A Mississippi Division of Medicaid All Regions SFY 2022 MississippiCAN Capitation Rate Development Final Base Data and Projection Assumptions							
Quasi-CHIP Rate Cell							
Calculation Step	PMPM Development	Category of Service					
		Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other
							Total
a	Base Period Summaries CY 2019 PMPM Costs	\$17.05	\$27.51	\$58.40	\$43.42	\$32.30	\$5.51
	Trends						\$184.19
b	Utilization Trend Factors CY 2019 to SFY 2022	1.051	1.013	1.051	1.038	1.000	1.051
c	Charge Trend Factors CY 2019 to SFY 2022	0.998	1.015	1.000	1.064	1.000	1.020
d	PRTF Specific Charge Trend CY 2019 to SFY 2022	1.011	1.000	1.000	1.000	1.000	1.000
	Population Changes						1.001
e	COVID-19 Population Acuity Adjustment	0.966	0.966	0.966	0.966	0.966	0.966
	Program Changes						0.966
f	ASD Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
g	Rx Limit Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
h	Home Health Limit Adjustment	1.000	1.000	1.000	1.000	1.000	1.000
i	PDL Adjustment	1.000	1.000	1.000	0.985	1.000	1.000
	Reimbursement Changes						0.996
j	OP Dental Adjustment	1.000	0.994	1.000	1.000	1.000	1.000
k	NET Reimbursement Adjustment	1.000	1.000	1.000	1.000	1.000	0.990
l	GME Adjustment	0.963	1.000	1.000	1.000	1.000	1.000
m	Emergency Ambulance Payment Increase	1.000	1.000	1.000	1.000	1.000	1.060
n	COVID-19 Vaccine Administration Adjustment	1.000	1.000	1.036	1.000	1.000	1.000
o	5% Assessment Removal Adjustment	1.000	1.006	1.026	1.000	1.049	1.048
p	Dental Reimbursement Change	1.000	1.000	1.000	1.000	1.001	1.000
Product of a through p							
	Projected SFY 2022 PMPM Costs	\$16.82	\$27.28	\$62.93	\$45.58	\$32.74	\$6.27
							\$191.61

EXHIBIT 2B

MA Adult and Pregnant Women Aggregate Services PMPMs

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State of Mississippi Division of Medicaid
SFY 2022 MississippiCAN Preliminary Rate Calculation and Certification

April 21, 2021

Exhibit 2B
Mississippi Division of Medicaid
All Regions SFY 2022 MississippiCAN Capitation Rate Development
MA Adult and Pregnant Women Aggregate Service PMPMs

MA Adult Rate Cell							
PMPM Development	Category of Service						
	Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other	Total
Projected SFY 2022 PMPM Costs Net of Deliveries	\$40.29	\$101.64	\$112.66	\$119.12	\$6.47	\$12.94	\$393.13
Projected Delivery Costs PMPM	\$34.12	\$0.12	\$9.28	\$0.17	\$0.00	\$0.26	\$43.96
Projected SFY 2022 PMPM Costs Including Deliveries	\$74.41	\$101.76	\$121.94	\$119.30	\$6.47	\$13.20	\$437.09

¹ PMPM costs are calculated using allowed amounts for 3,433 MA Adult deliveries in 2019.

Exhibit 2B
Mississippi Division of Medicaid
All Regions SFY 2022 MississippiCAN Capitation Rate Development
MA Adult and Pregnant Women Aggregate Service PMPMs

Pregnant Women Rate Cell							
PMPM Development	Category of Service						
	Inpatient Hospital	Outpatient Hospital	Physician	Drug	Dental	Other	Total
Projected SFY 2022 PMPM Costs Net of Deliveries	\$38.76	\$114.74	\$202.36	\$63.37	\$5.57	\$11.78	\$436.58
Projected Delivery Costs PMPM	\$483.83	\$1.30	\$132.66	\$2.59	\$0.00	\$2.41	\$622.79
Projected SFY 2022 PMPM Costs Including Deliveries	\$522.60	\$116.04	\$335.02	\$65.95	\$5.57	\$14.19	\$1,059.37

¹ PMPM costs are calculated using allowed amounts for 16,007 Pregnant Women deliveries in 2018 and 15,789 Pregnant Women deliveries in 2019.

EXHIBIT 3

Statewide Non-Service Expense Allowance Development

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State of Mississippi Division of Medicaid
SFY 2022 MississippiCAN Preliminary Rate Calculation and Certification

April 21, 2021

Exhibit 3 Mississippi Division of Medicaid SFY 2022 MississippiCAN Capitation Rate Development Statewide Non-Service Expense Allocation Development										
	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e = d × j</i>	<i>f</i>	<i>g = f × j</i>	<i>h</i>	<i>i = h × j</i>	<i>j = (b + c) / (1 - d - f - h)</i>
Rate Cell	Projected SFY 2022 Membership	SFY 2022 PMPM Cost	Fixed Non-Service Expense Load	Non-Service Percentage	Non-Service PMPM	Margin Percentage	Margin PMPM	Premium Tax Percentage	Premium Tax PMPM	Total
Non-Newborn SSI / Disabled	759,634	\$1,068.13	\$10.25	5.39%	\$64.68	1.80%	\$21.61	3.00%	\$36.02	\$1,200.70
Breast and Cervical Cancer	1,762	\$3,424.36	\$10.25	5.39%	\$206.02	1.80%	\$68.84	3.00%	\$114.73	\$3,824.19
MA Adult	616,693	\$437.09	\$10.25	5.39%	\$26.83	1.80%	\$8.97	3.00%	\$14.94	\$498.08
Pregnant Women	126,929	\$1,059.37	\$10.25	5.39%	\$64.16	1.80%	\$21.44	3.00%	\$35.73	\$1,190.95
SSI / Disabled Newborn	4,920	\$7,861.86	\$10.25	5.39%	\$472.19	1.80%	\$157.77	3.00%	\$262.95	\$8,765.03
Non-SSI Newborns 0 to 2 Months	75,599	\$1,875.04	\$10.25	5.39%	\$113.09	1.80%	\$37.78	3.00%	\$62.97	\$2,099.14
Non-SSI Newborns 3 to 12 Months	243,840	\$248.70	\$10.25	5.39%	\$15.53	1.80%	\$5.19	3.00%	\$8.65	\$288.32
Foster Care	81,472	\$609.85	\$10.25	5.39%	\$37.20	1.80%	\$12.43	3.00%	\$20.71	\$690.44
MYPAC	9,765	\$3,805.00	\$10.25	5.39%	\$228.85	1.80%	\$76.46	3.00%	\$127.44	\$4,248.00
MA Children	3,658,185	\$189.73	\$10.25	5.39%	\$12.00	1.80%	\$4.01	3.00%	\$6.68	\$222.66
Quasi-CHIP	385,859	\$191.61	\$10.25	5.39%	\$12.11	1.80%	\$4.05	3.00%	\$6.74	\$224.76
Total	5,964,659	\$388.51	\$10.25	5.39%	\$23.92	1.80%	\$7.99	3.00%	\$13.32	\$443.99

EXHIBIT 4

Final SFY 2022 Capitation Rates

This report assumes the reader is familiar with the State of Mississippi's MississippiCAN program, its benefits, and rate setting principles. The report was prepared solely to provide assistance to DOM to set SFY 2022 capitation rates for the MississippiCAN 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.

State of Mississippi Division of Medicaid
SFY 2022 MississippiCAN Preliminary Rate Calculation and Certification

April 21, 2021

Exhibit 4 Mississippi Division of Medicaid SFY 2022 MississippiCAN Capitation Rate Development Final SFY 2022 Capitation Rates										
	a	b	c = a × b	d = c × -1.00%	e = c + d	f	g	h = e + f + g	i	
Rate Cell	SFY 2022 Statewide Capitation Rates	Area Adjustments	SFY 2022 Regional Capitation Rates	Quality Withhold	SFY 2022 Regional Capitation Rates after Withhold	MHAP-FSA PMPM	Premium Tax on MHAP-FSA PMPM	Total Rate at 1.0 Risk Score after Withhold	Projected SFY 2022 Member Months	
Non-Newborn SSI / Disabled	\$1,200.70			(\$12.01)	\$1,188.69	\$123.05	\$3.81	\$1,315.55	759,634	
North Region		0.898	\$1,078.23	(\$10.78)	\$1,067.45	\$105.22	\$3.25	1,175.92	261,790	
Central Region		1.052	1,263.14	(\$12.63)	\$1,250.51	\$133.64	\$4.13	1,388.28	277,493	
South Region		1.055	1,266.74	(\$12.67)	\$1,254.07	\$130.88	\$4.05	1,389.00	220,351	
Breast and Cervical Cancer	\$3,824.19			(\$38.24)	\$3,785.95	\$413.08	\$12.78	\$4,211.80	1,762	
North Region		0.898	\$3,434.12	(\$34.34)	\$3,399.78	\$382.83	\$11.84	3,794.44	346	
Central Region		1.052	4,023.04	(\$40.23)	\$3,982.81	\$248.94	\$7.70	4,239.46	535	
South Region		1.055	4,034.52	(\$40.35)	\$3,994.17	\$524.56	\$16.22	4,534.95	881	
MA Adult	\$498.08			(\$4.98)	\$493.10	\$50.55	\$1.56	\$545.21	616,693	
North Region		0.943	\$469.69	(\$4.70)	\$464.99	\$47.55	\$1.47	514.02	198,010	
Central Region		1.049	522.49	(\$5.22)	\$517.26	\$53.76	\$1.66	572.69	207,051	
South Region		1.003	499.57	(\$5.00)	\$494.58	\$50.21	\$1.55	546.34	211,631	
Pregnant Women	\$1,190.95			(\$11.91)	\$1,179.04	\$228.56	\$7.07	\$1,414.67	126,929	
North Region		0.943	\$1,123.06	(\$11.23)	\$1,111.83	\$219.75	\$6.80	1,338.38	39,088	
Central Region		1.049	1,249.30	(\$12.49)	\$1,236.81	\$242.21	\$7.49	1,486.51	46,959	
South Region		1.003	1,194.52	(\$11.95)	\$1,182.57	\$221.30	\$6.84	1,410.72	40,882	
SSI / Disabled Newborn	\$8,765.03			(\$87.65)	\$8,677.38	\$1,988.46	\$61.50	\$10,727.33	4,920	
North Region		0.976	\$8,554.67	(\$85.55)	\$8,469.12	\$1,876.12	\$58.02	10,403.26	1,497	
Central Region		1.022	8,957.86	(\$89.58)	\$8,868.28	\$2,214.43	\$68.49	11,151.20	2,161	
South Region		0.998	8,747.50	(\$87.47)	\$8,660.02	\$1,734.82	\$53.65	10,448.50	1,262	
Non-SSI Newborns 0 to 2 Months	\$2,099.14			(\$20.99)	\$2,078.15	\$563.07	\$17.41	\$2,658.63	75,599	
North Region		0.976	\$2,048.76	(\$20.49)	\$2,028.27	\$581.90	\$18.00	2,628.17	23,732	
Central Region		1.022	2,145.32	(\$21.45)	\$2,123.87	\$583.30	\$18.04	2,725.21	27,817	
South Region		0.998	2,094.94	(\$20.95)	\$2,073.99	\$521.08	\$16.12	2,611.19	24,051	
Non-SSI Newborns 3 to 12 Months	\$288.32			(\$2.88)	\$285.44	\$27.45	\$0.85	\$313.73	243,840	
North Region		0.976	\$281.40	(\$2.81)	\$278.59	\$31.95	\$0.99	311.53	75,876	
Central Region		1.022	294.67	(\$2.95)	\$291.72	\$27.41	\$0.85	319.98	90,168	
South Region		0.998	287.75	(\$2.88)	\$284.87	\$23.09	\$0.71	308.67	77,796	
Foster Care	\$690.44			(\$6.90)	\$683.53	\$128.41	\$3.97	\$815.91	81,472	
North Region		0.976	\$673.87	(\$6.74)	\$667.13	\$127.75	\$3.95	798.83	22,504	
Central Region		1.022	705.63	(\$7.06)	\$698.57	\$162.91	\$5.04	866.53	23,420	
South Region		0.998	689.06	(\$6.89)	\$682.17	\$106.09	\$3.28	791.53	35,548	
MYPAC	\$4,248.00			(\$42.48)	\$4,205.52	\$196.87	\$6.09	\$4,408.48	9,765	
North Region		0.976	\$4,146.05	(\$41.46)	\$4,104.59	\$164.32	\$5.08	4,274.00	3,038	
Central Region		1.022	4,341.46	(\$43.41)	\$4,298.04	\$250.56	\$7.75	4,556.35	3,222	
South Region		0.998	4,239.51	(\$42.40)	\$4,197.11	\$175.73	\$5.44	4,378.28	3,506	
MA Children	\$222.66			(\$2.23)	\$220.43	\$15.04	\$0.47	\$235.94	3,658,185	
North Region		0.976	\$217.32	(\$2.17)	\$215.14	\$14.13	\$0.44	229.71	1,167,406	
Central Region		1.022	227.56	(\$2.28)	\$225.28	\$16.48	\$0.51	242.27	1,334,294	
South Region		0.998	222.21	(\$2.22)	\$219.99	\$14.32	\$0.44	234.75	1,156,485	
Quasi-CHIP	\$224.76			(\$2.25)	\$222.51	\$12.33	\$0.38	\$235.22	385,859	
North Region		0.976	\$219.36	(\$2.19)	\$217.17	\$11.38	\$0.35	228.90	124,500	
Central Region		1.022	229.70	(\$2.30)	\$227.41	\$13.34	\$0.41	241.16	144,779	
South Region		0.998	224.31	(\$2.24)	\$222.07	\$12.08	\$0.37	234.52	116,580	
Total Capitation Dollars										
Statewide Capitation Rates			\$2,648,268,409							
Regional Capitation Rates			\$2,647,960,758							

EXHIBIT 5

SFY 2021 to SFY 2022 Rate Change

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State of Mississippi Division of Medicaid
SFY 2022 MississippiCAN Preliminary Rate Calculation and Certification

April 21, 2021

Exhibit 5
Mississippi Division of Medicaid
SFY 2021 to SFY 2022 Rate Change

	Non- Newborn SSI / Disabled	Breast and Cervical Cancer	MA Adult	Pregnant Women	SSI / Disabled Newborn	Non-SSI Newborns 0 to 2 Months	Non-SSI Newborns 3 to 12 Months	Foster Care	MYPAC	MA Children	Quasi- CHIP	Total - Aggregated with CY 2019 MMs	Total - Aggregated with SFY 2022 MMs
SFY 2021 Capitation Rate	\$1,179.10	\$3,691.28	\$534.63	\$1,187.50	\$9,250.65	\$2,100.39	\$287.85	\$628.03	\$4,154.08	\$215.45	\$215.43	\$466.79	\$439.27
Base Period Data Update	1.006	1.029	1.001	0.978	0.949	1.000	0.999	1.069	0.978	1.032	1.041	1.011	1.012
Restated Assumptions	0.968	0.972	0.983	0.992	0.961	0.960	0.958	0.967	0.994	0.972	0.974	0.972	0.972
COVID-19 Population Acuity Adjustment - CY 2019 to SFY 2021 ³	1.000	1.000	0.939	1.000	1.000	1.000	1.000	1.000	1.000	0.978	0.978	0.987	0.985
Restated SFY 2021 Rate	0.974	1.000	0.924	0.971	0.912	0.960	0.957	1.034	0.972	0.982	0.991	0.969	0.969
SFY 2021 to SFY 2022 Trends	1.030	1.029	1.025	1.025	1.035	1.035	1.031	1.039	1.008	1.027	1.026	1.029	1.028
PDL CY 2020 to CY 2021 Adjustment ²	1.002	1.001	1.002	1.000	1.001	1.000	1.001	1.001	1.000	1.001	1.002	1.001	1.001
COVID-19 Vaccine Administration Adjustment ³	1.001	1.000	1.002	1.001	1.000	1.000	1.000	1.003	1.001	1.010	1.010	1.004	1.004
COVID-19 Population Acuity Adjustment - SFY 2021 to SFY 2022 ³	1.000	1.000	0.975	1.000	1.000	1.000	1.000	1.000	1.000	0.991	0.991	0.995	0.994
Removal of 5% Assessment ²	1.009	1.002	1.006	1.003	1.003	1.002	1.010	1.012	1.038	1.017	1.017	1.010	1.011
Dental Reimbursement Change ²	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Update Admin	1.004	1.005	1.000	1.003	1.000	1.003	1.004	1.008	1.004	1.006	1.006	1.004	1.004
SFY 2022 Rate Change Prior to MHAP	1.018	1.036	0.932	1.003	0.948	0.999	1.002	1.099	1.023	1.033	1.043	1.011	1.011
Fee Schedule Adjustment	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Preliminary SFY 2022 Rate Change¹	1.018	1.036	0.932	1.003	0.948	0.999	1.002	1.099	1.023	1.033	1.043	1.011	1.011
SFY 2022 Rate Change - Excluding Program Changes²	1.008	1.033	0.925	0.999	0.944	0.997	0.991	1.086	0.985	1.015	1.024	0.999	0.999
SFY 2022 Rate Change - Excluding COVID-19 Adjustments³	1.018	1.036	1.016	1.002	0.948	0.999	1.002	1.096	1.022	1.055	1.066	1.026	1.028

¹ Rates exclude MHAP and the quality withhold.

² Program change that increases or decreases total program costs outside of the control of the CCOs.

³ COVID-19 Adjustments include the COVID-19 Vaccine Administration Expense and the COVID-19 Population Acuity Adjustment.

EXHIBIT 6

Service Category to Milliman *HCGs* Grouper Category Mapping

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State of Mississippi Division of Medicaid
SFY 2022 MississippiCAN Preliminary Rate Calculation and Certification

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Exhibit 6
Mississippi Division of Medicaid
SFY 2022 MississippiCAN Capitation Rate Development
Service Category to Milliman HCGs Grouper Category Mapping

Broad Category of Service			Broad Category of Service		
MR Line		Description	MR Line		Description
I11a	Inpatient Facility	Medical - General	P37a	Physician	Miscellaneous Medical - General
I11b	Inpatient Facility	Medical - Rehabilitation	P37b	Physician	Miscellaneous Medical - Gastroenterology
I12	Inpatient Facility	Surgical	P37c	Physician	Miscellaneous Medical - Ophthalmology
I13a	Inpatient Facility	Psychiatric - Hospital	P37d	Physician	Miscellaneous Medical - Otorhinolaryngology
I13b	Inpatient Facility	Psychiatric - Residential	P37e	Physician	Miscellaneous Medical - Vestibular Function Tests
I14a	Inpatient Facility	Alcohol and Drug Abuse - Hospital	P37f	Physician	Miscellaneous Medical - Non-Invas. Vasc. Diag. Studies
I14b	Inpatient Facility	Alcohol and Drug Abuse - Residential	P37g	Physician	Miscellaneous Medical - Pulmonology
I21a	Inpatient Facility	Mat Norm Delivery	P37h	Physician	Miscellaneous Medical - Neurology
I21b	Inpatient Facility	Mat Norm Delivery - Mom\Baby Cmbnd	P37i	Physician	Miscellaneous Medical - Central Nervous System Tests
I22a	Inpatient Facility	Mat Csect Delivery	P37j	Physician	Miscellaneous Medical - Dermatology
I22b	Inpatient Facility	Mat Csect Delivery - Mom\Baby Cmbnd	P37k	Physician	Miscellaneous Medical - Dialysis
I23a	Inpatient Facility	Well Newborn - Normal Delivery	P40a	Physician	Preventive Other - General
I23b	Inpatient Facility	Well Newborn - Csect Delivery	P40b	Physician	Preventive Other - Colonoscopy
I23c	Inpatient Facility	Well Newborn - Unknown Delivery	P40c	Physician	Preventive Other - Mammography
I24	Inpatient Facility	Other Newborn	P40d	Physician	Preventive Other - Lab
I25	Inpatient Facility	Maternity Non-Delivery	P41	Physician	Preventive Immunizations
I31	Inpatient Facility	SNF	P42	Physician	Preventive Well Baby Exams
O10	Outpatient Facility	Observation	P43	Physician	Preventive Physical Exams
O11	Outpatient Facility	Emergency Room	P44	Physician	Vision Exams
O12a	Outpatient Facility	Surgery - Hospital Outpatient	P45	Physician	Hearing and Speech Exams
O12b	Outpatient Facility	Surgery - Ambulatory Surgery Center	P51a	Physician	ER Visits and Observation Care - Observation Care
O13a	Outpatient Facility	Radiology General - Therapeutic	P51b	Physician	ER Visits and Observation Care - ER Visits
O13b	Outpatient Facility	Radiology General - Diagnostic	P53	Physician	Physical Therapy
O14a	Outpatient Facility	Radiology - CT/MRI/PET - CT Scan	P54	Physician	Cardiovascular
O14b	Outpatient Facility	Radiology - CT/MRI/PET - MRI	P55b	Physician	Radiology IP - CT Scan
O14c	Outpatient Facility	Radiology - CT/MRI/PET - PET	P55c	Physician	Radiology IP - MRI
O15	Outpatient Facility	Pathology/Lab	P55d	Physician	Radiology IP - PET
O16a	Outpatient Facility	Pharmacy - General	P55e	Physician	Radiology IP - General - Therapeutic
O16b	Outpatient Facility	Pharmacy - Chemotherapy	P55f	Physician	Radiology IP - General - Diagnostic
O17	Outpatient Facility	Cardiovascular	P56a	Physician	Radiology OP - General - Therapeutic
O18	Outpatient Facility	PT/OT/ST	P56b	Physician	Radiology OP - General - Diagnostic
O31a	Outpatient Facility	Psychiatric - Partial Hospitalization	P57a	Physician	Radiology OP- CT/MRI/PET - CT Scan
O31b	Outpatient Facility	Psychiatric - Intensive Outpatient	P57b	Physician	Radiology OP- CT/MRI/PET - MRI
O32a	Outpatient Facility	Alcohol & Drug Abuse - Partial Hospitalization	P57c	Physician	Radiology OP- CT/MRI/PET - PET
O32b	Outpatient Facility	Alcohol & Drug Abuse - Intensive Outpatient	P58c	Physician	Radiology Office - General - Therapeutic
O41a	Outpatient Facility	Other - General	P58d	Physician	Radiology Office - General - Diagnostic
O41b	Outpatient Facility	Other - Blood	P58e	Physician	Radiology Office - General - Radiology Center - Therapeutic
O41d	Outpatient Facility	Other - Clinic	P58f	Physician	Radiology Office - General - Radiology Center - Diagnostic
O41e	Outpatient Facility	Other - Diagnostic	P59a	Physician	Radiology Office - CT/MRI/PET - CT Scan
O41f	Outpatient Facility	Other - Dialysis	P59b	Physician	Radiology Office - CT/MRI/PET - MRI
O41g	Outpatient Facility	Other - DME/Supplies	P59c	Physician	Radiology Office - CT/MRI/PET - PET
O41h	Outpatient Facility	Other - Trmt/SpcltySvcs	P59d	Physician	Radiology Office - CT/MRI/PET - CT Scan - Radiology Center
O41j	Outpatient Facility	Other - Pulmonary	P59e	Physician	Radiology Office - CT/MRI/PET - MRI - Radiology Center
O41l	Outpatient Facility	Other - Urgent Care	P59f	Physician	Radiology Office - CT/MRI/PET - PET - Radiology Center
O51a	Outpatient Facility	Preventive - General	P61a	Physician	Pathology/Lab - Inpatient & Outpatient - Inpatient
O51b	Outpatient Facility	Preventive - Colonoscopy	P61b	Physician	Pathology/Lab - Inpatient & Outpatient - Outpatient
O51c	Outpatient Facility	Preventive - Mammography	P63a	Physician	Pathology/Lab - Office - General
O51d	Outpatient Facility	Preventive - Lab	P63b	Physician	Pathology/Lab - Office - Venipuncture
P11	Physician	Inpatient Surgery	P63c	Physician	Pathology/Lab - Office - Independent Lab
P13	Physician	Inpatient Anesthesia	P65	Physician	Chiropractor
P14	Physician	Outpatient Surgery	P66	Physician	Outpatient Psychiatric
P15	Physician	Office Surgery	P67	Physician	Outpatient Alcohol & Drug Abuse
P16	Physician	Outpatient Anesthesia	P81a	Pharmacy	Prescription Drugs - Non-Specialty Generic
P21a	Physician	Maternity - Normal Deliveries	P81b	Pharmacy	Prescription Drugs - Non-Specialty Multi Source Brand
P21b	Physician	Maternity - Cesarean Deliveries	P81c	Pharmacy	Prescription Drugs - Non-Specialty Single Source Brand
P21c	Physician	Maternity - Non-Deliveries	P81d	Pharmacy	Prescription Drugs - Non-Specialty Unknown Drug Type
P21d	Physician	Maternity - Ancillary	P81e	Pharmacy	Prescription Drugs - OTC
P21e	Physician	Maternity - Anesthesia	P81g	Pharmacy	Prescription Drugs - Specialty
P31a	Physician	Inpatient Visits - General	P82a	Other	Private Duty Nursing/Home Health - HH
P31b	Physician	Inpatient Visits - Extended Care Visits	P82b	Other	Private Duty Nursing/Home Health - Hospice
P31c	Physician	Inpatient Visits - Critical Care Visits	P83	Other	Ambulance
P31d	Physician	Inpatient Visits - Medical	P84	Other	DME and Supplies
P31e	Physician	Inpatient Visits - Psychiatric	P85	Other	Prosthetics
P31f	Physician	Inpatient Visits - Alcohol and Drug Abuse	P89	Other	Benefits Glasses/Contacts
P32c	Physician	Office/Home Visits - PCP	P99a	Other	Benefits Other - General
P32d	Physician	Office/Home Visits - Specialist	P99b	Other	Benefits Other - Hearing Aids
P33	Physician	Urgent Care Visits	P99c	Dental	Benefits Other - Dental
P34a	Physician	Office Administered Drugs - General	P99d	Other	Benefits Other - Acupuncture
P34b	Physician	Office Administered Drugs - Chemotherapy	P99e	Physician	Benefits Other - Reproductive Medicine
P35	Physician	Allergy Testing	P99f	Physician	Benefits Other - Temporary Codes
P36	Physician	Allergy Immunotherapy	P99g	Physician	Benefits Other - Documentation/Unclassified
			P99h	Other	Benefits Other - Non-Emergency Transportation

EXHIBIT 7A

Development of Acuity Adjustments for SFY 2022 Rates

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State of Mississippi Division of Medicaid
SFY 2022 MississippiCAN Preliminary Rate Calculation and Certification

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Exhibit 7A
Mississippi Division of Medicaid
Development of Acuity Adjustment for SFY 2022 Rates
MA Adults

	Risk Adjustment Period	Q3 to Q4 2018	Q1 to Q2 2019	Q3 to Q4 2019	Q1 to Q2 2020
	Diagnosis Period	CY 2017	SFY 2018	CY 2018	SFY 2019
	Prior Enrollment Month	October 2017	April 2018	October 2018	April 2019
	New Enrollment Month	April 2018	October 2018	April 2019	October 2019
	Enrollment				
a	Prior Enrollment Month	46,782	43,812	40,388	41,410
b	New Enrollment Month	43,812	40,388	41,410	40,934
c = b / a	Membership Change Factor	0.937	0.922	1.025	0.989
	Risk Score				
d	Prior Enrollment Month	1.040	1.035	1.087	1.091
e	New Enrollment Month	1.053	1.080	1.077	1.065
f = e / d	Risk Score Change Factor	1.012	1.043	0.992	0.976
	Risk Score Model - Fit Using steps c and f ¹				
	Risk Score Factor = g × ((Enrollment Change) ^ h)				
g	Model Variable 1	0.989			
h	Model Variable 2	(0.478)			

	i	j = i / i _(CY 2019 Avg)	k = g × (j ^ h)	l = k / k _(CY 2019 Avg)
Time Period	Average Enrollment	Change From Base Period	Risk Score Factor	Acuity Adjustment
Q1 2019	41,387	N/A	N/A	N/A
Q2 2019	41,330	N/A	N/A	N/A
Q3 2019	41,029	N/A	N/A	N/A
Q4 2019	40,985	N/A	N/A	N/A
CY 2019 - Average	41,183	1.000	0.989	1.000
Q1 2020	40,421	0.982	0.998	1.009
Q2 2020	41,195	1.000	0.989	1.000
Q3 2020	44,827	1.088	0.950	0.960
Q4 2020	46,896	1.139	0.930	0.940
Q1 2021	49,358	1.199	0.907	0.917
Q2 2021	51,571	1.252	0.889	0.898
SFY 2021 - Average	48,163	1.169	0.918	0.928
Q3 2021	52,546	1.276	0.881	0.890
Q4 2021	52,954	1.286	0.877	0.887
Q1 2022	51,343	1.247	0.891	0.900
Q2 2022	48,721	1.183	0.913	0.923
SFY 2022 - Average	51,391	1.248	0.890	0.900

MA Children and QCHIP

	Risk Adjustment Period	Q3 to Q4 2018	Q1 to Q2 2019	Q3 to Q4 2019	Q1 to Q2 2020
	Diagnosis Period	CY 2017	SFY 2018	CY 2018	SFY 2019
	Prior Enrollment Month	October 2017	April 2018	October 2018	April 2019
	New Enrollment Month	April 2018	October 2018	April 2019	October 2019
	Enrollment				
a	Prior Enrollment Month	321,471	298,749	278,944	284,453
b	New Enrollment Month	298,749	278,944	284,453	281,405
c = b / a	Membership Change Factor	0.929	0.934	1.020	0.989
	Risk Score				
d	Prior Enrollment Month	1.028	1.023	1.046	1.058
e	New Enrollment Month	1.035	1.049	1.046	1.057
f = e / d	Risk Score Change Factor	1.007	1.026	1.000	0.999
	Risk Score Model - Fit Using steps c and f ¹				
	Risk Score Factor = g × ((Enrollment Change) ^ h)				
g	Model Variable 1	1.001			
h	Model Variable 2	(0.200)			

	i	j = i / i _(CY 2019 Avg)	k = g × (j ^ h)	l = k / k _(CY 2019 Avg)
Time Period	Average Enrollment	Change From Base Period	Risk Score Factor	Acuity Adjustment
Q1 2019	284,394	N/A	N/A	N/A
Q2 2019	284,480	N/A	N/A	N/A
Q3 2019	281,211	N/A	N/A	N/A
Q4 2019	282,208	N/A	N/A	N/A
CY 2019 - Average	283,073	1.000	1.001	1.000
Q1 2020	282,355	0.997	1.002	1.001
Q2 2020	285,552	1.009	1.000	0.998
Q3 2020	300,965	1.063	0.989	0.988
Q4 2020	313,902	1.109	0.981	0.980
Q1 2021	326,402	1.153	0.973	0.972
Q2 2021	338,020	1.194	0.966	0.965
SFY 2021 - Average	319,822	1.130	0.977	0.976
Q3 2021	342,751	1.211	0.964	0.962
Q4 2021	344,240	1.216	0.963	0.962
Q1 2022	336,608	1.189	0.967	0.966
Q2 2022	324,415	1.146	0.974	0.973
SFY 2022 - Average	337,004	1.191	0.967	0.966

¹ Risk score change predicted using a power regression model for each population.

EXHIBIT 7B

Graphical Representation of Acuity for SFY 2022

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State of Mississippi Division of Medicaid
SFY 2022 MississippiCAN Preliminary Rate Calculation and Certification

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Exhibit 7B
Mississippi Division of Medicaid
Graphical Representation of Acuity Adjustments for SFY 2022

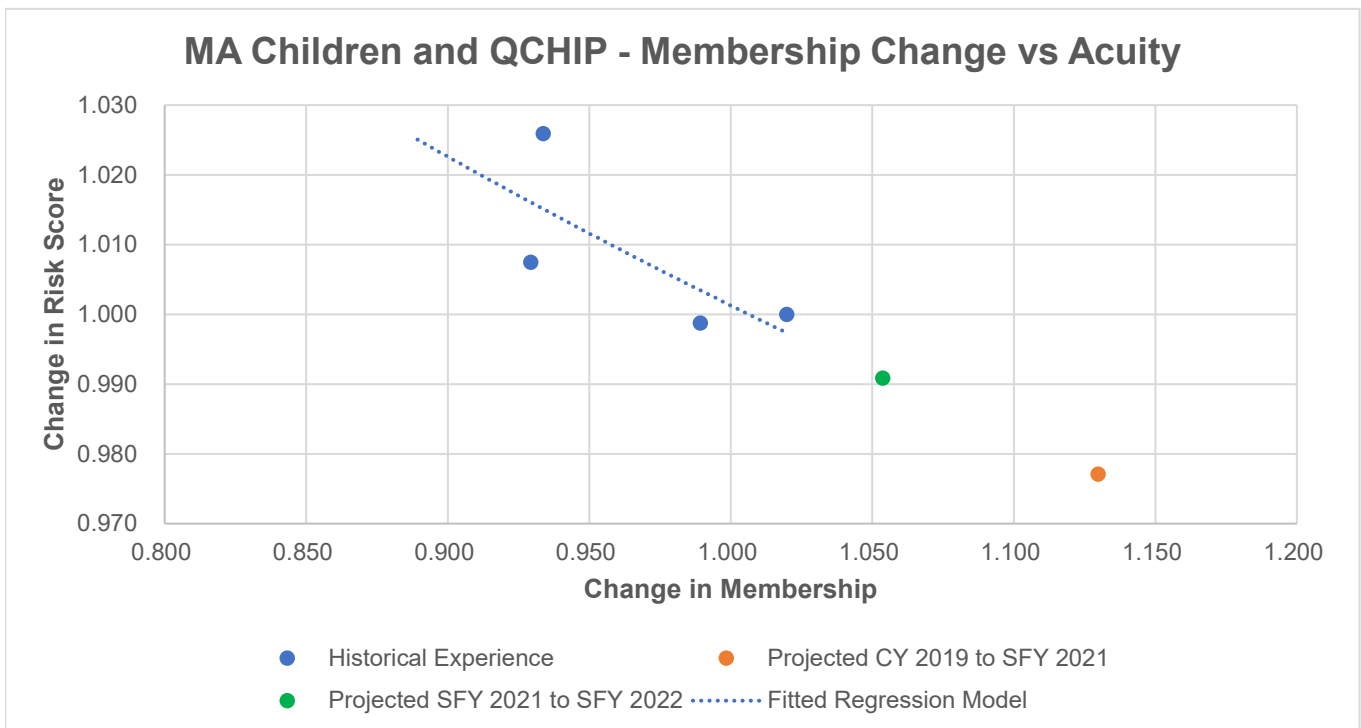
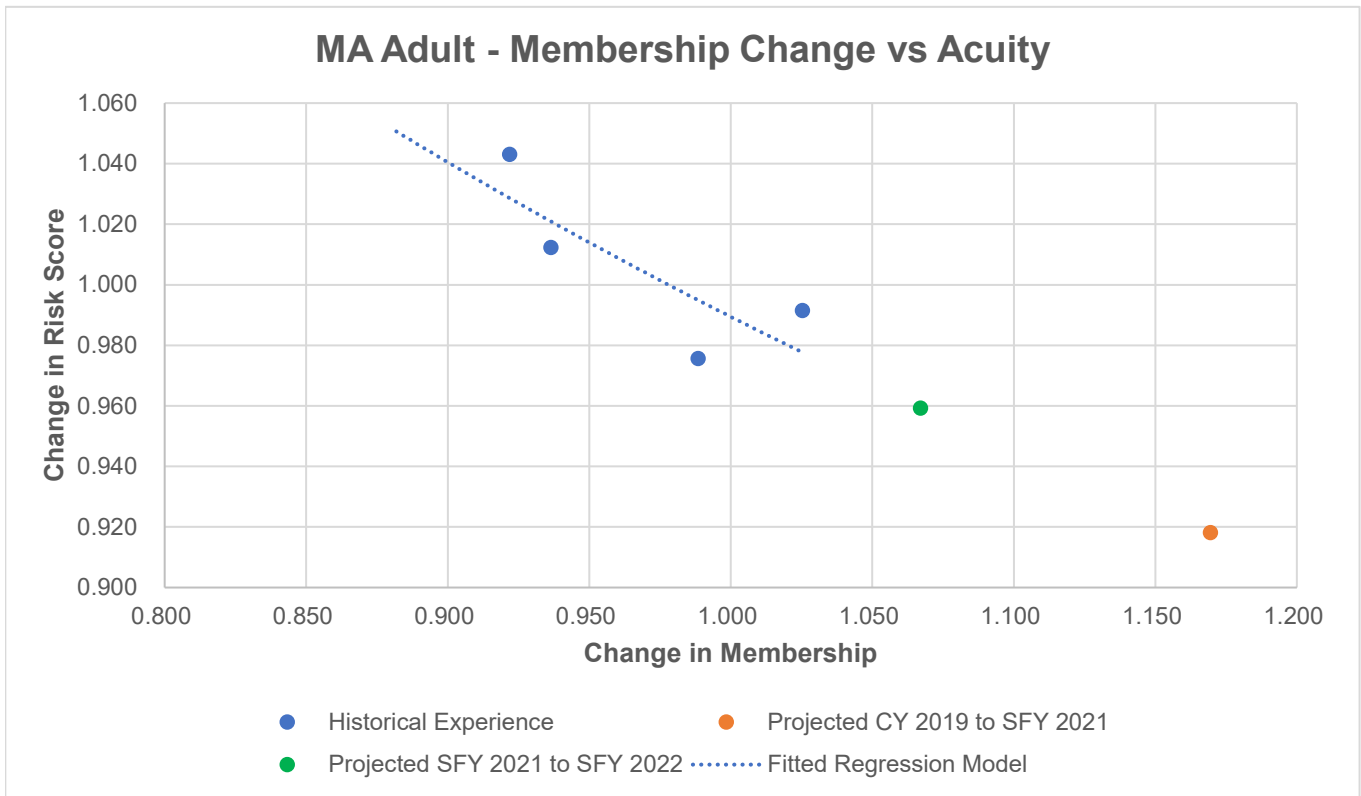


EXHIBIT 7C

Historical and Projected Membership for the MA Adults and Children Rate Cells

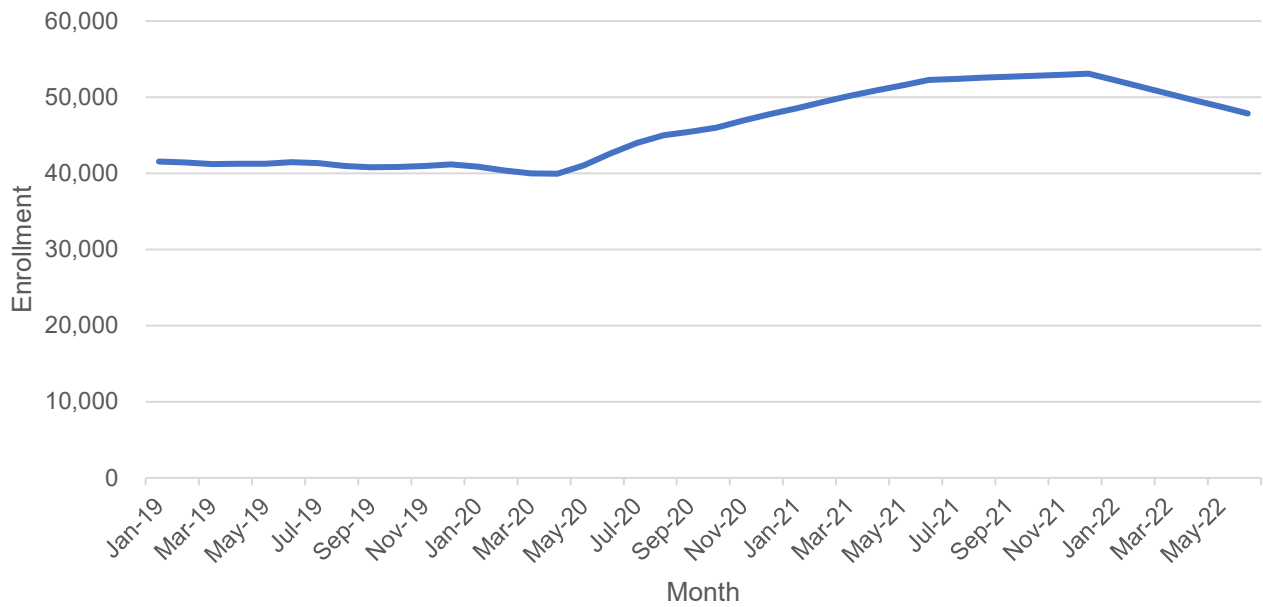
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State of Mississippi Division of Medicaid
SFY 2022 MississippiCAN Preliminary Rate Calculation and Certification

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Exhibit 7C
Mississippi Division of Medicaid
Historical and Projected Membership for the MA Adults and MA Children Rate Cells

Historical and Projected Enrollment in the MA Adult Rate Cell¹



Historical and Projected Enrollment in the MA Children and QCHIP Rate Cells¹

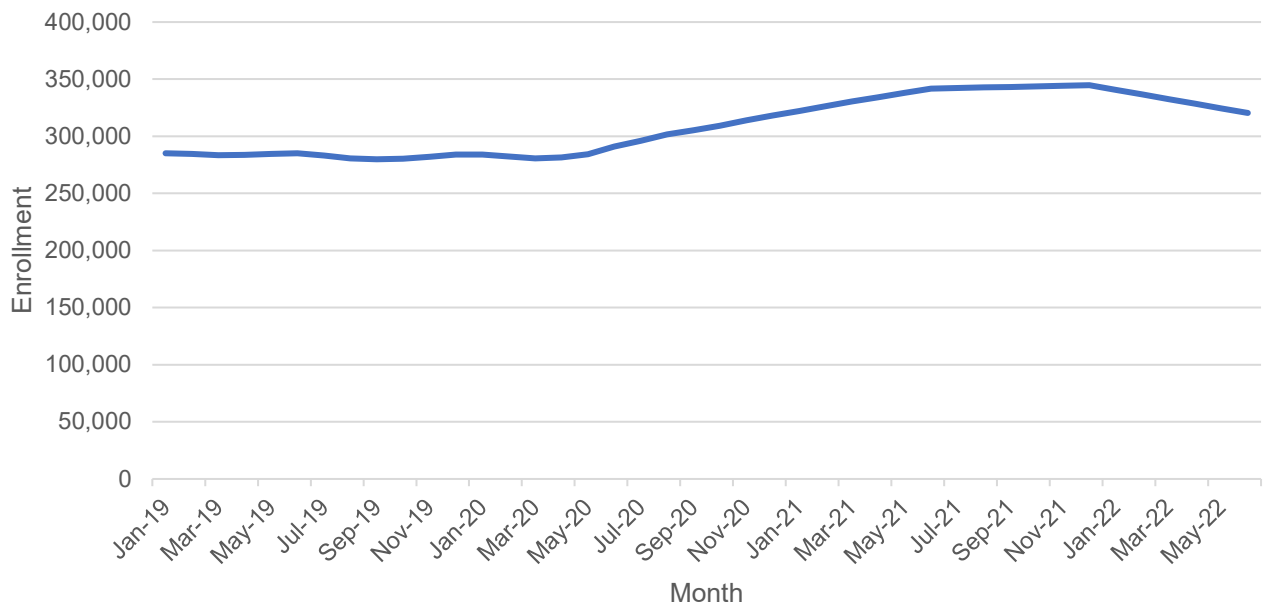


EXHIBIT 8A

Historical PMPM Trend Summary

All Populations

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State of Mississippi Division of Medicaid
SFY 2022 MississippiCAN Preliminary Rate Calculation and Certification

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Exhibit 8A
Mississippi Division of Medicaid
MississippiCAN Historical Completed Non-Pharmacy PMPM Costs and Trends
All Populations
PMPM Costs by Month¹

Month	Member Months	Inpatient Hospital Services	Outpatient Hospital Services	Physician Services	Dental Services	Other Services	Non-Pharmacy Total
January 2017	488,989	\$85.00	\$69.26	\$105.20	\$22.87	\$13.19	\$295.53
February 2017	488,167	\$83.20	\$66.55	\$101.20	\$21.62	\$12.36	\$284.92
March 2017	487,734	\$89.27	\$72.54	\$106.64	\$23.67	\$14.20	\$306.32
April 2017	486,791	\$84.02	\$67.92	\$95.39	\$20.50	\$13.00	\$280.83
May 2017	486,814	\$88.92	\$68.37	\$99.83	\$20.39	\$13.88	\$291.38
June 2017	487,945	\$86.68	\$69.17	\$93.03	\$22.06	\$13.38	\$284.31
July 2017	485,862	\$82.46	\$69.87	\$91.68	\$22.13	\$13.11	\$279.25
August 2017	483,329	\$84.23	\$73.94	\$112.27	\$25.61	\$14.09	\$310.13
September 2017	480,304	\$85.77	\$70.72	\$101.59	\$22.06	\$13.17	\$293.31
October 2017	479,631	\$85.69	\$74.64	\$109.36	\$24.34	\$14.28	\$308.32
November 2017	479,449	\$84.41	\$71.31	\$103.51	\$22.46	\$13.10	\$294.79
December 2017	474,591	\$85.24	\$68.87	\$93.11	\$17.76	\$12.22	\$277.20
CY 2017²	484,134	\$85.41	\$70.26	\$101.07	\$22.12	\$13.33	\$292.19
January 2018	469,839	\$91.70	\$72.03	\$106.14	\$20.28	\$13.03	\$303.18
February 2018	463,633	\$85.43	\$68.67	\$103.67	\$20.10	\$12.14	\$290.01
March 2018	456,427	\$86.93	\$70.44	\$101.57	\$21.60	\$13.24	\$293.77
April 2018	452,126	\$84.89	\$70.12	\$103.88	\$20.84	\$13.36	\$293.08
May 2018	450,999	\$88.80	\$72.56	\$101.71	\$19.12	\$13.80	\$295.99
June 2018	446,718	\$88.75	\$72.09	\$90.44	\$19.98	\$13.37	\$284.63
July 2018	440,671	\$86.54	\$67.62	\$97.70	\$21.95	\$14.56	\$288.37
August 2018	434,236	\$88.41	\$72.03	\$112.26	\$23.13	\$14.86	\$310.69
September 2018	429,869	\$80.76	\$66.48	\$98.24	\$18.80	\$13.67	\$277.95
October 2018	429,097	\$93.38	\$73.15	\$113.57	\$22.17	\$14.46	\$316.73
November 2018	430,579	\$89.60	\$68.72	\$101.54	\$18.59	\$12.62	\$291.08
December 2018	435,135	\$93.71	\$64.76	\$91.79	\$15.16	\$12.45	\$277.85
CY 2018²	444,944	\$88.24	\$69.89	\$101.87	\$20.14	\$13.46	\$293.61
January 2019	437,296	\$95.80	\$77.06	\$116.57	\$21.78	\$14.38	\$325.60
February 2019	435,850	\$91.41	\$74.40	\$112.30	\$18.93	\$13.33	\$310.37
March 2019	434,527	\$94.33	\$69.79	\$105.38	\$19.35	\$13.95	\$302.81
April 2019	434,549	\$96.01	\$73.22	\$110.36	\$20.42	\$14.62	\$314.62
May 2019	435,949	\$100.89	\$72.06	\$105.01	\$17.41	\$14.01	\$309.39
June 2019	436,832	\$89.79	\$70.79	\$93.29	\$18.14	\$13.30	\$285.32
July 2019	435,453	\$95.15	\$72.33	\$103.11	\$21.86	\$14.98	\$307.43
August 2019	432,479	\$90.25	\$69.28	\$111.60	\$21.42	\$15.65	\$308.20
September 2019	431,941	\$96.62	\$68.77	\$108.08	\$19.92	\$14.63	\$308.02
October 2019	432,622	\$102.86	\$74.77	\$117.65	\$22.76	\$14.95	\$332.98
November 2019	433,762	\$86.90	\$66.27	\$104.88	\$18.08	\$14.09	\$290.22
December 2019	436,090	\$87.32	\$66.18	\$103.47	\$16.09	\$13.68	\$286.73
CY 2019³	434,779	\$93.94	\$71.24	\$107.64	\$19.68	\$14.30	\$306.81
Annual PMPM Trends							
CY 2017 to CY 2018		3.3%	-0.5%	0.8%	-8.9%	1.0%	0.5%
CY 2018 to CY 2019		6.5%	1.9%	5.7%	-2.3%	6.2%	4.5%

¹ MississippiCAN PMPM figures have been adjusted for the removal of Zolgensma claims, the removal of the 5% assessment on OPPS services, 5% assessment on non-OPPS services, OPPS reimbursement changes not related to the 5% assessment, PAD, PDL, AAC, PRFT, OP Dental, GME, NET, Provider Settlements, and Financial to Encounter adjustments, and blend MississippiCAN rate cells using consistent enrollment from December 2019 to be directly comparable by month.

² CY 2017 and CY 2018 assumed to be fully complete with no explicit IBNR adjustment.

³ CY 2019 IBNR as found on Exhibit 1A of the SFY 2022 rate report.

EXHIBIT 8B

Historical PMPM Trend Summary

SSI+ Population

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State of Mississippi Division of Medicaid
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Exhibit 8B
Mississippi Division of Medicaid
MississippiCAN Historical Completed Non-Pharmacy PMPM Costs and Trends
SSI+ Population
PMPM Costs by Month¹

Month	Member Months	Inpatient Hospital Services	Outpatient Hospital Services	Physician Services	Dental Services	Other Services	Non-Pharmacy Total
January 2017	64,699	\$183.49	\$194.39	\$201.40	\$11.64	\$55.61	\$646.53
February 2017	64,540	\$177.39	\$188.08	\$188.47	\$10.84	\$50.59	\$615.36
March 2017	64,552	\$189.72	\$209.53	\$208.26	\$11.90	\$58.80	\$678.21
April 2017	64,500	\$161.99	\$190.65	\$185.91	\$9.80	\$54.60	\$602.95
May 2017	64,431	\$197.31	\$195.39	\$203.00	\$10.22	\$58.72	\$664.64
June 2017	64,517	\$184.83	\$197.87	\$198.74	\$10.86	\$57.25	\$649.54
July 2017	64,436	\$164.71	\$202.60	\$187.38	\$10.18	\$53.17	\$618.04
August 2017	64,466	\$155.37	\$213.15	\$220.62	\$12.84	\$57.88	\$659.86
September 2017	64,371	\$185.24	\$202.13	\$200.57	\$11.07	\$54.16	\$653.17
October 2017	64,503	\$174.83	\$210.72	\$216.05	\$12.47	\$58.01	\$672.07
November 2017	64,577	\$170.59	\$197.54	\$195.96	\$10.91	\$53.49	\$628.49
December 2017	64,589	\$179.36	\$186.01	\$175.54	\$9.19	\$49.96	\$600.05
CY 2017²	64,515	\$177.07	\$199.00	\$198.49	\$10.99	\$55.19	\$640.74
January 2018	64,495	\$189.04	\$202.50	\$207.18	\$10.36	\$53.64	\$662.74
February 2018	64,379	\$172.53	\$194.36	\$201.78	\$10.13	\$49.68	\$628.48
March 2018	64,313	\$183.18	\$202.63	\$206.78	\$10.63	\$55.18	\$658.40
April 2018	64,234	\$170.24	\$202.76	\$213.60	\$10.58	\$56.75	\$653.92
May 2018	64,379	\$178.03	\$215.75	\$215.31	\$10.28	\$59.34	\$678.71
June 2018	64,067	\$171.22	\$210.12	\$194.91	\$9.94	\$57.14	\$643.34
July 2018	64,232	\$175.16	\$200.96	\$213.16	\$9.67	\$59.34	\$658.30
August 2018	64,101	\$189.34	\$213.71	\$234.65	\$11.16	\$60.25	\$709.11
September 2018	63,987	\$169.93	\$193.50	\$205.22	\$9.41	\$56.59	\$634.64
October 2018	63,968	\$178.52	\$213.05	\$233.32	\$10.64	\$59.17	\$694.70
November 2018	63,973	\$177.79	\$199.12	\$201.70	\$9.68	\$51.76	\$640.06
December 2018	63,999	\$172.73	\$178.15	\$179.53	\$7.48	\$51.90	\$589.77
CY 2018²	64,177	\$177.31	\$202.22	\$208.93	\$10.00	\$55.90	\$654.35
January 2019	63,944	\$209.41	\$227.65	\$233.58	\$10.36	\$59.15	\$740.15
February 2019	63,913	\$189.72	\$213.55	\$214.73	\$8.92	\$56.56	\$683.49
March 2019	63,688	\$187.74	\$206.91	\$218.78	\$9.03	\$58.50	\$680.96
April 2019	63,872	\$194.08	\$217.11	\$227.87	\$9.78	\$60.29	\$709.13
May 2019	63,729	\$204.98	\$218.89	\$224.84	\$8.63	\$60.09	\$717.43
June 2019	63,894	\$172.57	\$209.27	\$206.66	\$7.88	\$57.66	\$654.04
July 2019	63,985	\$187.81	\$209.70	\$219.02	\$10.02	\$60.66	\$687.20
August 2019	63,806	\$188.04	\$207.57	\$229.40	\$10.24	\$62.63	\$697.87
September 2019	63,814	\$210.32	\$201.82	\$218.40	\$9.55	\$60.45	\$700.54
October 2019	63,791	\$216.35	\$217.33	\$237.58	\$10.83	\$61.64	\$743.74
November 2019	63,794	\$182.20	\$179.91	\$199.86	\$8.24	\$59.19	\$629.40
December 2019	63,856	\$199.17	\$183.26	\$202.13	\$7.49	\$56.90	\$648.95
CY 2019³	63,841	\$195.20	\$207.75	\$219.40	\$9.25	\$59.48	\$691.07
Annual PMPM Trends							
CY 2017 to CY 2018		0.1%	1.6%	5.3%	-9.1%	1.3%	2.1%
CY 2018 to CY 2019		10.1%	2.7%	5.0%	-7.5%	6.4%	5.6%
Annual PMPM Trend in SFY 2022							
Capitation Rates⁴		2.4%	1.7%	4.9%	-5.0%	5.8%	3.2%

¹ MississippiCAN PMPM figures have been adjusted for the removal of Zolgensma claims, the removal of the 5% assessment on OPPS services, 5% assessment on non-OPPS services, OPPS reimbursement changes not related to the 5% assessment, PAD, PDL, AAC, PRFT, OP Dental, GME, NET, Provider Settlements, and Financial to Encounter adjustments, and blend MississippiCAN rate cells using consistent enrollment from December 2019 to be directly comparable by month.

² CY 2017 and CY 2018 assumed to be fully complete with no explicit IBNR adjustment.

³ CY 2019 IBNR as found on Exhibit 1A of the SFY 2022 rate report.

⁴ Aggregate trend composited using CY 2019 PMPMs.

EXHIBIT 8C

Historical PMPM Trend Summary

Adults Population

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State of Mississippi Division of Medicaid
SFY 2022 MississippiCAN Preliminary Rate Calculation and Certification

April 21, 2021

Exhibit 8C
Mississippi Division of Medicaid
MississippiCAN Historical Completed Non-Pharmacy PMPM Costs and Trends
Adults Population
PMPM Costs by Month¹

Month	Member Months	Inpatient Hospital Services	Outpatient Hospital Services	Physician Services	Dental Services	Other Services	Non-Pharmacy Total
January 2017	60,165	\$41.82	\$116.50	\$151.11	\$9.95	\$11.31	\$330.69
February 2017	60,061	\$46.48	\$102.89	\$136.61	\$8.97	\$10.31	\$305.26
March 2017	60,379	\$59.28	\$120.41	\$155.38	\$10.82	\$11.25	\$357.13
April 2017	59,830	\$54.15	\$114.70	\$141.01	\$10.04	\$10.95	\$330.85
May 2017	59,860	\$52.98	\$118.13	\$152.45	\$9.33	\$11.34	\$344.23
June 2017	60,223	\$48.18	\$115.45	\$148.29	\$9.12	\$11.87	\$332.91
July 2017	60,042	\$51.27	\$119.35	\$139.80	\$7.93	\$11.16	\$329.50
August 2017	59,627	\$48.42	\$129.69	\$160.91	\$10.95	\$11.88	\$361.85
September 2017	59,057	\$47.43	\$118.17	\$139.88	\$9.55	\$10.80	\$325.83
October 2017	58,849	\$51.35	\$123.12	\$148.83	\$10.58	\$12.10	\$345.98
November 2017	58,467	\$44.53	\$113.98	\$141.05	\$8.62	\$10.50	\$318.67
December 2017	57,780	\$39.45	\$106.37	\$124.59	\$7.12	\$9.75	\$287.28
CY 2017²	59,528	\$48.78	\$116.56	\$144.99	\$9.41	\$11.10	\$330.85
January 2018	56,872	\$45.93	\$117.02	\$146.93	\$8.50	\$11.08	\$329.45
February 2018	55,859	\$34.16	\$107.56	\$133.54	\$7.81	\$9.48	\$292.55
March 2018	55,054	\$41.01	\$118.54	\$142.98	\$9.05	\$10.15	\$321.74
April 2018	54,424	\$48.48	\$120.54	\$145.43	\$8.94	\$10.61	\$334.00
May 2018	54,680	\$43.48	\$122.82	\$147.61	\$8.59	\$10.55	\$333.05
June 2018	54,131	\$41.04	\$118.88	\$134.89	\$7.85	\$10.76	\$313.43
July 2018	53,691	\$40.95	\$118.24	\$142.80	\$7.01	\$11.87	\$320.86
August 2018	52,789	\$47.79	\$123.25	\$151.88	\$8.46	\$12.39	\$343.76
September 2018	52,092	\$38.58	\$111.68	\$129.97	\$6.32	\$11.53	\$298.08
October 2018	51,942	\$49.65	\$120.54	\$146.81	\$8.11	\$12.24	\$337.35
November 2018	52,002	\$41.88	\$108.29	\$129.19	\$6.51	\$10.84	\$296.72
December 2018	52,554	\$44.28	\$105.87	\$120.80	\$5.14	\$10.49	\$286.59
CY 2018²	53,841	\$43.10	\$116.10	\$139.40	\$7.69	\$11.00	\$317.30
January 2019	52,799	\$38.76	\$123.26	\$152.45	\$8.12	\$11.82	\$334.40
February 2019	52,378	\$38.20	\$110.30	\$135.23	\$6.66	\$10.82	\$301.21
March 2019	52,191	\$43.19	\$111.94	\$134.67	\$6.75	\$10.28	\$306.83
April 2019	52,104	\$47.78	\$118.38	\$142.29	\$8.08	\$11.03	\$327.57
May 2019	52,670	\$50.74	\$116.32	\$143.86	\$6.73	\$11.34	\$329.00
June 2019	52,972	\$42.12	\$112.53	\$132.08	\$5.78	\$10.74	\$303.26
July 2019	53,181	\$44.92	\$124.56	\$143.66	\$5.77	\$11.64	\$330.54
August 2019	52,793	\$43.09	\$114.68	\$144.90	\$6.87	\$12.79	\$322.33
September 2019	52,867	\$43.71	\$108.82	\$137.05	\$5.90	\$11.62	\$307.09
October 2019	52,761	\$47.30	\$119.52	\$150.24	\$6.77	\$12.71	\$336.54
November 2019	52,512	\$38.74	\$101.05	\$127.63	\$4.96	\$11.66	\$284.04
December 2019	52,525	\$35.24	\$103.60	\$130.33	\$4.94	\$11.17	\$285.28
CY 2019³	52,646	\$42.82	\$113.75	\$139.53	\$6.44	\$11.47	\$314.01
Annual PMPM Trends							
CY 2017 to CY 2018		-11.6%	-0.4%	-3.9%	-18.3%	-0.9%	-4.1%
CY 2018 to CY 2019		-0.7%	-2.0%	0.1%	-16.2%	4.3%	-1.0%
Annual PMPM Trend in SFY 2022 Capitation Rates⁴		-0.2%	-0.2%	-0.1%	-5.0%	0.8%	-0.2%

¹ MississippiCAN PMPM figures have been adjusted for the removal of Zolgensma claims, the removal of the 5% assessment on OPPS services, 5% assessment on non-OPPS services, OPPS reimbursement changes not related to the 5% assessment, PAD, PDL, AAC, PRFT, OP Dental, GME, NET, Provider Settlements, and Financial to Encounter adjustments, and blend MississippiCAN rate cells using consistent enrollment from December 2019 to be directly comparable by month.

² CY 2017 and CY 2018 assumed to be fully complete with no explicit IBNR adjustment.

³ CY 2019 IBNR as found on Exhibit 1A of the SFY 2022 rate report.

⁴ Aggregate trend composited using CY 2019 PMPMs.

EXHIBIT 8D

Historical PMPM Trend Summary

Children Population

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State of Mississippi Division of Medicaid
SFY 2022 MississippiCAN Preliminary Rate Calculation and Certification

April 21, 2021

Exhibit 8D
Mississippi Division of Medicaid
MississippiCAN Historical Completed Non-Pharmacy PMPM Costs and Trends
Children Population
PMPM Costs by Month¹

Month	Member Months	Inpatient Hospital Services	Outpatient Hospital Services	Physician Services	Dental Services	Other Services	Non-Pharmacy Total
January 2017	364,125	\$51.31	\$36.46	\$72.14	\$27.24	\$4.93	\$192.08
February 2017	363,566	\$49.33	\$36.25	\$71.52	\$25.85	\$4.97	\$187.93
March 2017	362,803	\$52.85	\$37.28	\$71.68	\$28.13	\$5.69	\$195.62
April 2017	362,461	\$52.04	\$35.68	\$63.25	\$24.35	\$4.95	\$180.26
May 2017	362,523	\$52.06	\$34.76	\$64.23	\$24.23	\$5.25	\$180.54
June 2017	363,205	\$51.87	\$35.82	\$56.16	\$26.42	\$4.78	\$175.05
July 2017	361,384	\$49.99	\$35.19	\$58.18	\$26.85	\$5.35	\$175.55
August 2017	359,236	\$54.86	\$36.94	\$76.13	\$30.56	\$5.62	\$204.12
September 2017	356,876	\$51.49	\$36.64	\$69.18	\$26.31	\$5.27	\$188.89
October 2017	356,279	\$52.15	\$39.43	\$75.20	\$28.97	\$5.79	\$201.55
November 2017	356,405	\$52.16	\$39.05	\$72.50	\$27.04	\$5.40	\$196.16
December 2017	352,222	\$52.76	\$39.28	\$65.23	\$21.22	\$5.01	\$183.50
CY 2017²	360,090	\$51.91	\$36.90	\$67.95	\$26.43	\$5.25	\$188.44
January 2018	348,472	\$58.21	\$38.53	\$72.91	\$24.19	\$5.13	\$198.99
February 2018	343,395	\$54.61	\$37.14	\$72.83	\$24.11	\$4.92	\$193.61
March 2018	337,060	\$54.24	\$36.07	\$67.39	\$25.86	\$5.25	\$188.80
April 2018	333,468	\$51.67	\$35.26	\$68.69	\$24.84	\$5.03	\$185.49
May 2018	331,940	\$56.51	\$35.64	\$65.07	\$22.62	\$5.05	\$184.90
June 2018	328,520	\$58.87	\$36.79	\$55.92	\$23.98	\$4.92	\$180.48
July 2018	322,748	\$55.19	\$32.62	\$61.18	\$26.86	\$5.96	\$181.81
August 2018	317,346	\$53.50	\$35.27	\$75.15	\$27.93	\$6.09	\$197.94
September 2018	313,790	\$48.41	\$33.64	\$65.49	\$22.73	\$5.30	\$175.56
October 2018	313,187	\$62.17	\$37.37	\$78.12	\$26.79	\$5.77	\$210.22
November 2018	314,604	\$58.61	\$36.13	\$70.85	\$22.35	\$4.98	\$192.93
December 2018	318,582	\$64.46	\$35.31	\$63.64	\$18.34	\$4.79	\$186.53
CY 2018²	326,926	\$56.37	\$35.81	\$68.10	\$24.22	\$5.27	\$189.77
January 2019	320,553	\$59.97	\$39.35	\$81.18	\$26.30	\$5.78	\$212.59
February 2019	319,559	\$58.15	\$40.63	\$82.08	\$22.95	\$5.04	\$208.85
March 2019	318,648	\$61.66	\$35.41	\$72.02	\$23.49	\$5.57	\$198.15
April 2019	318,573	\$62.25	\$36.99	\$75.74	\$24.57	\$6.02	\$205.57
May 2019	319,550	\$65.07	\$35.37	\$68.57	\$20.92	\$5.15	\$195.09
June 2019	319,966	\$59.08	\$36.19	\$58.46	\$22.22	\$4.78	\$180.73
July 2019	318,287	\$63.16	\$36.23	\$67.50	\$26.87	\$6.34	\$200.10
August 2019	315,880	\$56.44	\$34.13	\$76.61	\$26.04	\$6.65	\$199.87
September 2019	315,260	\$60.32	\$35.54	\$75.25	\$24.29	\$5.91	\$201.32
October 2019	316,070	\$66.43	\$38.85	\$81.97	\$27.77	\$5.90	\$220.92
November 2019	317,456	\$53.55	\$37.77	\$75.93	\$22.20	\$5.39	\$194.84
December 2019	319,709	\$51.66	\$36.58	\$73.20	\$19.65	\$5.39	\$186.46
CY 2019³	318,293	\$59.81	\$36.92	\$74.04	\$23.94	\$5.66	\$200.37
Annual PMPM Trends							
CY 2017 to CY 2018		8.6%	-2.9%	0.2%	-8.4%	0.3%	0.7%
CY 2018 to CY 2019		6.1%	3.1%	8.7%	-1.1%	7.5%	5.6%
Annual PMPM Trend in SFY 2022							
Capitation Rates⁴		2.9%	0.8%	2.9%	-1.0%	3.8%	2.1%

¹ MississippiCAN PMPM figures have been adjusted for the removal of Zolgensma claims, the removal of the 5% assessment on OPPS services, 5% assessment on non-OPPS services, OPPS reimbursement changes not related to the 5% assessment, PAD, PDL, AAC, PRFT, OP Dental, GME, NET, Provider Settlements, and Financial to Encounter adjustments, and blend MississippiCAN rate cells using consistent enrollment from December 2019 to be directly comparable by month.

² CY 2017 and CY 2018 assumed to be fully complete with no explicit IBNR adjustment.

³ CY 2019 IBNR as found on Exhibit 1A of the SFY 2022 rate report.

⁴ Aggregate trend composited using CY 2019 PMPMs.

EXHIBIT 8E

Historical PMPM Trend Summary

Deliveries

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State of Mississippi Division of Medicaid
SFY 2022 MississippiCAN Preliminary Rate Calculation and Certification

April 21, 2021

Exhibit 8E
Mississippi Division of Medicaid
MississippiCAN Historical Completed Non-Pharmacy Delivery Costs and Trends
Deliveries
Per-Delivery Costs by Month¹

Month	Deliveries	Inpatient Hospital Services	Outpatient Hospital Services	Physician Services	Dental Services	Other Services	Non-Pharmacy Total
January 2017	1,689	\$3,900.57	\$9.13	\$1,163.29	\$0.03	\$18.63	\$5,091.65
February 2017	1,496	\$3,895.81	\$9.85	\$1,186.66	\$0.00	\$14.76	\$5,107.08
March 2017	1,545	\$3,932.06	\$7.05	\$1,227.74	\$0.00	\$16.62	\$5,183.47
April 2017	1,294	\$3,937.84	\$7.71	\$1,213.46	\$0.00	\$13.92	\$5,172.93
May 2017	1,520	\$3,898.47	\$10.74	\$1,174.73	\$0.00	\$15.77	\$5,099.72
June 2017	1,486	\$3,976.39	\$6.74	\$1,232.26	\$0.00	\$15.30	\$5,230.69
July 2017	1,647	\$3,909.20	\$8.47	\$1,196.84	\$0.06	\$15.40	\$5,129.97
August 2017	1,869	\$3,886.42	\$6.61	\$1,202.94	\$0.04	\$14.33	\$5,110.34
September 2017	1,732	\$3,823.96	\$7.96	\$1,174.46	\$0.00	\$18.69	\$5,025.07
October 2017	1,642	\$3,947.79	\$13.49	\$1,175.23	\$0.00	\$20.88	\$5,157.38
November 2017	1,671	\$3,986.88	\$7.18	\$1,176.97	\$0.00	\$12.33	\$5,183.36
December 2017	1,748	\$3,915.51	\$5.91	\$1,154.68	\$0.00	\$15.15	\$5,091.25
CY 2017²	1,612	\$3,917.58	\$8.40	\$1,189.94	\$0.01	\$15.98	\$5,131.91
January 2018	1,692	\$3,981.98	\$9.05	\$1,171.70	\$0.00	\$19.44	\$5,182.17
February 2018	1,496	\$4,034.55	\$7.40	\$1,169.75	\$0.00	\$29.00	\$5,240.71
March 2018	1,565	\$3,879.00	\$11.40	\$1,174.00	\$0.00	\$21.55	\$5,085.95
April 2018	1,514	\$4,092.78	\$15.87	\$1,191.47	\$0.11	\$20.21	\$5,320.44
May 2018	1,555	\$4,048.14	\$12.05	\$1,181.80	\$0.08	\$33.37	\$5,275.44
June 2018	1,566	\$3,924.70	\$7.12	\$1,172.61	\$0.09	\$24.89	\$5,129.41
July 2018	1,689	\$3,903.86	\$9.80	\$1,115.48	\$0.05	\$18.25	\$5,047.44
August 2018	1,821	\$3,957.54	\$7.23	\$1,137.17	\$0.00	\$20.52	\$5,122.46
September 2018	1,667	\$3,966.36	\$7.33	\$1,139.64	\$0.00	\$28.41	\$5,141.74
October 2018	1,642	\$3,950.22	\$8.94	\$1,122.49	\$0.00	\$22.72	\$5,104.37
November 2018	1,618	\$3,918.45	\$8.59	\$1,134.90	\$0.00	\$21.23	\$5,083.19
December 2018	1,683	\$3,987.46	\$8.41	\$1,081.70	\$0.00	\$18.77	\$5,096.33
CY 2018²	1,626	\$3,970.42	\$9.43	\$1,149.39	\$0.03	\$23.20	\$5,152.47
January 2019	1,696	\$4,158.87	\$7.60	\$1,131.21	\$0.05	\$13.94	\$5,311.67
February 2019	1,414	\$4,130.86	\$15.50	\$1,106.07	\$0.04	\$12.41	\$5,264.89
March 2019	1,506	\$4,140.30	\$11.94	\$1,091.46	\$0.00	\$14.49	\$5,258.19
April 2019	1,467	\$4,080.72	\$13.23	\$1,088.25	\$0.08	\$13.22	\$5,195.49
May 2019	1,492	\$4,298.22	\$16.94	\$1,131.09	\$0.00	\$16.83	\$5,463.08
June 2019	1,448	\$4,064.92	\$16.67	\$1,073.23	\$0.00	\$15.68	\$5,170.49
July 2019	1,791	\$4,014.18	\$15.02	\$1,070.41	\$0.00	\$12.00	\$5,111.62
August 2019	1,717	\$4,068.91	\$13.14	\$1,106.80	\$0.03	\$15.40	\$5,204.27
September 2019	1,715	\$4,113.95	\$15.38	\$1,114.52	\$0.17	\$12.18	\$5,256.19
October 2019	1,726	\$4,228.68	\$16.35	\$1,176.65	\$0.00	\$15.89	\$5,437.56
November 2019	1,519	\$4,105.30	\$15.41	\$1,153.65	\$0.00	\$18.19	\$5,292.55
December 2019	1,731	\$4,040.47	\$12.16	\$1,135.92	\$0.00	\$13.40	\$5,201.95
CY 2019³	1,602	\$4,120.45	\$14.11	\$1,114.94	\$0.03	\$14.47	\$5,264.00
Annual PMPM Trends							
CY 2017 to CY 2018		1.3%	12.3%	-3.4%	146.0%	45.1%	0.4%
CY 2018 to CY 2019		3.8%	49.6%	-3.0%	13.3%	-37.6%	2.2%
Annual PMPM Trend in SFY 2022							
Capitation Rates⁴		2.8%	0.7%	0.9%	1.0%	1.8%	2.4%

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² CY 2017 and CY 2018 assumed to be fully complete with no explicit IBNR adjustment.

³ CY 2019 IBNR as found on Exhibit 1A of the SFY 2022 rate report.

⁴ Aggregate trend composited using CY 2019 PMPMs.

EXHIBIT 9A

Pharmacy Trend Summary

SSI Rate Grouping

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State of Mississippi Division of Medicaid
SFY 2022 MississippiCAN Preliminary Rate Calculation and Certification

April 21, 2021

Exhibit 9A

Mississippi Division of Medicaid

MississippiCAN Historical and Projected Pharmacy Utilization and Cost

SSI Rate Grouping

Traditional Top 25		CY 2019						Annualized Prospective Trends								
		Cost / Script			Util / 1000			PMPM Cost			Cost / Script¹			Utilization²		
GPI4	GPI Description	Generic	Brand	Total	Generic	Brand	Total	Generic	Brand	Total	Generic	Brand	Total	Generic	Brand	Total
7260	Fibromyalgia Agents	\$23.97	\$696.50	\$102.82	1,515.7	201.3	1,717.0	\$3.03	\$11.68	\$14.71	0.0%	6.0%	4.8%	1.0%	1.0%	0.6%
2710L	Insulin - Long Acting	\$0.00	\$530.09	\$530.09	0.0	281.5	281.5	\$0.00	\$12.44	\$12.44	0.0%	5.0%	5.0%	3.0%	3.0%	1.8%
4420	Sympathomimetics	\$30.88	\$164.91	\$136.16	215.7	790.0	1,005.7	\$0.56	\$10.86	\$11.41	0.0%	0.0%	0.0%	3.0%	3.0%	1.8%
2710S	Insulin - Short / Intermediate Acting	\$0.00	\$591.42	\$591.42	0.0	212.8	212.8	\$0.00	\$10.49	\$10.49	0.0%	1.0%	1.0%	-5.0%	-5.0%	-3.0%
6110	Amphetamines	\$68.35	\$284.36	\$172.82	215.3	201.7	417.0	\$1.23	\$4.78	\$6.01	0.0%	4.0%	3.2%	0.0%	0.0%	0.0%
5940	Dibenzapines / Quinolinone Derivatives / Benzisoxazoles	\$31.51	\$1,273.23	\$729.98	45.3	58.2	103.5	\$0.12	\$6.18	\$6.30	0.0%	2.0%	2.0%	3.0%	3.0%	1.8%
6140	Stimulants - Misc.	\$124.09	\$340.85	\$211.19	149.9	100.7	250.6	\$1.55	\$2.86	\$4.41	0.0%	2.0%	1.3%	8.0%	8.0%	4.7%
2717	Incretin Mimetic Agents (GLP-1 Receptor Agonists)	\$0.00	\$716.48	\$716.48	0.0	90.0	90.0	\$0.00	\$5.38	\$5.38	0.0%	6.0%	6.0%	25.0%	25.0%	14.3%
2755	DPP-IV Agents	\$0.00	\$486.79	\$486.79	0.0	97.1	97.1	\$0.00	\$3.94	\$3.94	0.0%	6.0%	6.0%	-10.0%	-10.0%	-6.1%
8337	Anticoagulants	\$0.00	\$429.39	\$429.39	0.0	103.2	103.2	\$0.00	\$3.69	\$3.69	0.0%	6.0%	6.0%	10.0%	10.0%	5.9%
6510	Opioid Agonists	\$36.58	\$1,091.81	\$86.04	328.1	16.1	344.2	\$1.00	\$1.47	\$2.47	0.0%	7.0%	4.2%	-20.0%	-20.0%	-12.5%
4410	Bronchodilators - Anticholinergics	\$20.80	\$408.83	\$369.58	7.9	70.4	78.4	\$0.01	\$2.40	\$2.41	0.0%	7.0%	7.0%	-5.0%	-5.0%	-3.0%
5915	Dibenzapines / Quinolinone Derivatives / Benzisoxazoles	\$19.31	\$857.09	\$59.23	424.5	21.2	445.8	\$0.68	\$1.52	\$2.20	0.0%	0.0%	0.0%	3.0%	3.0%	1.8%
2770	SGLT-2 Agents	\$0.00	\$526.72	\$526.72	0.0	70.3	70.3	\$0.00	\$3.08	\$3.08	0.0%	6.0%	6.0%	15.0%	15.0%	8.7%
2799	Antidiabetic Combinations	\$23.22	\$456.50	\$367.68	16.2	62.9	79.1	\$0.03	\$2.39	\$2.42	0.0%	6.0%	5.9%	-6.0%	-6.0%	-3.6%
7210	Anticonvulsants - Benzodiazepines	\$21.07	\$990.76	\$111.53	189.9	19.5	209.4	\$0.33	\$1.61	\$1.95	0.0%	6.0%	5.0%	-14.0%	-14.0%	-8.7%
6599	Opioid Agonists	\$17.39	\$269.57	\$17.40	1,086.4	0.0	1,086.5	\$1.57	\$0.00	\$1.58	0.0%	1.0%	0.0%	-20.0%	-20.0%	-12.5%
4927	Proton Pump Inhibitors	\$17.37	\$319.01	\$22.23	916.2	15.0	931.2	\$1.33	\$0.40	\$1.73	0.0%	4.0%	0.9%	1.0%	1.0%	0.6%
5812	Modified Cyclics	\$14.66	\$359.77	\$68.42	306.9	56.6	363.5	\$0.37	\$1.70	\$2.07	0.0%	4.0%	3.3%	9.0%	9.0%	5.3%
6520	Opioid Partial Agonists	\$205.93	\$390.99	\$370.89	7.0	57.8	64.9	\$0.12	\$1.88	\$2.01	0.0%	5.0%	4.7%	25.0%	25.0%	14.3%
9410	Diagnostic Tests	\$135.43	\$72.52	\$85.28	41.4	163.0	204.4	\$0.47	\$0.98	\$1.45	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
3940	HMG CoA Reductase Inhibitors	\$14.55	\$334.68	\$14.99	919.5	1.3	920.8	\$1.11	\$0.04	\$1.15	0.0%	5.0%	0.2%	-6.0%	-6.0%	-3.6%
8120	Nutritional Supplements	\$103.74	\$274.52	\$274.08	0.2	72.9	73.1	\$0.00	\$1.67	\$1.67	0.0%	0.0%	0.0%	5.0%	5.0%	3.0%
5280	Phosphate Binder Agents	\$162.04	\$1,350.52	\$356.34	20.6	4.0	24.6	\$0.28	\$0.45	\$0.73	0.0%	5.0%	3.1%	12.0%	12.0%	7.0%
5907	Dibenzapines / Quinolinone Derivatives / Benzisoxazoles	\$34.91	\$1,334.79	\$53.22	279.6	4.0	283.6	\$0.81	\$0.44	\$1.26	0.0%	8.0%	2.9%	0.0%	0.0%	0.0%
Other Traditional		\$21.17	\$179.08	\$32.76	16,057.1	1,271.8	17,328.9	\$28.33	\$18.98	\$47.31	0.0%	7.0%	2.9%	0.0%	0.0%	0.0%
Total Traditional		\$22.66	\$330.33	\$69.10	22,743.5	4,043.6	26,787.1	\$42.95	\$111.31	\$154.26	0.0%	4.4%	3.2%	-0.7%	2.4%	1.6%
Specialty Top 5																
1210	Antiretrovirals	\$558.02	\$2,153.52	\$1,833.89	34.3	137.0	171.3	\$1.60	\$24.59	\$26.18	10.0%	10.0%	10.0%	-10.0%	-10.0%	-6.1%
1235C	Hepatitis C Agents	\$85.74	\$13,370.30	\$13,215.38	0.1	5.3	5.4	\$0.00	\$5.92	\$5.92	0.0%	0.0%	0.0%	-30.0%	-30.0%	-19.3%
6627	Autoimmune Agents	\$0.00	\$5,883.22	\$5,883.22	0.0	21.9	21.9	\$0.00	\$10.74	\$10.74	10.0%	10.0%	10.0%	10.0%	10.0%	5.9%
2153	Antineoplastic Enzyme Inhibitors	\$416.81	\$11,332.44	\$10,260.24	1.1	10.4	11.5	\$0.04	\$9.78	\$9.82	10.0%	10.0%	10.0%	5.0%	5.0%	3.0%
9310	Antidotes - Chelating Agents	\$4,602.45	\$10,498.07	\$10,419.99	0.1	9.3	9.5	\$0.05	\$8.17	\$8.22	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Specialty		\$244.62	\$6,002.12	\$1,911.23	256.3	104.4	360.7	\$5.22	\$52.22	\$57.44	10.0%	10.0%	10.0%	5.0%	5.0%	3.0%
Total Specialty		\$283.97	\$4,637.05	\$2,447.05	291.9	288.3	580.2	\$6.91	\$111.41	\$118.32	9.9%	9.0%	9.1%	1.6%	0.2%	0.3%
Total		\$25.97	\$616.97	\$119.52	23,035.4	4,331.9	27,367.4	\$49.85	\$222.72	\$272.58	1.5%	6.7%	5.8%	-0.4%	1.3%	1.0%

¹ Prospective unit cost trends apply for CY 2019 to July 1, 2021. Unit costs are assumed not to change after July 1, 2021.

² Prospective utilization trends apply for CY 2020 to SFY 2022. No utilization trends applied for CY 2019 to CY 2020. Composite utilization trends include mix component of trends.

EXHIBIT 9B

Pharmacy Trend Summary

Adult Rate Grouping

This report assumes the reader is familiar with the State of Mississippi's MississippiCAN program, its benefits, and rate setting principles. The report was prepared solely to provide assistance to DOM to set SFY 2022 capitation rates for the MississippiCAN 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.

State of Mississippi Division of Medicaid
SFY 2022 MississippiCAN Preliminary Rate Calculation and Certification

April 21, 2021

Exhibit 9B

Mississippi Division of Medicaid

MississippiCAN Historical and Projected Pharmacy Utilization and Cost

Adult Rate Grouping

Traditional Top 25		CY 2019						Annualized Prospective Trends								
GPI4 GPI Description		Generic	Cost / Script Brand	Total	Generic	Util / 1000 Brand	Total	Generic	PMPM Cost Brand	Total	Generic	Cost / Script ¹ Brand	Total	Generic	Utilization ² Brand	Total
7260	Fibromyalgia Agents	\$18.45	\$590.24	\$80.42	604.8	73.5	678.4	\$0.93	\$3.62	\$4.55	-2.0%	6.0%	4.4%	-1.0%	-1.0%	-0.6%
6520	Opioid Partial Agonists	\$154.26	\$390.71	\$342.64	36.4	142.5	178.8	\$0.47	\$4.64	\$5.11	-2.0%	5.0%	4.4%	15.0%	15.0%	8.7%
2710S	Insulin - Short / Intermediate Acting	\$0.00	\$488.48	\$488.48	0.0	98.8	98.8	\$0.00	\$4.02	\$4.02	-2.0%	1.0%	1.0%	0.0%	0.0%	0.0%
2710L	Insulin - Long Acting	\$0.00	\$494.45	\$494.45	0.0	96.3	96.3	\$0.00	\$3.97	\$3.97	-2.0%	5.0%	5.0%	5.0%	5.0%	3.0%
4420	Sympathomimetics	\$30.04	\$128.23	\$115.11	41.5	268.6	310.1	\$0.10	\$2.87	\$2.97	-2.0%	0.0%	-0.1%	3.0%	3.0%	1.8%
5940	Dibenzapines / Quinolinone Derivatives / Benzisoxazoles	\$31.03	\$1,202.05	\$893.42	8.5	23.7	32.2	\$0.02	\$2.38	\$2.40	-2.0%	2.0%	2.0%	-7.0%	-7.0%	-4.3%
2717	Incretin Mimetic Agents (GLP-1 Receptor Agonists)	\$0.00	\$724.23	\$724.23	0.0	44.7	44.7	\$0.00	\$2.70	\$2.70	-2.0%	6.0%	6.0%	30.0%	30.0%	17.0%
5812	Modified Cyclics	\$14.44	\$353.31	\$127.01	121.4	60.4	181.8	\$0.15	\$1.78	\$1.92	-2.0%	4.0%	3.6%	4.0%	4.0%	2.4%
6599	Opioid Agonists	\$14.98	\$0.00	\$14.98	980.5	0.0	980.5	\$1.22	\$0.00	\$1.22	-2.0%	1.0%	-2.0%	-20.0%	-20.0%	-12.5%
6610	Nonsteroidal Anti-inflammatory Agents (NSAIDs)	\$14.60	\$213.84	\$14.80	1,019.6	1.0	1,020.7	\$1.24	\$0.02	\$1.26	-2.0%	0.0%	-2.0%	2.0%	2.0%	1.2%
6110	Amphetamines	\$42.76	\$287.46	\$97.91	111.6	32.5	144.1	\$0.40	\$0.78	\$1.18	-2.0%	4.0%	2.0%	20.0%	20.0%	11.6%
2755	DPP-IV Agents	\$0.00	\$483.55	\$483.55	0.0	26.5	26.5	\$0.00	\$1.07	\$1.07	-2.0%	6.0%	6.0%	-10.0%	-10.0%	-6.1%
2599	Combination Contraceptives - Oral	\$20.55	\$185.16	\$41.79	276.1	40.9	317.1	\$0.47	\$0.63	\$1.10	-2.0%	9.0%	4.5%	-5.0%	-5.0%	-3.0%
2770	SGLT-2 Agents	\$0.00	\$523.98	\$523.98	0.0	26.3	26.3	\$0.00	\$1.15	\$1.15	-2.0%	6.0%	6.0%	15.0%	15.0%	8.7%
2515	Contraceptives - IUD / Implant / Injection	\$57.50	\$0.00	\$57.50	137.5	0.0	137.5	\$0.66	\$0.00	\$0.66	-2.0%	0.0%	-2.0%	0.0%	0.0%	0.0%
7851	Prenatal Vitamins	\$13.15	\$33.44	\$32.25	13.9	223.9	237.8	\$0.02	\$0.62	\$0.64	-2.0%	0.0%	0.0%	-5.0%	-5.0%	-3.0%
2799	Antidiabetic Combinations	\$21.28	\$458.98	\$398.45	3.3	20.5	23.8	\$0.01	\$0.78	\$0.79	-2.0%	6.0%	5.9%	-10.0%	-10.0%	-6.1%
4927	Proton Pump Inhibitors	\$15.41	\$302.38	\$17.92	433.5	3.8	437.3	\$0.56	\$0.10	\$0.65	-2.0%	4.0%	-1.1%	2.0%	2.0%	1.2%
5816	Selective Serotonin Reuptake Inhibitors (SSRIs)	\$13.25	\$0.00	\$13.25	574.9	0.0	574.9	\$0.63	\$0.00	\$0.63	-2.0%	0.0%	-2.0%	2.0%	2.0%	1.2%
2596	Combination Contraceptives - Transdermal	\$135.64	\$0.00	\$135.64	60.0	0.0	60.0	\$0.68	\$0.00	\$0.68	-2.0%	0.0%	-2.0%	10.0%	10.0%	5.9%
9410	Diagnostic Tests	\$137.58	\$71.75	\$81.78	10.8	60.0	70.8	\$0.12	\$0.36	\$0.48	-2.0%	0.0%	-0.5%	-15.0%	-15.0%	-9.3%
6510	Opioid Agonists	\$21.94	\$395.03	\$34.29	168.1	5.8	173.9	\$0.31	\$0.19	\$0.50	-2.0%	7.0%	1.6%	-25.0%	-25.0%	-15.9%
7510	Central Muscle Relaxants	\$14.23	\$0.00	\$14.23	460.8	0.0	460.8	\$0.55	\$0.00	\$0.55	-2.0%	0.0%	-2.0%	-1.0%	-1.0%	-0.6%
8337	Anticoagulants	\$0.00	\$439.48	\$439.48	0.0	18.7	18.7	\$0.00	\$0.69	\$0.69	-2.0%	6.0%	6.0%	5.0%	5.0%	3.0%
3400	Calcium Channel Blockers	\$16.27	\$96.53	\$16.28	386.5	0.0	386.5	\$0.52	\$0.00	\$0.52	-2.0%	0.0%	-2.0%	0.0%	0.0%	0.0%
Other Traditional		\$19.21	\$139.75	\$26.50	8,710.5	560.4	9,270.9	\$13.95	\$6.53	\$20.47	-2.0%	6.0%	0.7%	1.0%	1.0%	0.6%
Total Traditional		\$19.49	\$255.08	\$46.44	14,160.4	1,828.9	15,989.3	\$23.00	\$38.88	\$61.88	-2.0%	4.4%	2.2%	0.3%	4.7%	3.1%
Specialty Top 5																
1210	Antiretrovirals	\$485.90	\$2,288.39	\$2,069.52	4.8	35.1	39.9	\$0.20	\$6.68	\$6.88	-2.0%	10.0%	9.7%	0.0%	0.0%	0.0%
6627	Autoimmune Agents	\$0.00	\$6,163.18	\$6,163.18	0.0	12.6	12.6	\$0.00	\$6.49	\$6.49	-2.0%	10.0%	10.0%	30.0%	30.0%	17.0%
1235C	Hepatitis C Agents	\$326.78	\$14,246.33	\$14,164.45	0.0	3.2	3.2	\$0.00	\$3.81	\$3.81	-2.0%	0.0%	0.0%	0.0%	0.0%	0.0%
6240	Multiple Sclerosis Agents	\$1,387.00	\$6,971.00	\$6,187.73	0.6	3.6	4.2	\$0.07	\$2.10	\$2.16	-2.0%	5.0%	4.8%	0.0%	0.0%	0.0%
6629	Autoimmune Agents	\$0.00	\$5,089.71	\$5,089.71	0.0	3.7	3.7	\$0.00	\$1.56	\$1.56	-2.0%	10.0%	10.0%	0.0%	0.0%	0.0%
Other Specialty		\$65.92	\$5,914.07	\$1,763.47	41.9	17.1	59.0	\$0.23	\$8.44	\$8.67	-2.0%	5.0%	4.8%	15.0%	15.0%	8.7%
Total Specialty		\$125.49	\$4,633.88	\$2,894.51	47.3	75.3	122.6	\$0.49	\$29.08	\$29.57	-2.0%	7.1%	7.0%	7.1%	11.4%	11.3%
Total		\$19.85	\$428.25	\$68.12	14,207.7	1,904.2	16,111.9	\$23.50	\$67.96	\$91.46	-2.0%	5.7%	3.9%	0.4%	7.6%	5.8%

¹ Prospective unit cost trends apply for CY 2019 to July 1, 2021. Unit costs are assumed not to change after July 1, 2021.

² Prospective utilization trends apply for CY 2020 to SFY 2022. No utilization trends applied for CY 2019 to CY 2020. Composite utilization trends include mix component of trends.

EXHIBIT 9C

Pharmacy Trend Summary

Children Rate Grouping

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State of Mississippi Division of Medicaid
SFY 2022 MississippiCAN Preliminary Rate Calculation and Certification

April 21, 2021

Exhibit 9C
Mississippi Division of Medicaid
MississippiCAN Historical and Projected Pharmacy Utilization and Cost
Children Rate Grouping

Traditional Top 25		CY 2019									Annualized Prospective Trends								
		Cost / Script			Util / 1000			PMPM Cost			Cost / Script¹			Utilization²					
GPI#	GPI Description	Generic	Brand	Total	Generic	Brand	Total	Generic	Brand	Total	Generic	Brand	Total	Generic	Brand	Total			
6110	Amphetamines	\$76.50	\$291.27	\$207.09	140.1	217.3	357.3	\$0.89	\$5.27	\$6.17	1.0%	4.0%	3.6%	1.0%	1.0%	0.6%			
6140	Stimulants - Misc.	\$126.60	\$347.07	\$216.48	136.3	93.8	230.2	\$1.44	\$2.71	\$4.15	1.0%	2.0%	1.7%	8.0%	8.0%	4.7%			
4420	Sympathomimetics	\$26.16	\$108.84	\$69.74	153.9	171.5	325.4	\$0.34	\$1.56	\$1.89	1.0%	0.0%	0.2%	1.0%	1.0%	0.6%			
1250	Influenza Agents	\$99.34	\$236.62	\$101.00	205.7	2.5	208.2	\$1.70	\$0.05	\$1.75	1.0%	0.0%	1.0%	1.0%	1.0%	0.6%			
4440	Steroid Inhalants	\$98.38	\$205.90	\$150.81	35.0	33.3	68.3	\$0.29	\$0.57	\$0.86	1.0%	4.0%	3.0%	-2.0%	-2.0%	-1.2%			
2710S	Insulin - Short / Intermediate Acting	\$0.00	\$632.22	\$632.22	0.0	16.8	16.8	\$0.00	\$0.88	\$0.88	1.0%	1.0%	1.0%	1.0%	1.0%	0.6%			
4155	Antihistamines - Non-Sedating	\$16.18	\$31.86	\$16.18	573.4	0.0	573.4	\$0.77	\$0.00	\$0.77	1.0%	0.0%	1.0%	1.0%	1.0%	0.6%			
8799	Otic Combinations	\$61.76	\$231.02	\$217.77	3.4	39.9	43.3	\$0.02	\$0.77	\$0.79	1.0%	8.0%	7.9%	-5.0%	-5.0%	-3.0%			
4399	Cough/Cold/Allergy Combinations	\$20.11	\$14.57	\$15.14	47.4	418.5	465.9	\$0.08	\$0.51	\$0.59	1.0%	1.0%	1.0%	5.0%	5.0%	3.0%			
9005	Acne Products	\$75.75	\$203.65	\$113.40	40.3	16.8	57.2	\$0.25	\$0.29	\$0.54	1.0%	0.0%	0.5%	2.0%	2.0%	1.2%			
9055	Corticosteroids - Topical	\$23.82	\$225.12	\$25.57	220.6	1.9	222.5	\$0.44	\$0.04	\$0.47	1.0%	2.0%	1.1%	-2.0%	-2.0%	-1.2%			
0120	Penicillin	\$13.45	\$0.00	\$13.45	443.5	0.0	443.5	\$0.50	\$0.00	\$0.50	1.0%	0.0%	1.0%	1.0%	1.0%	0.6%			
4450	Leukotriene Modulators	\$17.59	\$235.88	\$17.60	285.8	0.0	285.8	\$0.42	\$0.00	\$0.42	1.0%	5.0%	1.0%	1.0%	1.0%	0.6%			
0340	Macrolides	\$20.19	\$201.94	\$20.20	246.1	0.0	246.1	\$0.41	\$0.00	\$0.41	1.0%	0.0%	1.0%	0.0%	0.0%	0.0%			
4927	Proton Pump Inhibitors	\$80.99	\$332.37	\$86.32	56.8	1.2	58.1	\$0.38	\$0.03	\$0.42	1.0%	4.0%	1.3%	5.0%	5.0%	3.0%			
3890	Anaphylaxis Therapy Agents	\$282.29	\$602.79	\$289.48	14.3	0.3	14.6	\$0.34	\$0.02	\$0.35	1.0%	1.0%	1.0%	1.0%	1.0%	0.6%			
6135	Attention-Deficit/Hyperactivity Disorder (ADHD) Agents	\$54.76	\$362.13	\$57.47	48.8	0.4	49.2	\$0.22	\$0.01	\$0.24	1.0%	1.0%	1.0%	3.0%	3.0%	1.8%			
4220	Nasal Steroids	\$16.93	\$228.66	\$27.24	155.5	8.0	163.4	\$0.22	\$0.15	\$0.37	1.0%	9.0%	4.4%	1.0%	1.0%	0.6%			
2210	Glucocorticosteroids	\$15.36	\$407.16	\$15.41	259.7	0.0	259.7	\$0.33	\$0.00	\$0.33	1.0%	1.0%	1.0%	1.0%	1.0%	0.6%			
0230	Cephalosporin	\$22.72	\$0.00	\$22.72	159.2	0.0	159.2	\$0.30	\$0.00	\$0.30	1.0%	0.0%	1.0%	0.0%	0.0%	0.0%			
9090	Scabicides & Pediculicides	\$40.98	\$265.27	\$157.38	12.1	13.1	25.2	\$0.04	\$0.29	\$0.33	1.0%	6.0%	5.4%	-10.0%	-10.0%	-6.1%			
0199	Penicillin	\$25.26	\$402.16	\$25.33	133.3	0.0	133.3	\$0.28	\$0.00	\$0.28	1.0%	0.0%	1.0%	1.0%	1.0%	0.6%			
2710L	Insulin - Long Acting	\$0.00	\$356.06	\$356.06	0.0	10.2	10.2	\$0.00	\$0.30	\$0.30	1.0%	5.0%	5.0%	3.0%	3.0%	1.8%			
7260	Fibromyalgia Agents	\$22.68	\$792.44	\$50.58	63.7	2.4	66.0	\$0.12	\$0.16	\$0.28	1.0%	6.0%	3.9%	2.0%	2.0%	1.2%			
2599	Combination Contraceptives - Oral	\$21.41	\$177.32	\$42.22	87.6	13.5	101.1	\$0.16	\$0.20	\$0.36	1.0%	9.0%	5.6%	0.0%	0.0%	0.0%			
Other Traditional		\$22.45	\$114.97	\$31.72	2,020.2	225.0	2,245.2	\$3.78	\$2.16	\$5.94	1.0%	1.0%	1.0%	1.0%	1.0%	0.6%			
Total Traditional		\$29.71	\$148.95	\$52.17	5,542.5	1,286.7	6,829.2	\$13.72	\$15.97	\$29.69	1.0%	2.9%	2.0%	1.7%	1.8%	1.7%			
Specialty Top 5																			
3010	Growth Hormones	\$0.00	\$4,359.96	\$4,359.96	0.0	2.0	2.0	\$0.00	\$0.73	\$0.73	0.0%	5.0%	5.0%	0.0%	0.0%	0.0%			
1950	Monoclonal Antibodies	\$0.00	\$2,208.73	\$2,208.73	0.0	4.6	4.6	\$0.00	\$0.84	\$0.84	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
6627	Autoimmune Agents	\$0.00	\$6,254.26	\$6,254.26	0.0	1.5	1.5	\$0.00	\$0.78	\$0.78	0.0%	10.0%	10.0%	40.0%	40.0%	22.4%			
4530	Cystic Fibrosis Agents	\$0.00	\$9,998.20	\$9,998.20	0.0	0.7	0.7	\$0.00	\$0.55	\$0.55	0.0%	5.0%	5.0%	0.0%	0.0%	0.0%			
3090	Metabolic Modifiers	\$69.91	\$16,593.03	\$3,934.97	0.8	0.3	1.1	\$0.00	\$0.35	\$0.35	0.0%	5.0%	4.9%	0.0%	0.0%	0.0%			
Other Specialty		\$198.49	\$3,607.91	\$1,265.41	16.8	7.7	24.5	\$0.28	\$2.30	\$2.58	0.0%	15.0%	13.5%	5.0%	5.0%	3.0%			
Total Specialty		\$192.49	\$4,002.60	\$2,041.15	17.6	16.6	34.3	\$0.28	\$5.55	\$5.83	0.0%	9.5%	9.1%	4.9%	8.1%	7.9%			
Total		\$30.22	\$198.13	\$62.11	5,560.1	1,303.3	6,863.5	\$14.00	\$21.52	\$35.52	1.0%	4.8%	3.3%	1.7%	3.4%	2.8%			

¹ Prospective unit cost trends apply for CY 2019 to July 1, 2021. Unit costs are assumed not to change after July 1, 2021.

² Prospective utilization trends apply for CY 2020 to SFY 2022. No utilization trends applied for CY 2019 to CY 2020. Composite utilization trends include mix component of trends.

EXHIBIT 10A

Development of Vaccine Expenses for SFY 2022 Rates

Cost per Vaccination Development

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State of Mississippi Division of Medicaid
SFY 2022 MississippiCAN Preliminary Rate Calculation and Certification

April 21, 2021

Exhibit 10A
Mississippi Division of Medicaid
Development of MississippiCAN Vaccine Expenses for SFY 2022 Rates
Cost per Vaccination Development

	<i>a</i>	<i>b</i>	<i>c = (a × 1) + (b × 2)</i>	<i>d</i>	<i>e = c × d</i>
Time Period	% Single Dose Vaccine	Vaccine Distribution % Two Dose Vaccine	Doses per Vaccination	Vaccine Fee per Dose	Total Cost per Vaccination
2H 2021	75%	25%	1.25	\$35.87	\$44.84
1H 2022	75%	25%	1.25	\$32.28	\$40.35

EXHIBIT 10B

Development of Vaccine Expenses for SFY 2022 Rates

Uptake Percentage by Month and Age Grouping

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State of Mississippi Division of Medicaid
SFY 2022 MississippiCAN Preliminary Rate Calculation and Certification

April 21, 2021

<div>Exhibit 10B</div> <div>Mississippi Division of Medicaid</div> <div>Development of MississippiCAN Vaccine Expenses for SFY 2022 Rates</div> <div>Uptake % by Month and Age Grouping</div>									
Month	Disabled Adults	Pregnant Adults	Non-Pregnant Adults	Children – Age 16 to 18	Children – Age 12 to 15	Children – Age 6 to 11	Children – Age 1 to 6	Newborns	
Jan-21									N/A
Feb-21	30.00%								N/A
Mar-21	30.00%								N/A
Apr-21	2.50%	30.00%	30.00%	30.00%	30.00%				N/A
May-21	2.50%	30.00%	30.00%	30.00%	30.00%				N/A
Jun-21	2.50%	2.50%	2.50%	2.50%					N/A
Jul-21	1.07%	2.50%	2.50%	2.50%	30.00%				N/A
Aug-21	1.07%	2.50%	2.50%	2.50%	30.00%				N/A
Sep-21	1.07%	1.07%	1.07%	1.07%	2.50%				N/A
Oct-21	1.07%	1.07%	1.07%	1.07%	2.50%				N/A
Nov-21	1.07%	1.07%	1.07%	1.07%	2.50%				N/A
Dec-21	1.07%	1.07%	1.07%	1.07%	1.07%	30.00%			N/A
Jan-22	1.07%	1.07%	1.07%	1.07%	1.07%	30.00%			N/A
Feb-22		1.07%	1.07%	1.07%	1.07%	2.50%			N/A
Mar-22		1.07%	1.07%	1.07%	1.07%	2.50%	30.00%		N/A
Apr-22						1.07%	30.00%		N/A
May-22						1.07%	2.50%		N/A
Jun-22						1.07%	2.50%		N/A
Jul-22						1.07%	2.50%		N/A
Aug-22						1.07%	1.07%		N/A
Sep-22						1.07%	1.07%		N/A
Oct-22						1.07%	1.07%		N/A
Nov-22						1.07%	1.07%		N/A
Dec-22							1.07%		N/A
Jan-23							1.07%		N/A
Feb-23							1.07%		N/A
Mar-23									N/A
All Time Periods	75.00%	75.00%	75.00%	75.00%	75.00%	75.00%	75.00%	75.00%	N/A
Total Uptake									
f2H 2021	6.43%	9.29%	9.29%	9.29%	68.57%	30.00%	0.00%		N/A
g1H 2022	1.07%	3.21%	3.21%	3.21%	6.43%	39.64%	65.00%		N/A
Cost per Vaccination									
h = Exhibit 10A step e2H 2021	\$44.84	\$44.84	\$44.84	\$44.84	\$44.84	\$44.84	\$44.84		N/A
i = Exhibit 10A step e1H 2022	\$40.35	\$40.35	\$40.35	\$40.35	\$40.35	\$40.35	\$40.35		N/A
Total Cost									
j = f × h2H 2021	\$2.88	\$4.16	\$4.16	\$4.16	\$30.75	\$13.45	\$0.00		N/A
k = g × i1H 2022	\$0.43	\$1.30	\$1.30	\$1.30	\$2.59	\$16.00	\$26.23		N/A
l = j + kSFY 2022 Total	\$3.31	\$5.46	\$5.46	\$5.46	\$33.34	\$29.45	\$26.23		N/A

EXHIBIT 10C

Development of Vaccine Expenses for SFY 2022 Rates

Uptake Percentage by Month and Age Grouping

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State of Mississippi Division of Medicaid
SFY 2022 MississippiCAN Preliminary Rate Calculation and Certification

April 21, 2021

Exhibit 10C
Mississippi Division of Medicaid
Development of MississippiCAN Vaccine Expenses for SFY 2022 Rates
Vaccine Cost PMPM Calculations

		Distribution by Group							
Cap Cell	Disabled Adults	Pregnant Adults	Non-Pregnant Adults	Children – Age 16 to 18	Children – Age 12 to 15	Children – Age 6 to 11	Children – Age 1 to 6	Newborns	
Breast and Cervical Cancer	N/A	N/A	100.00%	N/A	N/A	N/A	N/A	N/A	N/A
Foster Care	N/A	N/A	3.26%	9.65%	23.29%	36.63%	27.18%	N/A	N/A
MA Adult	N/A	N/A	99.99%	0.01%	N/A	N/A	N/A	N/A	N/A
MA Children	N/A	N/A	4.52%	9.24%	21.73%	31.59%	32.90%	N/A	N/A
MYPAC	N/A	N/A	3.37%	19.14%	43.40%	31.00%	3.10%	N/A	N/A
Non-Newborn SSI / Disabled	77.77%	N/A	N/A	N/A	7.04%	9.99%	5.19%	N/A	N/A
Non-SSI Newborns 0 to 2 Months	N/A	N/A	N/A	N/A	N/A	N/A	N/A	100.00%	
Non-SSI Newborns 3 to 12 Months	N/A	N/A	N/A	N/A	N/A	N/A	N/A	100.00%	
Pregnant Women	N/A	99.55%	N/A	0.41%	0.05%	N/A	N/A	N/A	N/A
Quasi-CHIP	N/A	N/A	7.33%	14.99%	33.62%	44.05%	0.01%	N/A	N/A
SSI / Disabled Newborn	N/A	N/A	N/A	N/A	N/A	N/A	N/A	100.00%	
		Costs PMPM							
	Disabled Adults	Pregnant Adults	Non-Pregnant Adults	Children – Age 16 to 18	Children – Age 12 to 15	Children – Age 6 to 11	Children – Age 1 to 6	Newborns	
<i>m = Exhibit 10B step 1</i> All Cap Cells	\$3.31	\$5.46	\$5.46	\$5.46	\$33.34	\$29.45	\$26.23	N/A	
Cap Cell	Total Cost Per Member	Total Cost PMPM							
Breast and Cervical Cancer	\$5.46	\$0.46							
Foster Care	\$26.38	\$2.20							
MA Adult	\$5.46	\$0.46							
MA Children	\$25.93	\$2.16							
MYPAC	\$25.64	\$2.14							
Non-Newborn SSI / Disabled	\$9.23	\$0.77							
Non-SSI Newborns 0 to 2 Months	\$0.00	\$0.00							
Non-SSI Newborns 3 to 12 Months	\$0.00	\$0.00							
Pregnant Women	\$5.47	\$0.46							
Quasi-CHIP	\$25.40	\$2.12							
SSI / Disabled Newborn	\$0.00	\$0.00							

EXHIBIT 11

Enhanced Match Services

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State of Mississippi Division of Medicaid
SFY 2022 MississippiCAN Preliminary Rate Calculation and Certification

April 21, 2021

Exhibit 11
Mississippi Division of Medicaid
SFY 2022 MississippiCAN Capitation Rate Development
Enhanced Match Services

	Medical Portion of Capitation Rate	COVID-19 Vaccine Administration	Family Planning (Non-waiver)	Breast and Cervical Cancer	Indian Health Services
Non-Newborn SSI / Disabled	\$1,068.13	\$0.77	\$0.00	\$0.15	\$0.33
North Region	959.18	0.69	0.00	0.14	0.30
Central Region	1,123.67	0.81	0.00	0.16	0.35
South Region	1,126.88	0.81	0.00	0.16	0.35
Breast and Cervical Cancer	\$3,424.36	\$0.46	\$0.00	\$3,423.90	\$0.00
North Region	3,075.07	0.41	0.00	3,074.66	0.00
Central Region	3,602.42	0.48	0.00	3,601.95	0.00
South Region	3,612.70	0.48	0.00	3,612.22	0.00
MA Adult	\$437.09	\$0.46	\$0.00	\$0.00	\$0.26
North Region	412.17	0.43	0.00	0.00	0.24
Central Region	458.51	0.48	0.00	0.00	0.27
South Region	438.40	0.46	0.00	0.00	0.26
Pregnant Women	\$1,059.37	\$0.46	\$0.03	\$0.00	\$0.01
North Region	998.99	0.43	0.02	0.00	0.01
Central Region	1,111.28	0.48	0.03	0.00	0.01
South Region	1,062.55	0.46	0.03	0.00	0.01
SSI / Disabled Newborn	\$7,861.86	\$0.00	\$0.00	\$0.00	\$0.10
North Region	7,673.18	0.00	0.00	0.00	0.10
Central Region	8,034.83	0.00	0.00	0.00	0.11
South Region	7,846.14	0.00	0.00	0.00	0.10
Non-SSI Newborns 0 to 2 Months	\$1,875.04	\$0.00	\$0.00	\$0.00	\$2.09
North Region	1,830.04	0.00	0.00	0.00	2.04
Central Region	1,916.30	0.00	0.00	0.00	2.14
South Region	1,871.29	0.00	0.00	0.00	2.09
Non-SSI Newborns 3 to 12 Months	\$248.70	\$0.00	\$0.00	\$0.00	\$2.22
North Region	242.73	0.00	0.00	0.00	2.17
Central Region	254.17	0.00	0.00	0.00	2.27
South Region	248.20	0.00	0.00	0.00	2.22
Foster Care	\$609.85	\$2.20	\$0.00	\$0.00	\$0.02
North Region	595.22	2.15	0.00	0.00	0.02
Central Region	623.27	2.25	0.00	0.00	0.02
South Region	608.63	2.19	0.00	0.00	0.02
MYPAC	\$3,805.00	\$2.14	\$0.00	\$0.00	\$0.00
North Region	3,713.68	2.09	0.00	0.00	0.00
Central Region	3,888.71	2.18	0.00	0.00	0.00
South Region	3,797.39	2.13	0.00	0.00	0.00
MA Children	\$189.73	\$2.16	\$0.00	\$0.00	\$0.33
North Region	185.17	2.11	0.00	0.00	0.32
Central Region	193.90	2.21	0.00	0.00	0.34
South Region	189.35	2.16	0.00	0.00	0.33
Quasi-CHIP	\$191.61	\$2.12	\$0.00	\$0.00	\$0.15
North Region	187.01	2.07	0.00	0.00	0.14
Central Region	195.83	2.16	0.00	0.00	0.15
South Region	191.23	2.11	0.00	0.00	0.15

EXHIBIT 12

MississippiCAN Expenditure Projection

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State of Mississippi Division of Medicaid
SFY 2022 MississippiCAN Preliminary Rate Calculation and Certification

April 21, 2021

Exhibit 12
Mississippi Division of Medicaid
SFY 2022 MississippiCAN Capitation Rate Development
SFY 2022 MississippiCAN Expenditure Estimate

	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e = a × (b + c + d)</i>	<i>f</i>	<i>g = e × f</i>
Rate Cell	Projected SFY 2022 Member Months	SFY 2022 Capitation Rates (Including MHAP FSA)¹	QIPP PMPM (Including Premium Tax)	MAPS PMPM (Including Premium Tax)	MississippiCAN Estimated Cost	FMAP / EFMAP²	Federal Estimated Cost
Non-Newborn SSI / Disabled	759,634	\$1,327.55	\$42.78	\$6.70	\$1,046,041,752	81.27%	\$850,144,283
Breast and Cervical Cancer	1,762	4,250.04	42.78	6.70	7,575,742	81.27%	6,156,995
MA Adult	616,693	550.19	42.78	6.70	369,815,563	81.27%	300,558,354
Pregnant Women	126,929	1,426.57	42.78	6.70	187,354,868	81.27%	152,267,985
SSI / Disabled Newborn	4,920	10,814.98	42.78	6.70	53,453,731	81.27%	43,443,184
Non-SSI Newborns 0 to 2 Months	75,599	2,679.62	42.78	6.70	206,318,574	81.27%	167,680,263
Non-SSI Newborns 3 to 12 Months	243,840	316.62	42.78	6.70	89,269,447	81.27%	72,551,511
Foster Care	81,472	822.82	42.78	6.70	71,067,985	81.27%	57,758,728
MYPAC	9,765	4,450.96	42.78	6.70	43,948,449	81.27%	35,718,003
MA Children	3,658,185	238.17	42.78	6.70	1,052,281,424	81.27%	855,215,420
Quasi-CHIP	385,859	237.47	42.78	6.70	110,722,273	84.91%	94,014,282
Total - All Rate Cells	5,964,659	\$493.36	\$42.78	\$6.70	\$3,237,849,809	81.40%	\$2,635,509,009

¹ Capitation rates prior to quality withhold, excluding MHAP QIPP, MAPS, and HIF (if applicable).

² For SFY 2022, FMAP is calculated as the blend of three months using an FMAP of 83.96%, three months using an FMAP of 84.51%, and six months using an FMAP of 78.31%. For SFY 2022, EFMAP is calculated as the blend of six months using an EFMAP of 85.00% and six months using an EFMAP of 84.82%. Assuming a PHE end as of December 31, 2021, the first six months of both FMAP and EFMAP projections reflect an additional 6.2% FMAP and EFMAP, up to a maximum of 85%.

EXHIBIT 13

Illustrative MLR Development

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State of Mississippi Division of Medicaid
SFY 2022 MississippiCAN Preliminary Rate Calculation and Certification

April 21, 2021

Exhibit 13
Mississippi Division of Medicaid
SFY 2022 MississippiCAN Capitation Rate Development
Illustrative MLR Development

	a	b	c	d	e = (b + c) × d	f	g = b × d × (f × 1%) / (1 - 1%)	h	i	j = e + g + h + i	k	l = (c × d) + h + i + k	m	n = (c × d) + h + i + m	o = l / j	p = n / j
	Projected SFY 2022 Membership ¹	SFY 2022 Regional Capitation Rates net of Withhold ²	MHAP-FSA PMPM Gross of Premium Tax ¹	Illustrative Risk Score ¹	Risk Adjusted Premium Net of Withhold	% of Withhold Returned ¹	Withhold Returned PMPM	MHAP-QIPP Gross of Premium Tax ¹	MAPS Gross of Premium Tax ¹	Total Revenue PMPM	Projected SFY 2022 Medical Costs PMPM ³	Projected Total Service Costs PMPM	Illustrative Actual SFY 2022 Medical Costs PMPM ³	Illustrative Actual Total Service Costs PMPM	Illustrative Target MLR	Illustrative Actual MLR
Non-Newborn SSI / Disabled	759,634	\$1,188.69	\$126.85	1.000	\$1,315.55	100%	\$12.01	\$42.78	\$6.70	\$1,377.03	\$1,068.13	\$1,244.47	\$1,120.00	\$1,296.33	90.4%	94.1%
Breast and Cervical Cancer	1,762	\$3,785.95	\$425.85	1.000	\$4,211.80	100%	\$38.24	\$42.78	\$6.70	\$4,299.52	\$3,424.36	\$3,899.69	\$3,600.00	\$4,075.33	90.7%	94.8%
MA Adult	616,693	\$493.10	\$52.11	1.000	\$545.21	100%	\$4.98	\$42.78	\$6.70	\$599.68	\$437.09	\$538.68	\$460.00	\$561.60	89.8%	93.6%
Pregnant Women	126,929	\$1,179.04	\$235.63	1.000	\$1,414.67	100%	\$11.91	\$42.78	\$6.70	\$1,476.06	\$1,059.37	\$1,344.48	\$1,110.00	\$1,395.11	91.1%	94.5%
SSI / Disabled Newborn	4,920	\$8,677.38	\$2,049.95	1.000	\$10,727.33	100%	\$87.65	\$42.78	\$6.70	\$10,864.47	\$7,861.86	\$9,961.30	\$8,250.00	\$10,349.44	91.7%	95.3%
Non-SSI Newborns 0 to 2 Months	75,599	\$2,078.15	\$580.48	1.000	\$2,658.63	100%	\$20.99	\$42.78	\$6.70	\$2,729.10	\$1,875.04	\$2,505.01	\$1,970.00	\$2,599.96	91.8%	95.3%
Non-SSI Newborns 3 to 12 Months	243,840	\$285.44	\$28.29	1.000	\$313.73	100%	\$2.88	\$42.78	\$6.70	\$366.10	\$248.70	\$326.48	\$260.00	\$337.78	89.2%	92.3%
Foster Care	81,472	\$683.53	\$132.38	1.000	\$815.91	100%	\$6.90	\$42.78	\$6.70	\$872.30	\$609.85	\$791.71	\$640.00	\$821.86	90.8%	94.2%
MYPAC	9,765	\$4,205.52	\$202.96	1.000	\$4,408.48	100%	\$42.48	\$42.78	\$6.70	\$4,500.45	\$3,805.00	\$4,057.44	\$4,000.00	\$4,252.44	90.2%	94.5%
MA Children	3,658,185	\$220.43	\$15.51	1.000	\$235.94	100%	\$2.23	\$42.78	\$6.70	\$287.65	\$189.73	\$254.72	\$200.00	\$264.99	88.6%	92.1%
Quasi-CHIP	385,859	\$222.51	\$12.71	1.000	\$235.22	100%	\$2.25	\$42.78	\$6.70	\$286.95	\$191.61	\$253.80	\$200.00	\$262.19	88.4%	91.4%
Total	5,964,659	\$439.55	\$49.36	1.000	\$488.92	100%	\$4.44	\$42.78	\$6.70	\$542.84	\$388.51	\$487.36	\$408.18	\$507.02	89.8%	93.4%
Illustrative Actual MLR	93.40%															
Illustrative Target MLR	89.78%															
MLR Difference	-3.62%															
MLR Difference Exceeding Corridor	-1.62%															
Total Revenue	\$3,237,849,809															
Risk Corridor Settlement Received (Paid) by DoM	(\$52,538,312)															

¹ MLR calculation will be populated with actual SFY 2022 CCO-specific values.

² Illustrative values demonstrate projected regional enrollment mix. Actual values will use CCO-specific regional enrollment mix.

³ Includes all services incurred during SFY 2022 with payments made to providers as defined in Exhibit C of the CCO Contract, including fee-for-service payments, subcapitation payments, and settlement payments. Actual MLR, but not target MLR, will be populated with actual SFY 2022 CCO-specific values. Additionally, both actual and target costs will use CCO-specific regional enrollment mix.

APPENDIX A

SFY 2022 Rate Cell Definitions

This report assumes the reader is familiar with the State of Mississippi's MississippiCAN program, its benefits, and rate setting principles. The report was prepared solely to provide assistance to DOM to set SFY 2022 capitation rates for the MississippiCAN 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.

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APPENDIX A

SFY 2022 Rate Cell Definitions

This section of our report outlines the rate cell definitions to be used for SFY 2022 for the populations addressed in this report. These definitions are summarized in Table 1 below. Capitation rate cells for SFY 2022 were kept consistent with the SFY 2021 capitation rate cells.

Table 1 Mississippi Division of Medicaid Rate Cell Definitions			
Rate Cell Grouping for Assumption Development	Rate Cell	Age Requirement	Category of Eligibility (COE)
Children	SSI / Disabled Newborns	Ages 0 to 12 months (13 month duration)	01, 19
Children	Non-SSI Newborns – age 0 to 2 months	Ages 0 to 2 months (3 month duration)	03, 26, 71, 88
Children	Non-SSI Newborns – age 3 to 12 months	Ages 3 to 12 months (10 month duration)	03, 26, 71, 88
Children	MA Children	Ages 1 to 19	72, 73
Children	Quasi-CHIP	Ages 1 to 19	74
Children	MYPAC	Ages 1 to 20	N/A, Lckn_cd = SED
Children	Foster Care	Ages 1+	03, 26
Adult	Pregnant Women	Ages 8 to 64	88
Adult	MA Adult	Ages 19+	75
SSI	Non-Newborn SSI / Disabled	Ages 1+	01, 19, 25
SSI	Breast and Cervical Cancer	N/A	27

All rate cell eligibility excludes the following individuals not enrolled in MississippiCAN:

- Retroactive membership
- Dual eligible members
- Institutionalized beneficiaries in a long-term care facility
- Individuals in the following waiver programs: WAL, WED, WMR, or WTB
- Individuals diagnosed with Hemophilia or Von Willebrand disease

GEOGRAPHIC REGIONS

DOM uses regional payments to better reflect enrollment for CCOs that enroll a disproportionate number of members from higher-cost or lower-cost regions of the state. DOM uses the three regions of North, Central, and South based on the county where a beneficiary lives. Table 2 displays the counties included in each region.

APPENDIX A

SFY 2022 Rate Cell Definitions

Table 2 Mississippi Division of Medicaid Geographic Regions by County		
North Region	Central Region	South Region
Alcorn	Calhoun	Adams
Attala	Chickasaw	Amite
Benton	Choctaw	Covington
Bolivar	Claiborne	Forrest
Carroll	Clarke	Franklin
Coahoma	Clay	George
DeSoto	Copiah	Greene
Grenada	Hinds	Hancock
Holmes	Issaquena	Harrison
Humphreys	Jasper	Jackson
Itawamba	Kemper	Jefferson
Lafayette	Lauderdale	Jefferson Davis
Lee	Leake	Jones
LeFlore	Lowndes	Lamar
Marshall	Madison	Lawrence
Montgomery	Monroe	Lincoln
Panola	Neshoba	Marion
Pontotoc	Newton	Pearl River
Prentiss	Noxubee	Perry
Quitman	Oktibbeha	Pike
Sunflower	Rankin	Stone
Tallahatchie	Scott	Walthall
Tate	Sharkey	Wayne
Tippah	Simpson	Wilkinson
Tishomingo	Smith	
Tunica	Warren	
Union	Webster	
Washington	Winston	
Yalobusha	Yazoo	

To determine a beneficiary's county, we used the following approach:

- a. County code included on a beneficiary's enrollment record in a given month.
- b. Absent (a), we mapped zip codes in the enrollment file to counties. In cases where a zip code is present in more than one county, we assumed that a zip code maps to a given county if:
 - i. The zip code shows up most frequently for a given county in the enrollment file (assuming a minimum of five occurrences).
 - ii. Census information indicating the portion of a zip code's population that resides in each county. County is assigned to a zip code based on the county that includes the largest portion of a zip code's population.

If a beneficiary could not be assigned to a region, we excluded their eligibility and claim experience from the base data. This accounts for less than 0.1% of all current MississippiCAN eligible members in CY 2019.

APPENDIX B

Data Sources and Processing

This report assumes the reader is familiar with the State of Mississippi's MississippiCAN program, its benefits, and rate setting principles. The report was prepared solely to provide assistance to DOM to set SFY 2022 capitation rates for the MississippiCAN 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.

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APPENDIX B

Data Sources and Processing

A number of data sources are used to develop the base data for the SFY 2022 MississippiCAN capitation rates.

- Medicaid eligibility data
- FFS claim data
- CCO encounter data
- CCO financial data

CY 2019 experience forms the primary base data for the SFY 2022 capitation rates. For smaller MississippiCAN populations that are not credible based on CY 2019 experience alone (using a threshold of 150,000 member months), we blend CY 2019 and CY 2018 experience to form the base data. The rate cells using two years of data are the following:

- Foster Care
- Breast and Cervical Cancer
- Pregnant Women
- SSI / Disabled Newborn
- Non-SSI Newborns 0 to 2 Months
- MYPAC

This section of the report outlines each data source and steps to process the data.

MEDICAID ELIGIBILITY

DOM's MMIS vendor provided detailed Medicaid eligibility data for CY 2018 and CY 2019. Before analyzing claims, we pared down the eligibility data to groups that are eligible to enroll in MississippiCAN, as defined in Appendix A of our report. In order to isolate data only for this group, we applied various filters as described in the rest of this appendix.

If the population was enrolled in MississippiCAN at the time, we relied upon the 'CAN' lock-in code for each eligibility span to include individuals enrolled in MississippiCAN in the base period, and did not apply most of the additional filters described below. This assumes that MMIS-calculated enrollment criteria in the base period is consistent with SFY 2022. In addition, this removes opt-outs from voluntary populations (SSI children and Mississippi Band of Choctaw Indians) from the base data used to develop capitation rates. The opt-out rates for these populations have been stable in recent experience. However, adjustments were still made for the removal of retroactive eligibility periods and records we were not able to map to a geographic area.

Removal of Retroactive Eligibility Periods

Beneficiary enrollment in the FFS program can occur retroactively. When some individuals apply and qualify for Medicaid coverage, DOM reimburses claims, which occurred during the retroactive qualification period prior to their application. DOM backdates the eligibility of the individual to accommodate the retroactive coverage.

There is also a lag between the first date of eligibility and the date of enrollment in a CCO because Medicaid eligibility begins on the first day of the month in which the application was received. Once a Medicaid beneficiary signs up for a CCO, they will be enrolled on the first day of the subsequent month. The retroactive enrollment period is not covered by the CCO, so we removed retroactive eligibility included in the data provided to us using the following criteria:

- Eligibility months prior to the date that a beneficiary was added to the Medicaid enrollment file were removed. For example, if a beneficiary is active January 15, 2019, but they were added to the enrollment file February 1, 2019, we only included data on or after February 1, 2019 to exclude any retroactivity that may have occurred.

As of December 2015, newborns are enrolled in MississippiCAN at the time of their birth. Therefore, the retroactive eligibility exclusion is not applicable to these populations.

Geographic Area

If a beneficiary could not be assigned to a region, we excluded them from the base data. This accounts for less than 0.1% of all current MississippiCAN eligible member months in CY 2019. See Appendix A for additional information on the assignment of a geographic region.

APPENDIX B

Data Sources and Processing

FFS DATA

FFS claims are provided by DOM's MMIS vendor. These claims include any populations and / or services not included in MississippiCAN. Q1 to Q3 2018 FFS claims experience for members with a 'SED' lock-in code forms the base period data for the MYPAC rate cell.

We reviewed the FFS data for reasonability for several considerations, including the following, and verified it was consistent with monthly DOM cost reporting:

- Monthly claim counts per member
- Monthly payments per member
- Average cost per unit
- Monthly units and payments by COS
- Monthly units and payments by rate cell

ENCOUNTER DATA

Encounter claims are included in the data provided by DOM's MMIS vendor. This data represents the actual amounts paid to the provider, so no repricing was done as part of the development of capitation rates. A claim processed by a CCO and submitted to DOM can be identified in the data using the following definition. Please note, the field names may vary from those provided in the encounter data submission from the CCOs.

- The 6th character of claim_id is '5' and cl_type is 'R,' or
- The 6th character of claim_id is '0' and cl_type is not 'R'

For all service categories we used CY 2019 encounter data with runout through April 2020.

Only encounter claims for members flagged as a MississippiCAN enrollee in the eligibility data were included in the base data. Encounter claims, which failed to be mapped to a MississippiCAN CCO enrollee were removed.

CCO encounters are rigorously vetted by Myers and Stauffer as part of their reconciliation of encounters against CCOs' cash disbursement journals (CDJs). As part of this reconciliation, Myers and Stauffer identifies encounter claims that are duplicates, voids, or replacements for other encounter claims. Myers and Stauffer shares these findings with CCOs at a claim level to ensure they are accurately determining the final, non-duplicated version of each paid claim. As a result of their analysis, Myers and Stauffer are able to reconcile closely to the CCOs' CDJs (historically within 2% on a paid basis). We use summaries provided by Myers and Stauffer to identify final, non-duplicative claims consistent with their CDJ reconciliation.

Lastly, the encounter data is run through Milliman's 2019 *Health Cost Guidelines (HCGs)* grouper to map the encounter data into detailed categories of service. These categories of service are then rolled up into six high level categories of service: inpatient, outpatient, physician, pharmacy, dental, and other. This mapping from detailed category of service to broad category of service is included as Exhibit 6.

After processing the data, we review the encounter data for several considerations, including:

- Monthly encounter counts per member (including and excluding \$0 payments)
- Monthly payments per member
- Average cost per unit
- Monthly units and payments by COS
- Quarterly units and payments relative to financials by COS
- Frequency of diagnosis completion by COS

FINANCIAL REPORTING DATA

For base data development, each CCO submitted a financial report reconciled to their organization's audited CY 2018 and CY 2019 financial statements for Mississippi. Separate reports were submitted for CY 2018 and CY 2019 including earned premium, claim experience with run out through June 2019 or April 2020 for CY 2018 and CY 2019 data, respectively, best estimate IBNR claim amounts, subcapitated arrangements, non-service expenses, and membership. The reported membership was close in total to the MMIS enrollment, so we utilized the MMIS enrollment for rate development.

APPENDIX B

Data Sources and Processing

We worked with each CCO to validate that their reports were filled out consistently with the category of service and non-medical definitions used in the capitation rate development. Adjustments were made to the original submissions to help align these definitions.

APPENDIX C

CY 2018 and CY 2019 Databooks

This report assumes the reader is familiar with the State of Mississippi's MississippiCAN program, its benefits, and rate setting principles. The report was prepared solely to provide assistance to DOM to set SFY 2022 capitation rates for the MississippiCAN 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.

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Appendix C.1
Mississippi Division of Medicaid
Summary of CY 2018* MississippiCAN Encounter and FFS Claims
Summary of Total Costs by Rate Cell

Member Months	769,034	1,093	510,748	510,748	135,342	135,342	6,314	76,083	258,928	77,042	5,473	3,170,515	334,230	5,344,802
PMPM Allowed Cost														
Service Category	Non-Newborn SSI / Disabled	Breast and Cervical Cancer	MA Adult - Non- Deliveries	Deliveries - MA Adult	Pregnant Women - Non-Deliveries	Deliveries - Pregnant Women	SSI / Disabled Newborn	Non-SSI Newborns 0 to 2 Months	Non-SSI Newborns 3 to 12 Months	Foster Care	MYPAC	MA Children	Quasi-CHIP	All MSCAN Rate Cells
Inpatient Facility Services														
Medical	\$49,170,062	\$104,273	\$5,548,957	\$0	\$344,952	\$6,901	\$1,723,681	\$2,727,440	\$5,196,908	\$473,183	\$52,927	\$10,169,992	\$803,991	\$76,323,268
Surgical	\$66,406,948	\$118,200	\$11,547,820	\$0	\$728,138	\$9,556	\$5,428,187	\$6,977,292	\$3,882,384	\$890,834	\$52,495	\$12,391,912	\$1,428,637	\$109,862,403
Maternity / Deliveries	\$2,851,529	\$0	\$1,906,313	\$16,226,872	\$4,418,712	\$65,290,522	\$25,755,479	\$93,046,049	\$108,868	\$89,871	\$7,420	\$3,879,310	\$429,351	\$214,010,296
Psychiatric / Substance Abuse	\$24,575,978	\$0	\$3,956,624	\$0	\$246,751	\$0	\$0	\$0	\$0	\$6,880,889	\$1,530,951	\$19,670,273	\$1,852,444	\$58,713,910
Skilled Nursing Facility	\$1,429	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,429
Missing Data	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inpatient Behavioral Health Total	\$4,421,338	\$0	\$57,619	\$0	\$13,890	\$0	\$0	\$0	\$0	\$5,481,465	\$884,097	\$13,438,753	\$1,162,977	\$25,460,139
Inpatient Facility Total	\$143,005,946	\$222,473	\$22,959,714	\$16,226,872	\$5,738,554	\$65,306,978	\$32,907,348	\$102,750,781	\$9,188,159	\$8,334,778	\$1,643,793	\$46,111,487	\$4,514,422	\$458,911,306
Outpatient Facility Services														
Emergency Room	\$24,179,937	\$26,256	\$16,470,423	\$10,366	\$4,446,241	\$34,797	\$265,401	\$1,462,968	\$6,329,538	\$661,984	\$107,136	\$33,579,355	\$2,594,148	\$90,168,549
Urgent Care	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$153	\$1,093	\$0	\$0	\$3,114	\$47	\$4,407
Radiology / Pathology	\$24,578,202	\$429,281	\$11,265,859	\$7,149	\$3,526,979	\$29,291	\$181,901	\$645,623	\$2,175,838	\$400,537	\$54,121	\$14,230,413	\$1,450,452	\$58,975,647
Psychiatric / Alcohol & Drug Abuse	\$6,555,337	\$0	\$6,099	\$0	\$113	\$0	\$0	\$0	\$0	\$948,748	\$5,556	\$16,403,793	\$882,145	\$24,801,793
Pharmacy	\$30,509,154	\$699,133	\$6,205,578	\$4,330	\$1,453,205	\$22,117	\$1,084,682	\$98,554	\$601,317	\$76,882	\$5,032	\$4,743,233	\$410,340	\$45,913,558
Other	\$65,828,972	\$351,418	\$23,536,526	\$17,405	\$5,557,565	\$53,016	\$1,025,264	\$1,680,677	\$5,228,026	\$1,296,011	\$113,850	\$42,114,585	\$3,553,618	\$150,356,933
Missing Data	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Outpatient Behavioral Health Total	\$6,607,129	\$0	\$6,129	\$0	\$113	\$0	\$0	\$0	\$0	\$950,503	\$5,776	\$16,495,963	\$888,230	\$24,953,844
Outpatient Facility Total	\$151,651,603	\$1,506,088	\$57,484,485	\$39,250	\$14,984,103	\$139,222	\$2,557,248	\$3,887,976	\$14,335,812	\$3,384,162	\$285,695	\$111,074,493	\$8,890,751	\$370,220,888
Physician Services														
IP Visits	\$11,912,772	\$16,720	\$1,695,012	\$53,758	\$409,317	\$199,799	\$7,025,975	\$11,489,190	\$1,521,347	\$331,922	\$82,424	\$2,720,816	\$232,099	\$37,691,152
IP Surgery	\$4,643,694	\$24,502	\$1,213,938	\$29,041	\$122,052	\$98,291	\$405,322	\$473,365	\$328,772	\$46,749	\$1,339	\$1,053,603	\$101,981	\$8,542,648
Office / Home Visits	\$35,233,767	\$111,759	\$18,366,733	\$645	\$1,389,128	\$5,007	\$405,478	\$2,886,212	\$9,286,858	\$1,899,197	\$161,780	\$63,980,951	\$6,249,003	\$139,976,519
Preventive Exams & Immunizations	\$4,839,606	\$14,670	\$7,416,585	\$163,103	\$14,329,233	\$540,270	\$223,395	\$8,684,191	\$9,226,992	\$689,657	\$44,519	\$20,797,539	\$1,559,899	\$68,529,658
Urgent Care Visits	\$239,038	\$57	\$384,338	\$0	\$42,424	\$90	\$668	\$1,229	\$103,468	\$55,898	\$1,631	\$1,890,201	\$204,564	\$2,923,607
ER Visits and Observation Care	\$8,431,644	\$11,171	\$5,089,585	\$16,822	\$1,607,796	\$71,401	\$109,235	\$555,548	\$2,134,661	\$192,581	\$37,369	\$10,442,483	\$788,891	\$29,489,186
OP Surgery	\$11,644,810	\$115,566	\$6,466,864	\$1,188	\$464,983	\$2,373	\$95,381	\$203,115	\$990,636	\$366,189	\$24,685	\$12,051,961	\$1,221,285	\$33,649,036
Physical Therapy	\$5,956,312	\$16,504	\$1,179,714	\$0	\$34,112	\$95	\$108,197	\$8,712	\$274,442	\$450,467	\$16,806	\$7,184,939	\$532,546	\$15,762,845
Psychiatric / Substance Abuse	\$31,634,863	\$5,033	\$3,044,778	\$809	\$157,622	\$772	\$115	\$0	\$3,038	\$3,605,229	\$15,816,262	\$30,461,375	\$2,632,162	\$87,362,059
Radiology / Pathology	\$14,013,949	\$146,509	\$9,515,987	\$163,145	\$7,065,986	\$644,634	\$181,854	\$407,519	\$1,153,129	\$299,049	\$45,280	\$11,045,208	\$1,196,523	\$45,878,771
Vision, Hearing, and Speech Exams	\$3,280,918	\$5,872	\$1,957,528	\$142	\$432,100	\$481	\$29,629	\$20,046	\$110,718	\$386,674	\$36,413	\$10,985,033	\$1,448,842	\$18,694,395
Other	\$36,921,099	\$585,365	\$6,061,214	\$4,012,331	\$1,372,617	\$16,649,746	\$467,445	\$418,173	\$639,381	\$681,596	\$39,575	\$7,704,749	\$1,061,059	\$76,614,350
Missing Data	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Physician Behavioral Health Total	\$44,630,118	\$5,865	\$4,199,086	\$556	\$199,151	\$708	\$4,912	\$7,391	\$60,071	\$4,023,465	\$15,831,540	\$33,666,149	\$2,946,955	\$105,575,968
Physician Total	\$168,752,471	\$1,053,728	\$62,392,275	\$4,440,985	\$27,427,369	\$18,212,960	\$9,052,693	\$25,147,300	\$25,773,443	\$9,005,208	\$16,308,082	\$180,318,857	\$17,228,853	\$565,114,225
Pharmacy Services														
Pharmacy	\$212,990,027	\$443,398	\$52,608,363	\$69,604	\$7,249,283	\$301,618	\$3,087,997	\$644,518	\$6,564,374	\$5,599,479	\$925,951	\$106,395,592	\$14,054,774	\$410,934,977
Missing Data	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pharmacy Total	\$212,990,027	\$443,398	\$52,608,363	\$69,604	\$7,249,283	\$301,618	\$3,087,997	\$644,518	\$6,564,374	\$5,599,479	\$925,951	\$106,395,592	\$14,054,774	\$410,934,977
Dental Services														
Dental	\$7,720,653	\$8,609	\$4,183,721	\$153	\$812,223	\$372	\$3,388	\$40,002	\$261,477	\$2,265,260	\$180,381	\$78,034,119	\$10,436,449	\$103,946,805
Missing Data	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dental Total	\$7,720,653	\$8,609	\$4,183,721	\$153	\$812,223	\$372	\$3,388	\$40,002	\$261,477	\$2,265,260	\$180,381	\$78,034,119	\$10,436,449	\$103,946,805
Other Services														
Ambulance	\$8,161,406	\$4,286	\$2,005,992	\$65,569	\$546,771	\$229,169	\$234,311	\$1,045,181	\$665,213	\$118,178	\$33,022	\$3,294,398	\$243,235	\$16,646,732
Non-Emergency Transportation	\$11,141,660	\$27,114	\$1,703,600	\$7,764	\$428,302	\$14,853	\$201,186	\$76,913	\$220,708	\$54,892	\$3,535	\$2,236,536	\$97,854	\$16,214,918
DME	\$15,160,336	\$17,866	\$1,489,463	\$596	\$199,526	\$2,689	\$727,000	\$232,962	\$474,940	\$235,130	\$15,655	\$3,606,681	\$592,456	\$22,755,301
Glasses / Contacts	\$1,215,434	\$1,884	\$758,520	\$0	\$169,206	\$173	\$180	\$39	\$1,682	\$152,037	\$18,999	\$4,034,169	\$573,983	\$6,926,306
Other	\$9,582,717	\$4,927	\$150,158	\$0	\$2,525	\$74	\$1,153,093	\$12,733	\$78,149	\$114,319	\$63,366	\$725,009	\$74,770	\$11,961,841
Missing Data	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Other Behavioral Health Total	\$603,390	\$166	\$73,109	\$0	\$2,304	\$74	\$0	\$0	\$0	\$22,124	\$866	\$422,914	\$38,381	\$1,163,328
Other Total	\$45,261,553	\$56,077	\$6,107,733	\$73,929	\$1,346,330	\$246,958	\$2,315,770	\$1,367,828	\$1,440,693	\$674,557	\$134,577	\$13,896,793	\$1,582,299	\$74,505,098
Total Behavioral Health	\$56,261,975	\$6,031	\$4,335,943	\$556	\$215,459	\$781	\$4,912	\$7,391	\$60,071	\$10,477,558	\$16,722,279	\$64,023,779	\$5,036,543	\$157,153,279
Grand Total	\$729,382,252	\$3,290,374	\$205,736,291	\$20,850,793	\$57,557,863	\$84,208,108	\$49,924,444	\$133,838,405	\$57,563,957	\$29,263,445	\$19,478,480	\$535,831,340	\$56,707,548	\$1,983,633,299

* The MYPAC rate cell contains FFS claims from Q1 to Q3 2018 rather than the full CY 2018 period.

Appendix C.2
Mississippi Division of Medicaid
Summary of CY 2018* MississippiCAN Encounter and FFS Claims
Summary of Allowed PMPM by Rate Cell

Member Months	769,034	1,093	510,748	510,748	135,342	135,342	6,314	76,083	258,928	77,042	5,473	3,170,515	334,230	5,344,802
PMPM Allowed Cost														
Service Category	Non-Newborn SSI / Disabled	Breast and Cervical Cancer	MA Adult - Non-Deliveries	Deliveries - MA Adult	Pregnant Women - Non-Deliveries	Deliveries - Pregnant Women	SSI / Disabled Newborn	Non-SSI Newborns 0 to 2 Months	Non-SSI Newborns 3 to 12 Months	Foster Care	MYPAC	MA Children	Quasi-CHIP	All MSCAN Rate Cells
Inpatient Facility Services														
Medical	\$63.94	\$95.40	\$10.86	\$0.00	\$2.55	\$0.05	\$272.99	\$35.85	\$20.07	\$6.14	\$9.67	\$3.21	\$2.41	\$14.28
Surgical	\$86.35	\$108.14	\$22.61	\$0.00	\$5.38	\$0.07	\$859.71	\$91.71	\$14.99	\$11.56	\$9.59	\$3.91	\$4.27	\$20.55
Maternity / Deliveries	\$3.71	\$0.00	\$3.73	\$31.77	\$32.65	\$482.41	\$4,079.11	\$1,222.95	\$0.42	\$1.17	\$1.36	\$1.22	\$1.28	\$40.04
Psychiatric / Substance Abuse	\$31.96	\$0.00	\$7.75	\$0.00	\$1.82	\$0.00	\$0.00	\$0.00	\$0.00	\$89.31	\$279.73	\$6.20	\$5.54	\$10.99
Skilled Nursing Facility	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Missing Data	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inpatient Behavioral Health Total	\$5.75	\$0.00	\$0.11	\$0.00	\$0.10	\$0.00	\$0.00	\$0.00	\$0.00	\$71.15	\$161.54	\$4.24	\$3.48	\$4.76
Inpatient Facility Total	\$185.96	\$203.54	\$44.95	\$31.77	\$42.40	\$482.53	\$5,211.81	\$1,350.51	\$35.49	\$108.18	\$300.35	\$14.54	\$13.51	\$85.86
Outpatient Facility Services														
Emergency Room	\$31.44	\$24.02	\$32.25	\$0.02	\$32.85	\$0.26	\$42.03	\$19.23	\$24.45	\$8.59	\$19.58	\$10.59	\$7.76	\$16.87
Urgent Care	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Radiology / Pathology	\$31.96	\$392.76	\$22.06	\$0.01	\$26.06	\$0.22	\$28.81	\$8.49	\$8.40	\$5.20	\$9.89	\$4.49	\$4.34	\$11.03
Psychiatric / Alcohol & Drug Abuse	\$8.52	\$0.00	\$0.01	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$12.31	\$1.02	\$5.17	\$2.64	\$4.64
Pharmacy	\$39.67	\$639.65	\$12.15	\$0.01	\$10.74	\$0.16	\$171.79	\$1.30	\$2.32	\$1.00	\$0.92	\$1.50	\$1.23	\$8.59
Other	\$85.60	\$321.52	\$46.08	\$0.03	\$41.06	\$0.39	\$162.38	\$22.09	\$20.19	\$16.82	\$20.80	\$13.28	\$10.63	\$28.13
Missing Data	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Outpatient Behavioral Health Total	\$8.59	\$0.00	\$0.01	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$12.34	\$1.06	\$5.20	\$2.66	\$4.67
Outpatient Facility Total	\$197.20	\$1,377.94	\$112.55	\$0.08	\$110.71	\$1.03	\$405.01	\$51.10	\$55.37	\$43.93	\$52.20	\$35.03	\$26.60	\$69.27
Physician Services														
IP Visits	\$15.49	\$15.30	\$3.32	\$0.11	\$3.02	\$1.48	\$1,112.76	\$151.01	\$5.88	\$4.31	\$15.06	\$0.86	\$0.69	\$7.05
IP Surgery	\$6.04	\$22.42	\$2.38	\$0.06	\$0.90	\$0.73	\$64.19	\$6.22	\$1.27	\$0.61	\$0.24	\$0.33	\$0.31	\$1.60
Office / Home Visits	\$45.82	\$102.25	\$35.96	\$0.00	\$10.26	\$0.04	\$64.22	\$37.94	\$35.87	\$24.65	\$29.56	\$20.18	\$18.70	\$26.19
Preventive Exams & Immunizations	\$6.29	\$13.42	\$14.52	\$0.32	\$105.87	\$3.99	\$35.38	\$114.14	\$35.64	\$8.95	\$8.13	\$6.56	\$4.67	\$12.82
Urgent Care Visits	\$0.31	\$0.05	\$0.75	\$0.00	\$0.31	\$0.00	\$0.11	\$0.02	\$0.40	\$0.73	\$0.30	\$0.60	\$0.61	\$0.55
ER Visits and Observation Care	\$10.96	\$10.22	\$9.96	\$0.03	\$11.88	\$0.53	\$17.30	\$7.30	\$8.24	\$2.50	\$6.83	\$3.29	\$2.36	\$5.52
OP Surgery	\$15.14	\$105.73	\$12.66	\$0.00	\$3.44	\$0.02	\$15.11	\$2.67	\$3.83	\$4.75	\$4.51	\$3.80	\$3.65	\$6.30
Physical Therapy	\$7.75	\$15.10	\$2.31	\$0.00	\$0.25	\$0.00	\$17.14	\$0.11	\$1.06	\$5.85	\$3.07	\$2.27	\$1.59	\$2.95
Psychiatric / Substance Abuse	\$41.14	\$4.61	\$5.96	\$0.00	\$1.16	\$0.01	\$0.02	\$0.00	\$0.01	\$46.80	\$2,889.87	\$9.61	\$7.88	\$16.35
Radiology / Pathology	\$18.22	\$134.04	\$18.63	\$0.32	\$52.21	\$4.76	\$28.80	\$5.36	\$4.45	\$3.88	\$8.27	\$3.48	\$3.58	\$8.58
Vision, Hearing, and Speech Exams	\$4.27	\$5.37	\$3.83	\$0.00	\$3.19	\$0.00	\$4.69	\$0.26	\$0.43	\$5.02	\$6.65	\$3.46	\$4.33	\$3.50
Other	\$48.01	\$535.56	\$11.87	\$7.86	\$10.14	\$123.02	\$74.03	\$5.50	\$2.47	\$8.85	\$7.23	\$2.43	\$3.17	\$14.33
Missing Data	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Physician Behavioral Health Total	\$58.03	\$5.37	\$8.22	\$0.00	\$1.47	\$0.01	\$0.78	\$0.10	\$0.23	\$52.22	\$2,892.66	\$10.62	\$8.82	\$19.75
Physician Total	\$219.43	\$964.07	\$122.16	\$8.70	\$202.65	\$134.57	\$1,433.75	\$330.52	\$99.54	\$116.89	\$2,979.73	\$56.87	\$51.55	\$105.73
Pharmacy Services														
Pharmacy	\$276.96	\$405.67	\$103.00	\$0.14	\$53.56	\$2.23	\$489.07	\$8.47	\$25.35	\$72.68	\$169.19	\$33.56	\$42.05	\$76.88
Missing Data	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pharmacy Total	\$276.96	\$405.67	\$103.00	\$0.14	\$53.56	\$2.23	\$489.07	\$8.47	\$25.35	\$72.68	\$169.19	\$33.56	\$42.05	\$76.88
Dental Services														
Dental	\$10.04	\$7.88	\$8.19	\$0.00	\$6.00	\$0.00	\$0.54	\$0.53	\$1.01	\$29.40	\$32.96	\$24.61	\$31.23	\$19.45
Missing Data	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dental Total	\$10.04	\$7.88	\$8.19	\$0.00	\$6.00	\$0.00	\$0.54	\$0.53	\$1.01	\$29.40	\$32.96	\$24.61	\$31.23	\$19.45
Other Services														
Ambulance	\$10.61	\$3.92	\$3.93	\$0.13	\$4.04	\$1.69	\$37.11	\$13.74	\$2.57	\$1.53	\$6.03	\$1.04	\$0.73	\$3.11
Non-Emergency Transportation	\$14.49	\$24.81	\$3.34	\$0.02	\$3.16	\$0.11	\$31.86	\$1.01	\$0.85	\$0.71	\$0.65	\$0.71	\$0.29	\$3.03
DME	\$19.71	\$16.35	\$2.92	\$0.00	\$1.47	\$0.02	\$115.14	\$3.06	\$1.83	\$3.05	\$2.86	\$1.14	\$1.77	\$4.26
Glasses / Contacts	\$1.58	\$1.72	\$1.49	\$0.00	\$1.25	\$0.00	\$0.03	\$0.00	\$0.01	\$1.97	\$3.47	\$1.27	\$1.72	\$1.30
Other	\$12.46	\$4.51	\$0.29	\$0.00	\$0.02	\$0.00	\$182.62	\$0.17	\$0.30	\$1.48	\$11.58	\$0.23	\$0.22	\$2.24
Missing Data	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Other Behavioral Health Total	\$0.78	\$0.15	\$0.14	\$0.00	\$0.02	\$0.00	\$0.00	\$0.00	\$0.00	\$0.29	\$0.16	\$0.13	\$0.11	\$0.22
Other Total	\$58.86	\$51.31	\$11.96	\$0.14	\$9.95	\$1.82	\$366.77	\$17.98	\$5.56	\$8.76	\$24.59	\$4.38	\$4.73	\$13.94
Total Behavioral Health	\$73.16	\$5.52	\$8.49	\$0.00	\$1.59	\$0.01	\$0.78	\$0.10	\$0.23	\$136.00	\$3,055.41	\$20.19	\$15.07	\$29.40
Grand Total	\$948.44	\$3,010.41	\$402.81	\$40.82	\$425.28	\$622.19	\$7,906.94	\$1,759.11	\$222.32	\$379.84	\$3,559.01	\$169.00	\$169.67	\$371.13

* The MYPAC rate cell contains FFS claims from Q1 to Q3 2018 rather than the full CY 2018 period.

Appendix C.3
Mississippi Division of Medicaid
Summary of CY 2018* MississippiCAN Encounter and FFS Claims
Summary of Allowed PMPM by Rate Cell

Member Months	769,034	1,093	510,748	510,748	135,342	135,342	6,314	76,083	258,928	77,042	5,473	3,170,515	334,230	5,344,802
% of Total Allowed Cost														
Service Category	Non-Newborn SSI / Disabled	Breast and Cervical Cancer	MA Adult - Non-Deliveries	Deliveries - MA Adult	Pregnant Women - Non-Deliveries	Deliveries - Pregnant Women	SSI / Disabled Newborn	Non-SSI Newborns 0 to 2 Months	Non-SSI Newborns 3 to 12 Months	Foster Care	MYPAC	MA Children	Quasi-CHIP	All MSCAN Rate Cells
Inpatient Facility Services														
Medical	6.7%	3.2%	2.7%	0.0%	0.6%	0.0%	3.5%	2.0%	9.0%	1.6%	0.3%	1.9%	1.4%	3.8%
Surgical	9.1%	3.6%	5.6%	0.0%	1.3%	0.0%	10.9%	5.2%	6.7%	3.0%	0.3%	2.3%	2.5%	5.5%
Maternity / Deliveries	0.4%	0.0%	0.9%	77.8%	7.7%	77.5%	51.6%	69.5%	0.2%	0.3%	0.0%	0.7%	0.8%	10.8%
Psychiatric / Substance Abuse	3.4%	0.0%	1.9%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	23.5%	7.9%	3.7%	3.3%	3.0%
Skilled Nursing Facility	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Missing Data	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inpatient Behavioral Health Total	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	18.7%	4.5%	2.5%	2.1%	1.3%
Inpatient Facility Total	19.6%	6.8%	11.2%	77.8%	10.0%	77.6%	65.9%	76.8%	16.0%	28.5%	8.4%	8.6%	8.0%	23.1%
Outpatient Facility Services														
Emergency Room	3.3%	0.8%	8.0%	0.0%	7.7%	0.0%	0.5%	1.1%	11.0%	2.3%	0.6%	6.3%	4.6%	4.5%
Urgent Care	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Radiology / Pathology	3.4%	13.0%	5.5%	0.0%	6.1%	0.0%	0.4%	0.5%	3.8%	1.4%	0.3%	2.7%	2.6%	3.0%
Psychiatric / Alcohol & Drug Abuse	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.2%	0.0%	3.1%	1.6%	1.3%
Pharmacy	4.2%	21.2%	3.0%	0.0%	2.5%	0.0%	2.2%	0.1%	1.0%	0.3%	0.0%	0.9%	0.7%	2.3%
Other	9.0%	10.7%	11.4%	0.1%	9.7%	0.1%	2.1%	1.3%	9.1%	4.4%	0.6%	7.9%	6.3%	7.6%
Missing Data	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Outpatient Behavioral Health Total	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.2%	0.0%	3.1%	1.6%	1.3%
Outpatient Facility Total	20.8%	45.8%	27.9%	0.2%	26.0%	0.2%	5.1%	2.9%	24.9%	11.6%	1.5%	20.7%	15.7%	18.7%
Physician Services														
IP Visits	1.6%	0.5%	0.8%	0.3%	0.7%	0.2%	14.1%	8.6%	2.6%	1.1%	0.4%	0.5%	0.4%	1.9%
IP Surgery	0.6%	0.7%	0.6%	0.1%	0.2%	0.1%	0.8%	0.4%	0.6%	0.2%	0.0%	0.2%	0.2%	0.4%
Office / Home Visits	4.8%	3.4%	8.9%	0.0%	2.4%	0.0%	0.8%	2.2%	16.1%	6.5%	0.8%	11.9%	11.0%	7.1%
Preventive Exams & Immunizations	0.7%	0.4%	3.6%	0.8%	0.4%	0.6%	0.4%	6.5%	16.0%	2.4%	0.2%	3.9%	2.8%	3.5%
Urgent Care Visits	0.0%	0.0%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.2%	0.2%	0.0%	0.4%	0.4%	0.1%
ER Visits and Observation Care	1.2%	0.3%	2.5%	0.1%	2.8%	0.1%	0.2%	0.4%	3.7%	0.7%	0.2%	1.9%	1.4%	1.5%
OP Surgery	1.6%	3.5%	3.1%	0.0%	0.8%	0.0%	0.2%	0.2%	1.7%	1.3%	0.1%	2.2%	2.2%	1.7%
Physical Therapy	0.8%	0.5%	0.6%	0.0%	0.1%	0.0%	0.2%	0.0%	0.5%	1.5%	0.1%	1.3%	0.9%	0.8%
Psychiatric / Substance Abuse	4.3%	0.2%	1.5%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	12.3%	81.2%	5.7%	4.6%	4.4%
Radiology / Pathology	1.9%	4.5%	4.6%	0.8%	12.3%	0.8%	0.4%	0.3%	2.0%	1.0%	0.2%	2.1%	2.1%	2.3%
Vision, Hearing, and Speech Exams	0.4%	0.2%	1.0%	0.0%	0.8%	0.0%	0.1%	0.0%	0.2%	1.3%	0.2%	2.1%	2.6%	0.9%
Other	5.1%	17.8%	2.9%	19.2%	2.4%	19.8%	0.9%	0.3%	1.1%	2.3%	0.2%	1.4%	1.9%	3.9%
Missing Data	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Physician Behavioral Health Total	6.1%	0.2%	2.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.1%	13.7%	81.3%	6.3%	5.2%	5.3%
Physician Total	23.1%	32.0%	30.3%	21.3%	47.7%	21.6%	18.1%	18.8%	44.8%	30.8%	83.7%	33.7%	30.4%	28.5%
Pharmacy Services														
Pharmacy	29.2%	13.5%	25.6%	0.3%	12.6%	0.4%	6.2%	0.5%	11.4%	19.1%	4.8%	19.9%	24.8%	20.7%
Missing Data	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pharmacy Total	29.2%	13.5%	25.6%	0.3%	12.6%	0.4%	6.2%	0.5%	11.4%	19.1%	4.8%	19.9%	24.8%	20.7%
Dental Services														
Dental	1.1%	0.3%	2.0%	0.0%	1.4%	0.0%	0.0%	0.0%	0.5%	7.7%	0.9%	14.6%	18.4%	5.2%
Missing Data	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dental Total	1.1%	0.3%	2.0%	0.0%	1.4%	0.0%	0.0%	0.0%	0.5%	7.7%	0.9%	14.6%	18.4%	5.2%
Other Services														
Ambulance	1.1%	0.1%	1.0%	0.3%	0.9%	0.3%	0.5%	0.8%	1.2%	0.4%	0.2%	0.6%	0.4%	0.8%
Non-Emergency Transportation	1.5%	0.8%	0.8%	0.0%	0.7%	0.0%	0.4%	0.1%	0.4%	0.2%	0.0%	0.4%	0.2%	0.8%
DME	2.1%	0.5%	0.7%	0.0%	0.3%	0.0%	1.5%	0.2%	0.8%	0.8%	0.1%	0.7%	1.0%	1.1%
Glasses / Contacts	0.2%	0.1%	0.4%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.5%	0.1%	0.8%	1.0%	0.3%
Other	1.3%	0.1%	0.1%	0.0%	0.0%	0.0%	2.3%	0.0%	0.1%	0.4%	0.3%	0.1%	0.1%	0.6%
Missing Data	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Other Behavioral Health Total	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.1%	0.1%
Other Total	6.2%	1.7%	3.0%	0.4%	2.3%	0.3%	4.6%	1.0%	2.5%	2.3%	0.7%	2.6%	2.8%	3.8%
Total Behavioral Health	7.7%	0.2%	2.1%	0.0%	0.4%	0.0%	0.0%	0.0%	0.1%	35.8%	85.9%	11.9%	8.9%	7.9%
Grand Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

* The MYPAC rate cell contains FFS claims from Q1 to Q3 2018 rather than the full CY 2018 period.

Appendix C.4
Mississippi Division of Medicaid
Summary of CY 2018* MississippiCAN Encounter and FFS Claims
Summary of Utilization/1000 and Average Charge by Rate Cell

Member Months	769,034	1,093	510,748	510,748	135,342	135,342	6,314	76,083	258,928	77,042	5,473	3,170,515	334,230	5,344,802
Utilization/1000														
Service Category	Non-Newborn SSI / Disabled	Breast and Cervical Cancer	MA Adult - Non-Deliveries	Deliveries - MA Adult	Pregnant Women - Non-Deliveries	Deliveries - Pregnant Women	SSI / Disabled Newborn	Non-SSI Newborns 0 to 2 Months	Non-SSI Newborns 3 to 12 Months	Foster Care	MYPAC	MA Children	Quasi-CHIP	All MSCAN Rate Cells
Inpatient Facility Services														
Medical	99.5	98.8	20.6	0.0	5.6	0.0	292.7	70.8	48.6	10.3	17.5	7.6	4.8	25.1
Surgical	53.9	131.7	20.9	0.0	3.5	0.1	197.7	39.0	10.1	6.5	6.6	2.7	1.9	12.9
Maternity / Deliveries	6.6	0.0	7.0	65.7	73.3	1,113.7	448.5	3,118.2	0.5	3.0	4.4	2.7	3.1	84.8
Psychiatric / Substance Abuse	53.0	11.0	16.4	0.0	4.3	0.0	0.0	0.0	0.0	67.6	475.8	9.0	8.0	16.6
Skilled Nursing Facility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Inpatient Behavioral Health Total	8.1	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.0	37.2	260.9	5.6	4.8	5.6
Inpatient Facility Total	213.1	241.5	64.8	65.7	86.8	1,113.8	938.9	3,227.9	59.1	87.4	504.3	21.9	17.8	139.4
Pharmacy Services														
Pharmacy	27,764.9	38,634.9	17,555.6	98.0	9,712.6	1,599.9	13,651.6	3,370.7	7,569.4	10,786.6	25,501.9	6,456.4	6,354.4	10,816.0
Pharmacy Total	27,764.9	38,634.9	17,555.6	98.0	9,712.6	1,599.9	13,651.6	3,370.7	7,569.4	10,786.6	25,501.9	6,456.4	6,354.4	10,816.0
Average Charge														
Service Category	Non-Newborn SSI / Disabled	Breast and Cervical Cancer	MA Adult - Non-Deliveries	Deliveries - MA Adult	Pregnant Women - Non-Deliveries	Deliveries - Pregnant Women	SSI / Disabled Newborn	Non-SSI Newborns 0 to 2 Months	Non-SSI Newborns 3 to 12 Months	Foster Care	MYPAC	MA Children	Quasi-CHIP	All MSCAN Rate Cells
Inpatient Facility Services														
Medical	\$7,710.53	\$11,585.93	\$6,334.43	\$0.00	\$5,475.43	\$0.00	\$11,192.74	\$6,074.48	\$4,958.88	\$7,169.44	\$6,615.92	\$5,097.74	\$5,955.49	\$6,826.77
Surgical	\$19,220.53	\$9,850.01	\$13,004.30	\$0.00	\$18,203.45	\$9,555.72	\$52,194.11	\$28,248.15	\$17,891.17	\$21,210.34	\$17,498.40	\$17,552.28	\$27,473.78	\$19,050.18
Maternity / Deliveries	\$6,741.20	\$0.00	\$6,440.25	\$5,805.68	\$5,343.06	\$5,197.88	\$109,133.39	\$4,706.43	\$10,886.82	\$4,730.08	\$3,709.79	\$5,358.16	\$4,992.45	\$5,669.30
Psychiatric / Substance Abuse	\$7,232.48	\$0.00	\$5,660.41	\$0.00	\$5,035.74	\$0.00	\$0.00	\$0.00	\$0.00	\$15,854.58	\$7,055.07	\$8,285.71	\$8,306.92	\$7,939.68
Skilled Nursing Facility	\$1,429.21	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,429.21
Inpatient Behavioral Health Total	\$8,486.25	\$0.00	\$6,402.07	\$0.00	\$6,945.03	\$0.00	\$0.00	\$0.00	\$0.00	\$22,935.00	\$7,429.39	\$9,067.98	\$8,744.19	\$10,163.73
Inpatient Facility Total	\$10,473.56	\$10,112.43	\$8,321.75	\$5,805.68	\$5,861.65	\$5,198.77	\$66,614.06	\$5,020.56	\$7,206.40	\$14,857.00	\$7,146.93	\$7,951.63	\$9,101.66	\$7,390.83
Pharmacy Services														
Pharmacy	\$119.70	\$126.00	\$70.41	\$16.68	\$66.18	\$16.72	\$429.90	\$30.16	\$40.19	\$80.86	\$79.61	\$62.37	\$79.41	\$85.30
Pharmacy Total	\$119.70	\$126.00	\$70.41	\$16.68	\$66.18	\$16.72	\$429.90	\$30.16	\$40.19	\$80.86	\$79.61	\$62.37	\$79.41	\$85.30

* The MYPAC rate cell contains FFS claims from Q1 to Q3 2018 rather than the full CY 2018 period.

Appendix C.5
Mississippi Division of Medicaid
Summary of CY 2019 MississippiCAN Encounter Claims
Summary of Total Costs by Rate Cell

Member Months	764,943	1,190	494,459	494,459	137,293	137,293	6,339	75,333	252,819	78,894	7,783	3,073,512	332,614	5,225,179
Total Allowed Cost														
Service Category	Non-Newborn SSI / Disabled	Breast and Cervical Cancer	MA Adult - Non- Deliveries	Deliveries - MA Adult	Pregnant Women - Non-Deliveries	Deliveries - Pregnant Women	SSI / Disabled Newborn	Non-SSI Newborns 0 to 2 Months	Non-SSI Newborns 3 to 12 Months	Foster Care	MYPAC	MA Children	Quasi-CHIP	All MSCAN Rate Cells
Inpatient Facility Services														
Medical	\$50,401,185	\$95,901	\$5,883,961	\$4,774	\$293,698	\$0	\$1,419,989	\$2,525,231	\$4,204,730	\$383,889	\$71,353	\$9,241,452	\$685,466	\$75,211,628
Surgical	\$69,060,136	\$148,331	\$10,933,757	\$0	\$438,670	\$11,995	\$4,793,664	\$5,856,273	\$4,286,182	\$643,935	\$524,752	\$14,287,832	\$1,293,049	\$112,278,577
Maternity / Deliveries	\$2,237,317	\$0	\$1,823,809	\$16,072,600	\$3,994,352	\$62,481,678	\$19,462,828	\$92,931,892	\$549,852	\$73,707	\$27,462	\$3,804,429	\$381,176	\$203,841,102
Psychiatric / Substance Abuse	\$26,067,046	\$0	\$3,116,508	\$0	\$145,728	\$0	\$11,489	\$0	\$10,587	\$22,200,631	\$3,215,871	\$30,227,230	\$3,086,821	\$88,081,909
Skilled Nursing Facility	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Missing Data	\$901	\$0	\$29,585	\$18,515	\$1,326	\$16,376	\$0	\$169,012	\$0	\$26,057	\$0	\$6,716	\$0	\$268,488
Inpatient Behavioral Health Total	\$6,921,661	\$0	\$178,717	\$0	\$25,424	\$0	\$0	\$0	\$0	\$21,057,144	\$2,314,651	\$24,728,762	\$2,569,372	\$57,795,730
Inpatient Facility Total	\$147,766,585	\$244,232	\$21,787,619	\$16,095,889	\$4,873,775	\$62,510,049	\$25,687,969	\$101,482,408	\$9,051,350	\$23,328,220	\$3,839,438	\$57,567,658	\$5,446,512	\$479,681,704
Outpatient Facility Services														
Emergency Room	\$24,170,953	\$25,264	\$16,225,257	\$10,822	\$4,744,253	\$38,618	\$274,303	\$1,502,838	\$6,528,949	\$676,798	\$181,626	\$35,150,321	\$2,661,682	\$92,191,683
Urgent Care	\$173	\$0	\$103	\$0	\$0	\$0	\$0	\$0	\$1,195	\$0	\$0	\$2,171	\$192	\$3,834
Radiology / Pathology	\$24,286,422	\$396,269	\$10,748,860	\$5,867	\$3,753,989	\$28,109	\$186,908	\$707,126	\$2,346,891	\$426,522	\$90,789	\$15,180,221	\$1,554,615	\$59,712,587
Psychiatric / Alcohol & Drug Abuse	\$5,994,237	\$0	\$1,121	\$0	\$0	\$0	\$0	\$0	\$0	\$950,869	\$7,264	\$14,950,243	\$928,295	\$22,832,028
Pharmacy	\$36,037,611	\$1,120,492	\$5,966,835	\$6,622	\$1,645,443	\$27,023	\$35,874	\$107,331	\$372,779	\$62,531	\$14,595	\$5,114,453	\$591,711	\$51,103,301
Other	\$65,657,233	\$320,253	\$22,257,458	\$36,302	\$5,739,353	\$112,866	\$931,841	\$1,663,758	\$5,401,063	\$1,262,479	\$125,641	\$39,483,048	\$3,337,260	\$146,328,556
Missing Data	\$57,075	\$0	\$23,481	\$15	\$34,431	\$290	\$57	\$28	\$1,226	\$104	\$0	\$14,122	\$169	\$130,997
Outpatient Behavioral Health Total	\$6,038,502	\$0	\$981	\$0	\$0	\$0	\$0	\$0	\$0	\$953,089	\$7,423	\$15,021,876	\$933,469	\$22,955,341
Outpatient Facility Total	\$156,203,705	\$1,862,278	\$55,223,115	\$59,627	\$15,917,469	\$206,906	\$1,428,982	\$3,981,080	\$14,652,104	\$3,379,302	\$419,914	\$109,894,579	\$9,073,923	\$372,302,985
Physician Services														
IP Visits	\$12,679,238	\$12,272	\$1,639,993	\$46,342	\$352,862	\$186,899	\$7,357,899	\$11,720,883	\$1,881,848	\$367,352	\$162,708	\$2,671,726	\$207,756	\$39,287,778
IP Surgery	\$4,910,932	\$27,886	\$1,152,002	\$35,039	\$113,192	\$83,441	\$442,603	\$483,902	\$336,315	\$41,285	\$25,836	\$1,354,683	\$137,071	\$9,144,187
Office / Home Visits	\$35,120,230	\$123,528	\$18,015,211	\$437	\$1,411,988	\$3,374	\$427,833	\$2,975,823	\$9,346,888	\$2,125,479	\$240,862	\$67,393,181	\$6,769,927	\$143,954,761
Preventive Exams & Immunizations	\$4,688,327	\$10,358	\$6,988,378	\$162,883	\$13,982,028	\$466,533	\$216,967	\$8,270,092	\$9,118,768	\$717,351	\$71,776	\$21,348,269	\$1,588,552	\$67,630,282
Urgent Care Visits	\$309,312	\$328	\$489,702	\$0	\$46,949	\$0	\$1,538	\$2,664	\$124,959	\$82,306	\$6,718	\$2,485,004	\$271,880	\$3,821,360
ER Visits and Observation Care	\$8,491,382	\$11,730	\$5,001,892	\$17,562	\$1,661,724	\$68,107	\$107,521	\$569,110	\$2,109,959	\$208,922	\$60,195	\$10,968,243	\$818,775	\$30,095,121
OP Surgery	\$11,589,616	\$91,197	\$6,066,072	\$2,269	\$442,946	\$3,473	\$130,650	\$213,375	\$956,496	\$442,007	\$37,543	\$11,669,453	\$1,154,545	\$32,799,643
Physical Therapy	\$6,826,498	\$5,669	\$1,150,126	\$0	\$27,289	\$0	\$200,509	\$3,936	\$285,697	\$524,101	\$44,290	\$6,900,215	\$534,774	\$16,503,104
Psychiatric / Substance Abuse	\$31,606,962	\$3,227	\$3,111,422	\$575	\$172,312	\$650	\$113	\$1,555	\$477	\$3,872,742	\$21,211,683	\$31,492,719	\$3,021,586	\$94,496,024
Radiology / Pathology	\$13,688,758	\$138,811	\$9,150,371	\$149,930	\$7,040,647	\$553,821	\$205,439	\$478,420	\$1,680,440	\$376,166	\$66,061	\$13,386,833	\$1,449,618	\$48,365,312
Vision, Hearing, and Speech Exams	\$3,311,680	\$6,009	\$1,901,088	\$0	\$420,692	\$0	\$28,872	\$16,283	\$102,683	\$395,547	\$42,903	\$10,683,596	\$1,439,627	\$18,348,979
Other	\$35,717,926	\$775,107	\$5,537,918	\$3,825,791	\$1,248,900	\$15,538,625	\$710,097	\$485,319	\$809,911	\$1,050,615	\$85,943	\$7,656,235	\$1,711,638	\$75,154,025
Missing Data	\$37,990	\$0	\$11,592	\$673	\$559	\$388	\$0	\$210	\$1,522	\$4,435	\$498	\$43,141	\$4,256	\$105,264
Physician Behavioral Health Total	\$35,886,725	\$4,450	\$3,773,330	\$423	\$202,958	\$786	\$2,518	\$9,117	\$71,146	\$4,271,188	\$21,235,010	\$34,955,904	\$3,366,934	\$103,780,489
Physician Total	\$168,978,852	\$1,206,122	\$60,215,768	\$4,241,499	\$26,922,089	\$16,905,311	\$9,830,040	\$25,221,573	\$26,755,964	\$10,208,306	\$22,057,015	\$188,053,300	\$19,110,003	\$579,705,842
Pharmacy Services														
Pharmacy	\$235,604,188	\$627,925	\$56,838,826	\$79,632	\$7,081,894	\$316,401	\$3,714,071	\$668,672	\$6,010,791	\$5,832,756	\$1,281,341	\$106,948,542	\$14,472,984	\$439,478,022
Missing Data	\$89,566	\$12	\$15,168	\$18	\$2,163	\$90	\$157	\$612	\$7,817	\$101	\$463	\$33,330	\$9,003	\$158,501
Pharmacy Total	\$235,693,754	\$627,937	\$56,853,993	\$79,650	\$7,084,057	\$316,490	\$3,714,228	\$669,284	\$6,018,608	\$5,832,857	\$1,281,804	\$106,981,873	\$14,481,987	\$439,636,523
Dental Services														
Dental	\$7,106,507	\$9,848	\$3,409,467	\$323	\$665,919	\$270	\$4,457	\$49,024	\$249,144	\$2,138,388	\$244,109	\$78,513,331	\$10,780,970	\$103,171,756
Missing Data	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$328	\$328
Dental Total	\$7,106,507	\$9,848	\$3,409,467	\$323	\$665,919	\$270	\$4,457	\$49,024	\$249,144	\$2,138,388	\$244,109	\$78,513,331	\$10,781,298	\$103,172,084
Other Services														
Ambulance	\$7,820,392	\$4,881	\$1,816,407	\$81,510	\$535,580	\$177,574	\$217,570	\$812,699	\$570,011	\$117,548	\$71,406	\$3,314,050	\$255,459	\$15,795,085
Non-Emergency Transportation	\$10,424,395	\$24,419	\$1,509,721	\$4,922	\$322,711	\$9,259	\$185,103	\$65,216	\$180,112	\$47,001	\$29,415	\$1,921,680	\$83,814	\$14,807,768
DME	\$18,132,298	\$17,911	\$1,974,646	\$1,066	\$240,411	\$5,023	\$614,869	\$160,037	\$570,151	\$415,580	\$20,158	\$5,095,626	\$838,681	\$28,086,457
Glasses / Contacts	\$1,190,183	\$1,942	\$722,302	\$0	\$167,827	\$105	\$947	\$0	\$1,568	\$155,180	\$19,245	\$3,960,059	\$580,548	\$6,799,906
Other	\$9,267,977	\$496	\$176,808	\$0	\$2,136	\$0	\$584,434	\$8,614	\$7,571	\$222,950	\$2,347	\$888,668	\$81,047	\$11,243,049
Missing Data	\$12,274	\$0	\$394	\$4	\$0	\$0	\$0	\$0	\$0	\$37	\$0	\$12,364	\$0	\$25,073
Other Behavioral Health Total	\$580,792	\$160	\$61,515	\$0	\$2,045	\$0	\$0	\$0	\$0	\$26,482	\$2,311	\$450,590	\$52,849	\$1,176,744
Other Total	\$46,847,518	\$49,649	\$6,200,278	\$87,502	\$1,268,663	\$191,961	\$1,602,923	\$1,046,566	\$1,329,414	\$958,295	\$142,571	\$15,192,447	\$1,839,549	\$76,757,338
Total Behavioral Health	\$49,427,679	\$4,610	\$4,014,543	\$423	\$230,428	\$786	\$2,518	\$9,117	\$71,146	\$26,307,902	\$23,559,395	\$75,157,132	\$6,922,625	\$185,708,304
Grand Total	\$762,596,921	\$4,000,066	\$203,690,241	\$20,564,490	\$56,731,973	\$80,130,988	\$42,268,598	\$132,449,935	\$58,056,583	\$45,845,369	\$27,984,850	\$556,203,189	\$60,733,273	\$2,051,256,476

Appendix C.6
Mississippi Division of Medicaid
Summary of CY 2019 MississippiCAN Encounter Claims
Summary of Allowed PMPM by Rate Cell

Member Months	764,943	1,190	494,459	494,459	137,293	137,293	6,339	75,333	252,819	78,894	7,783	3,073,512	332,614	5,225,179
PMPM Allowed Cost														
Service Category	Non-Newborn SSI / Disabled	Breast and Cervical Cancer	MA Adult - Non-Deliveries	Deliveries - MA Adult	Pregnant Women - Non-Deliveries	Deliveries - Pregnant Women	SSI / Disabled Newborn	Non-SSI Newborns 0 to 2 Months	Non-SSI Newborns 3 to 12 Months	Foster Care	MYPAC	MA Children	Quasi-CHIP	All MSCAN Rate Cells
Inpatient Facility Services														
Medical	\$65.89	\$80.59	\$11.90	\$0.01	\$2.14	\$0.00	\$224.01	\$33.52	\$16.63	\$4.87	\$9.17	\$3.01	\$2.06	\$14.39
Surgical	\$90.28	\$124.65	\$22.11	\$0.00	\$3.20	\$0.09	\$756.22	\$77.74	\$16.95	\$8.16	\$67.42	\$4.65	\$3.89	\$21.49
Maternity / Deliveries	\$2.92	\$0.00	\$3.69	\$32.51	\$29.09	\$455.10	\$3,070.33	\$1,233.61	\$2.17	\$0.93	\$3.53	\$1.24	\$1.15	\$39.01
Psychiatric / Substance Abuse	\$34.08	\$0.00	\$6.30	\$0.00	\$1.06	\$0.00	\$1.81	\$0.00	\$0.04	\$281.40	\$413.19	\$9.83	\$9.28	\$16.86
Skilled Nursing Facility	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Missing Data	\$0.00	\$0.00	\$0.06	\$0.04	\$0.01	\$0.12	\$0.00	\$2.24	\$0.00	\$0.33	\$0.00	\$0.00	\$0.00	\$0.05
Inpatient Behavioral Health Total	\$9.05	\$0.00	\$0.36	\$0.00	\$0.19	\$0.00	\$0.00	\$0.00	\$0.00	\$266.90	\$297.40	\$8.05	\$7.72	\$11.06
Inpatient Facility Total	\$193.17	\$205.24	\$44.06	\$32.55	\$35.50	\$455.30	\$4,052.37	\$1,347.12	\$35.80	\$295.69	\$493.31	\$18.73	\$16.37	\$91.80
Outpatient Facility Services														
Emergency Room	\$31.60	\$21.23	\$32.81	\$0.02	\$34.56	\$0.28	\$43.27	\$19.95	\$25.82	\$8.58	\$23.34	\$11.44	\$8.00	\$17.64
Urgent Care	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Radiology / Pathology	\$31.75	\$333.00	\$21.74	\$0.01	\$27.34	\$0.20	\$29.49	\$9.39	\$9.28	\$5.41	\$11.67	\$4.94	\$4.67	\$11.43
Psychiatric / Alcohol & Drug Abuse	\$7.84	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$12.05	\$0.93	\$4.86	\$2.79	\$4.37
Pharmacy	\$47.11	\$941.59	\$12.07	\$0.01	\$11.98	\$0.20	\$5.66	\$1.42	\$1.47	\$0.79	\$1.88	\$1.66	\$1.78	\$9.78
Other	\$85.83	\$269.12	\$45.01	\$0.07	\$41.80	\$0.82	\$147.00	\$22.09	\$21.36	\$16.00	\$16.14	\$12.85	\$10.03	\$28.00
Missing Data	\$0.07	\$0.00	\$0.05	\$0.00	\$0.25	\$0.00	\$0.01	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.03
Outpatient Behavioral Health Total	\$7.89	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$12.08	\$0.95	\$4.89	\$2.81	\$4.39
Outpatient Facility Total	\$204.20	\$1,564.94	\$111.68	\$0.12	\$115.94	\$1.51	\$225.43	\$52.85	\$57.95	\$42.83	\$53.95	\$35.76	\$27.28	\$71.25
Physician Services														
IP Visits	\$16.58	\$10.31	\$3.32	\$0.09	\$2.57	\$1.36	\$1,160.74	\$155.59	\$7.44	\$4.66	\$20.91	\$0.87	\$0.62	\$7.52
IP Surgery	\$6.42	\$23.43	\$2.33	\$0.07	\$0.82	\$0.61	\$69.82	\$6.42	\$1.33	\$0.52	\$3.32	\$0.44	\$0.41	\$1.75
Office / Home Visits	\$45.91	\$103.80	\$36.43	\$0.00	\$10.28	\$0.02	\$67.49	\$39.50	\$36.97	\$26.94	\$30.95	\$21.93	\$20.35	\$27.55
Preventive Exams & Immunizations	\$6.13	\$8.70	\$14.13	\$0.33	\$101.84	\$3.40	\$34.23	\$109.78	\$36.07	\$9.09	\$9.22	\$6.95	\$4.78	\$12.94
Urgent Care Visits	\$0.40	\$0.28	\$0.99	\$0.00	\$0.34	\$0.00	\$0.24	\$0.04	\$0.49	\$1.04	\$0.86	\$0.81	\$0.82	\$0.73
ER Visits and Observation Care	\$11.10	\$9.86	\$10.12	\$0.04	\$12.10	\$0.50	\$16.96	\$7.55	\$8.35	\$2.65	\$7.73	\$3.57	\$2.46	\$5.76
OP Surgery	\$15.15	\$76.64	\$12.27	\$0.00	\$3.23	\$0.03	\$20.61	\$2.83	\$3.78	\$5.60	\$4.82	\$3.80	\$3.47	\$6.28
Physical Therapy	\$8.92	\$4.76	\$2.33	\$0.00	\$0.20	\$0.00	\$31.63	\$0.05	\$1.13	\$6.64	\$5.69	\$2.25	\$1.61	\$3.16
Psychiatric / Substance Abuse	\$41.32	\$2.71	\$6.29	\$0.00	\$1.26	\$0.00	\$0.02	\$0.02	\$0.00	\$49.09	\$2,725.39	\$10.25	\$9.08	\$18.08
Radiology / Pathology	\$17.90	\$116.65	\$18.51	\$0.30	\$51.28	\$4.03	\$32.41	\$6.35	\$6.65	\$4.77	\$8.49	\$4.36	\$4.36	\$9.26
Vision, Hearing, and Speech Exams	\$4.33	\$5.05	\$3.84	\$0.00	\$3.06	\$0.00	\$4.55	\$0.22	\$0.41	\$5.01	\$5.51	\$3.48	\$4.33	\$3.51
Other	\$46.69	\$651.35	\$11.20	\$7.74	\$9.10	\$113.18	\$112.02	\$6.44	\$3.20	\$13.32	\$11.04	\$2.49	\$5.15	\$14.38
Missing Data	\$0.05	\$0.00	\$0.02	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.01	\$0.06	\$0.06	\$0.01	\$0.01	\$0.02
Physician Behavioral Health Total	\$46.91	\$3.74	\$7.63	\$0.00	\$1.48	\$0.01	\$0.40	\$0.12	\$0.28	\$54.14	\$2,728.38	\$11.37	\$10.12	\$19.86
Physician Total	\$220.90	\$1,013.55	\$121.78	\$8.58	\$196.09	\$123.13	\$1,550.72	\$334.80	\$105.83	\$129.39	\$2,834.00	\$61.19	\$57.45	\$110.94
Pharmacy Services														
Pharmacy	\$308.00	\$527.67	\$114.95	\$0.16	\$51.58	\$2.30	\$585.91	\$8.88	\$23.78	\$73.93	\$164.63	\$34.80	\$43.51	\$84.11
Missing Data	\$0.12	\$0.01	\$0.03	\$0.00	\$0.02	\$0.00	\$0.02	\$0.01	\$0.03	\$0.00	\$0.06	\$0.01	\$0.03	\$0.03
Pharmacy Total	\$308.12	\$527.68	\$114.98	\$0.16	\$51.60	\$2.31	\$585.93	\$8.88	\$23.81	\$73.93	\$164.69	\$34.81	\$43.54	\$84.14
Dental Services														
Dental	\$9.29	\$8.28	\$6.90	\$0.00	\$4.85	\$0.00	\$0.70	\$0.65	\$0.99	\$27.10	\$31.36	\$25.55	\$32.41	\$19.75
Missing Data	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Dental Total	\$9.29	\$8.28	\$6.90	\$0.00	\$4.85	\$0.00	\$0.70	\$0.65	\$0.99	\$27.10	\$31.36	\$25.55	\$32.41	\$19.75
Other Services														
Ambulance	\$10.22	\$4.10	\$3.67	\$0.16	\$3.90	\$1.29	\$34.32	\$10.79	\$2.25	\$1.49	\$9.17	\$1.08	\$0.77	\$3.02
Non-Emergency Transportation	\$13.63	\$20.52	\$3.05	\$0.01	\$2.35	\$0.07	\$29.20	\$0.87	\$0.71	\$0.60	\$3.78	\$0.63	\$0.25	\$2.83
DME	\$23.70	\$15.05	\$3.99	\$0.00	\$1.75	\$0.04	\$97.00	\$2.12	\$2.26	\$5.27	\$2.59	\$1.66	\$2.52	\$5.38
Glasses / Contacts	\$1.56	\$1.63	\$1.46	\$0.00	\$1.22	\$0.00	\$0.15	\$0.00	\$0.01	\$1.97	\$2.47	\$1.29	\$1.75	\$1.30
Other	\$12.12	\$0.42	\$0.36	\$0.00	\$0.02	\$0.00	\$92.20	\$0.11	\$0.03	\$2.83	\$0.30	\$0.29	\$0.24	\$2.15
Missing Data	\$0.02	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Other Behavioral Health Total	\$0.76	\$0.13	\$0.12	\$0.00	\$0.01	\$0.00	\$0.00	\$0.00	\$0.00	\$0.34	\$0.30	\$0.15	\$0.16	\$0.23
Other Total	\$61.24	\$41.72	\$12.54	\$0.18	\$9.24	\$1.40	\$252.87	\$13.89	\$5.26	\$12.15	\$18.32	\$4.94	\$5.53	\$14.69
Total Behavioral Health	\$64.62	\$3.87	\$8.12	\$0.00	\$1.68	\$0.01	\$0.40	\$0.12	\$0.28	\$333.46	\$3,027.03	\$24.45	\$20.81	\$35.54
Grand Total	\$996.93	\$3,361.40	\$411.95	\$41.59	\$413.22	\$583.65	\$6,668.02	\$1,758.19	\$229.64	\$581.10	\$3,595.64	\$180.97	\$182.59	\$392.57

Appendix C.7
Mississippi Division of Medicaid
Summary of CY 2019 MississippiCAN Encounter Claims
Summary of Total Costs by Rate Cell

Member Months	764,943	1,190	494,459	494,459	137,293	137,293	6,339	75,333	252,819	78,894	7,783	3,073,512	332,614	5,225,179
% of Total Allowed Cost														
Service Category	Non-Newborn SSI / Disabled	Breast and Cervical Cancer	MA Adult - Non-Deliveries	Deliveries - MA Adult	Pregnant Women - Non-Deliveries	Deliveries - Pregnant Women	SSI / Disabled Newborn	Non-SSI Newborns 0 to 2 Months	Non-SSI Newborns 3 to 12 Months	Foster Care	MYPAC	MA Children	Quasi-CHIP	All MSCAN Rate Cells
Inpatient Facility Services														
Medical	6.6%	2.4%	2.9%	0.0%	0.5%	0.0%	3.4%	1.9%	7.2%	0.8%	0.3%	1.7%	1.1%	3.7%
Surgical	9.1%	3.7%	5.4%	0.0%	0.8%	0.0%	11.3%	4.4%	7.4%	1.4%	1.9%	2.6%	2.1%	5.5%
Maternity / Deliveries	0.3%	0.0%	0.9%	78.2%	7.0%	78.0%	46.0%	70.2%	0.9%	0.2%	0.1%	0.7%	0.6%	9.9%
Psychiatric / Substance Abuse	3.4%	0.0%	1.5%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	48.4%	11.5%	5.4%	5.1%	4.3%
Skilled Nursing Facility	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Missing Data	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
Inpatient Behavioral Health Total	0.9%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	45.9%	8.3%	4.4%	4.2%	2.8%
Inpatient Facility Total	19.4%	6.1%	10.7%	78.3%	8.6%	78.0%	60.8%	76.6%	15.6%	50.9%	13.7%	10.4%	9.0%	23.4%
Outpatient Facility Services														
Emergency Room	3.2%	0.6%	8.0%	0.1%	8.4%	0.0%	0.6%	1.1%	11.2%	1.5%	0.6%	6.3%	4.4%	4.5%
Urgent Care	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Radiology / Pathology	3.2%	9.9%	5.3%	0.0%	6.6%	0.0%	0.4%	0.5%	4.0%	0.9%	0.3%	2.7%	2.6%	2.9%
Psychiatric / Alcohol & Drug Abuse	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	0.0%	2.7%	1.5%	1.1%
Pharmacy	4.7%	28.0%	2.9%	0.0%	2.9%	0.0%	0.1%	0.1%	0.6%	0.1%	0.1%	0.9%	1.0%	2.5%
Other	8.6%	8.0%	10.9%	0.2%	10.1%	0.1%	2.2%	1.3%	9.3%	2.8%	0.4%	7.1%	5.5%	7.1%
Missing Data	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Outpatient Behavioral Health Total	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	0.0%	2.7%	1.5%	1.1%
Outpatient Facility Total	20.5%	46.6%	27.1%	0.3%	28.1%	0.3%	3.4%	3.0%	25.2%	7.4%	1.5%	19.8%	14.9%	18.1%
Physician Services														
IP Visits	1.7%	0.3%	0.8%	0.2%	0.6%	0.2%	17.4%	8.8%	3.2%	0.8%	0.6%	0.5%	0.3%	1.9%
IP Surgery	0.6%	0.7%	0.6%	0.2%	0.2%	0.1%	1.0%	0.4%	0.6%	0.1%	0.1%	0.2%	0.2%	0.4%
Office / Home Visits	4.6%	3.1%	8.8%	0.0%	2.5%	0.0%	1.0%	2.2%	16.1%	4.6%	0.9%	12.1%	11.1%	7.0%
Preventive Exams & Immunizations	0.6%	0.3%	3.4%	0.8%	24.6%	0.6%	0.5%	6.2%	15.7%	1.6%	0.3%	3.8%	2.6%	3.3%
Urgent Care Visits	0.0%	0.0%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.2%	0.2%	0.0%	0.4%	0.4%	0.2%
ER Visits and Observation Care	1.1%	0.3%	2.5%	0.1%	2.9%	0.1%	0.3%	0.4%	3.6%	0.5%	0.2%	2.0%	1.3%	1.5%
OP Surgery	1.5%	2.3%	3.0%	0.0%	0.8%	0.0%	0.3%	0.2%	1.6%	1.0%	0.1%	2.1%	1.9%	1.6%
Physical Therapy	0.9%	0.1%	0.6%	0.0%	0.0%	0.0%	0.5%	0.0%	0.5%	1.1%	0.2%	1.2%	0.9%	0.8%
Psychiatric / Substance Abuse	4.1%	0.1%	1.5%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	8.4%	75.8%	5.7%	5.0%	4.6%
Radiology / Pathology	1.8%	3.5%	4.5%	0.7%	12.4%	0.7%	0.5%	0.4%	2.9%	0.8%	0.2%	2.4%	2.4%	2.4%
Vision, Hearing, and Speech Exams	0.4%	0.2%	0.9%	0.0%	0.7%	0.0%	0.1%	0.0%	0.2%	0.9%	0.2%	1.9%	2.4%	0.9%
Other	4.7%	19.4%	2.7%	18.6%	2.2%	19.4%	1.7%	0.4%	1.4%	2.3%	0.3%	1.4%	2.8%	3.7%
Missing Data	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Physician Behavioral Health Total	4.7%	0.1%	1.9%	0.0%	0.4%	0.0%	0.0%	0.0%	0.1%	9.3%	75.9%	6.3%	5.5%	5.1%
Physician Total	22.2%	30.2%	29.6%	20.6%	47.5%	21.1%	23.3%	19.0%	46.1%	22.3%	78.8%	33.8%	31.5%	28.3%
Pharmacy Services														
Pharmacy	30.9%	15.7%	27.9%	0.4%	12.5%	0.4%	8.8%	0.5%	10.4%	12.7%	4.6%	19.2%	23.8%	21.4%
Missing Data	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Pharmacy Total	30.9%	15.7%	27.9%	0.4%	12.5%	0.4%	8.8%	0.5%	10.4%	12.7%	4.6%	19.2%	23.8%	21.4%
Dental Services														
Dental	0.9%	0.2%	1.7%	0.0%	1.2%	0.0%	0.0%	0.0%	0.4%	4.7%	0.9%	14.1%	17.8%	5.0%
Missing Data	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Dental Total	0.9%	0.2%	1.7%	0.0%	1.2%	0.0%	0.0%	0.0%	0.4%	4.7%	0.9%	14.1%	17.8%	5.0%
Other Services														
Ambulance	1.0%	0.1%	0.9%	0.4%	0.9%	0.2%	0.5%	0.6%	1.0%	0.3%	0.3%	0.6%	0.4%	0.8%
Non-Emergency Transportation	1.4%	0.6%	0.7%	0.0%	0.6%	0.0%	0.4%	0.0%	0.3%	0.1%	0.1%	0.3%	0.1%	0.7%
DME	2.4%	0.4%	1.0%	0.0%	0.4%	0.0%	1.5%	0.1%	1.0%	0.9%	0.1%	0.9%	1.4%	1.4%
Glasses / Contacts	0.2%	0.0%	0.4%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.3%	0.1%	0.7%	1.0%	0.3%
Other	1.2%	0.0%	0.1%	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	0.5%	0.0%	0.2%	0.1%	0.5%
Missing Data	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Behavioral Health Total	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.1%	0.1%
Other Total	6.1%	1.2%	3.0%	0.4%	2.2%	0.2%	3.8%	0.8%	2.3%	2.1%	0.5%	2.7%	3.0%	3.7%
Total Behavioral Health	6.5%	0.1%	2.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.1%	57.4%	84.2%	13.5%	11.4%	9.1%
Grand Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Appendix C.8
Mississippi Division of Medicaid
Summary of CY 2019 MississippiCAN Encounter Claims
Summary of Utilization/1000 and Average Charge by Rate Cell

Member Months	764,943	1,190	494,459	494,459	137,293	137,293	6,339	75,333	252,819	78,894	7,783	3,073,512	332,614	5,225,179
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Utilization/1000														
Service Category	Non-Newborn SSI / Disabled	Breast and Cervical Cancer	MA Adult - Non-Deliveries	Deliveries - MA Adult	Pregnant Women - Non-Deliveries	Deliveries - Pregnant Women	SSI / Disabled Newborn	Non-SSI Newborns 0 to 2 Months	Non-SSI Newborns 3 to 12 Months	Foster Care	MYPAC	MA Children	Quasi-CHIP	All MSCAN Rate Cells
Inpatient Facility Services														
Medical	112.2	141.2	26.6	0.0	5.5	0.0	350.2	70.1	47.4	9.1	17.0	7.7	4.7	27.9
Surgical	60.9	141.2	21.5	0.0	3.5	0.2	240.4	44.1	10.6	5.5	3.1	3.2	3.5	14.7
Maternity / Deliveries	6.0	0.0	9.0	76.3	82.6	1,221.2	365.4	3,574.4	0.7	2.0	9.3	3.2	3.0	97.3
Psychiatric / Substance Abuse	64.9	0.0	17.2	0.0	3.0	0.0	1.9	0.0	0.1	145.3	602.9	13.7	11.5	23.1
Skilled Nursing Facility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Inpatient Behavioral Health Total	13.6	0.0	1.0	0.0	0.4	0.0	0.0	0.0	0.0	117.4	404.0	10.1	8.5	11.0
Inpatient Facility Total	244.0	282.4	74.4	76.3	94.6	1,221.4	957.9	3,688.6	58.8	161.8	632.1	27.8	22.6	163.0
Pharmacy Services														
Pharmacy	27,466.1	38,510.9	17,435.8	107.9	9,426.9	1,578.2	13,296.7	3,436.7	7,357.0	11,516.2	26,167.8	6,778.8	6,712.2	11,028.1
Pharmacy Total	27,466.1	38,510.9	17,435.8	107.9	9,426.9	1,578.2	13,296.7	3,436.7	7,357.0	11,516.2	26,167.8	6,778.8	6,712.2	11,028.1

Average Charge														
Service Category	Non-Newborn SSI / Disabled	Breast and Cervical Cancer	MA Adult - Non-Deliveries	Deliveries - MA Adult	Pregnant Women - Non-Deliveries	Deliveries - Pregnant Women	SSI / Disabled Newborn	Non-SSI Newborns 0 to 2 Months	Non-SSI Newborns 3 to 12 Months	Foster Care	MYPAC	MA Children	Quasi-CHIP	All MSCAN Rate Cells
Inpatient Facility Services														
Medical	\$7,044.19	\$6,850.05	\$5,358.80	\$4,774.06	\$4,661.88	\$0.00	\$7,675.61	\$5,739.16	\$4,213.16	\$6,398.15	\$6,486.63	\$4,657.99	\$5,313.69	\$6,196.38
Surgical	\$17,799.00	\$10,595.10	\$12,354.53	\$0.00	\$10,966.75	\$5,997.56	\$37,745.39	\$21,141.78	\$19,134.74	\$17,887.09	\$262,375.99	\$17,424.19	\$13,469.26	\$17,535.31
Maternity / Deliveries	\$5,887.68	\$0.00	\$4,902.71	\$5,112.15	\$4,226.83	\$4,471.92	\$100,843.67	\$4,141.53	\$36,656.80	\$5,669.78	\$4,577.07	\$4,600.28	\$4,592.48	\$4,808.82
Psychiatric / Substance Abuse	\$6,302.48	\$0.00	\$4,395.64	\$0.00	\$4,286.13	\$0.00	\$11,488.65	\$0.00	\$5,293.33	\$23,246.73	\$8,224.73	\$8,638.82	\$9,706.98	\$8,768.73
Skilled Nursing Facility	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Inpatient Behavioral Health Total	\$7,983.46	\$0.00	\$4,156.21	\$0.00	\$5,084.84	\$0.00	\$0.00	\$0.00	\$0.00	\$27,276.09	\$8,834.55	\$9,569.95	\$10,933.50	\$12,121.59
Inpatient Facility Total	\$9,502.06	\$8,722.58	\$7,110.84	\$5,117.93	\$4,504.41	\$4,473.31	\$50,766.74	\$4,382.55	\$7,305.37	\$21,925.02	\$9,364.48	\$8,074.01	\$8,700.50	\$6,758.46
Pharmacy Services														
Pharmacy	\$134.57	\$164.42	\$79.11	\$17.91	\$65.66	\$17.52	\$528.77	\$30.99	\$38.78	\$77.04	\$75.50	\$61.60	\$77.79	\$91.52
Pharmacy Total	\$134.62	\$164.42	\$79.14	\$17.91	\$65.68	\$17.53	\$528.79	\$31.02	\$38.83	\$77.04	\$75.52	\$61.62	\$77.84	\$91.55

APPENDIX D

5% Provider Assessment Application

This report assumes the reader is familiar with the State of Mississippi's MississippiCAN program, its benefits, and rate setting principles. The report was prepared solely to provide assistance to DOM to set SFY 2022 capitation rates for the MississippiCAN 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.

State of Mississippi Division of Medicaid
SFY 2022 MississippiCAN Preliminary Rate Calculation and Certification

April 21, 2021

Appendix D
Mississippi Division of Medicaid
Encounter Data - 5% Assessment Categories

COS	COS Description	Rendering Provider Code	Rendering Provider Type Description	Mapped Broad Category of Service	Percent of Total 2018 Allowed in COS and Rendering Provider	Percent of Total 2019 Allowed in COS and Rendering Provider
03	LABORATORY AND RADIOLOGY	B00	INDEPENDENT LAB	Physician	0.41%	0.21%
05	PHYSICIAN	A08	CHIROPRACTOR	Physician	0.03%	0.01%
05	PHYSICIAN	A09	PODIATRIST	Physician, Other	0.07%	0.03%
06	HOME & COMM BASED SERVICES	L00	HHA UNCLASSIFIED	N/A - No Claims	0.00%	0.00%
06	HOME & COMM BASED SERVICES	L02	HHA HOSPITAL BASED PROGRAM	N/A - No Claims	0.00%	0.00%
06	HOME & COMM BASED SERVICES	W01	PERSONAL CARE SERVICES	N/A - No Claims	0.00%	0.00%
06	HOME & COMM BASED SERVICES	W03	RESPIRE CARE, IN HOME	Other	0.00%	0.00%
06	HOME & COMM BASED SERVICES	W04	ADULT DAY CARE	N/A - No Claims	0.00%	0.00%
06	HOME & COMM BASED SERVICES	WC0	ASSISTED LIVING SERVICES PROV	N/A - No Claims	0.00%	0.00%
07	HOME HEALTH SERVICES	L00	HHA UNCLASSIFIED	Outpatient	0.00%	0.02%
07	HOME HEALTH SERVICES	L02	HHA HOSPITAL BASED PROGRAM	Outpatient	0.01%	0.01%
09	MENTAL HEALTH CLINIC SERVICES	X00	COMMUNITY MENTAL HEALTH	Physician, Outpatient	3.76%	1.28%
09	MENTAL HEALTH CLINIC SERVICES	X01	PRIVATE MENTAL HEALTH	Physician	0.45%	0.26%
10	EPSDT SCREENING	E00	NURSE SCREENING	Physician	0.22%	0.09%
10	EPSDT SCREENING	E01	NURSE SCREENING WITH CASE MGMT	Physician, Dental	0.00%	0.00%
10	EPSDT SCREENING	E04	PHYSICIANS SCREENER	Physician	0.50%	0.17%
10	EPSDT SCREENING	E06	FEDERAL CLINIC, SCREEN ONLY	Physician	0.00%	0.00%
10	EPSDT SCREENING	ED0	SCHOOL BASED SCREEN & CS MGT	Physician	0.00%	0.00%
10	EPSDT SCREENING	EV0	VACCINE FOR CHILDREN PROVIDER	Physician	0.20%	0.07%
11	EMERG/NON-EMERG TRANS	J00	AMBULANCE	Other	0.38%	0.18%
12	DENTAL SERVICES	K00	DENTIST, UNCLASSIFIED	Dental	0.28%	0.07%
13	EYEGLASS SERVICES	N00	OPTOMETRIST	Physician, Other	0.30%	0.24%
13	EYEGLASS SERVICES	N01	OPTICAL DISPENSARY	Other	0.02%	0.01%
16	DENTAL SCREENING	K00	DENTIST, UNCLASSIFIED	Dental	3.88%	1.26%
17	EYEGLASS SCREENING	N00	OPTOMETRIST	Physician, Other	0.77%	0.50%
17	EYEGLASS SCREENING	N01	OPTICAL DISPENSARY	Other	0.05%	0.02%
18	HEARING SCREENING	M00	AUDIOLOGIST	Other, Physician	0.01%	0.00%
24	MEDICAL SUPPLY (DME)	I00	DME, MEDICAL EQUIP SUPPLIES	Other	0.57%	0.38%
24	MEDICAL SUPPLY (DME)	I01	DME, HOME HEALTH	Other	0.01%	0.01%
24	MEDICAL SUPPLY (DME)	I03	DME, PHARMACY BASED, COMMUNITY	Other, Physician	0.06%	0.03%
24	MEDICAL SUPPLY (DME)	S02	NURSE PRACTITIONER	Physician, Other	0.00%	0.00%
24	MEDICAL SUPPLY (DME)	Y03	NF, COUNTY OWNED	N/A - No Claims	0.00%	0.00%
24	MEDICAL SUPPLY (DME)	ZA0	GROUP, PHYSICIANS	N/A - No Claims	0.00%	0.00%
24	MEDICAL SUPPLY (DME)	ZZ0	GROUP, OTHERS	N/A - No Claims	0.00%	0.00%
25	THERAPY SERVICES (OUTSIDE HH)	T00	OCCUPATIONAL THERAPISTS	Physician	0.09%	0.05%
25	THERAPY SERVICES (OUTSIDE HH)	T01	PHYSICAL THERAPISTS	Physician	0.22%	0.10%
25	THERAPY SERVICES (OUTSIDE HH)	T02	SPEECH/LANGUAGE THERAPISTS	Physician	0.24%	0.12%
28	NURSE SERVICES	S00	NURSE ANESTHETIST	Physician	0.26%	0.08%
28	NURSE SERVICES	S01	NURSE MIDWIVES	Physician	0.03%	0.01%
28	NURSE SERVICES	S02	NURSE PRACTITIONER	Physician	1.71%	0.75%
28	NURSE SERVICES	S05	PRIVATE DUTY NURSING	Other	0.24%	0.08%
28	NURSE SERVICES	S06	PHYSICIAN ASSISTANT	Physician	0.09%	0.04%
29	AMBULATORY SURGICAL CENTER	V00	AMBULATORY SURGICAL CENTERS	Physician, Outpatient	0.24%	0.13%
30	PERSONAL CARE SERVICES	W06	PERSONAL CARE ATTENDANT	N/A - No Claims	0.00%	0.00%
33	MENTAL HEALTH PRIVATE SERVICES	X02	SOCIAL WORKER	Physician	0.11%	0.05%
33	MENTAL HEALTH PRIVATE SERVICES	X03	PSYCHOLOGIST	Physician	0.05%	0.02%
33	MENTAL HEALTH PRIVATE SERVICES	X05	IDD COMMUNITY SUPPORT PROGRAM	Physician	0.00%	0.00%
33	MENTAL HEALTH PRIVATE SERVICES	X07	LICENSED PROFESIONAL COUNSELOR	Physician	0.10%	0.05%
33	MENTAL HEALTH PRIVATE SERVICES	X08	BOARD CERTIFD BEHAVIOR ANALYST	Physician	0.01%	0.01%
35	FREE STANDING DIALYSIS	Q01	KIDNEY DIALYSIS FREESTANDING	Outpatient	0.54%	0.17%
35	FREE STANDING DIALYSIS	Q02	KIDNEY DIALYSIS HOSPITAL BASED	Outpatient	0.00%	0.00%
61	PRESCRIBED PED EXT CARE CENTER	S07	PRESCRIBED PED EXT CARE CENTER	Physician	0.29%	0.18%
57	MYPAC SERVICES	X04	N/A	Physician	0.00%	0.26%
Percent of Allowed Eligible for 5% Assessment (A)					16.21%	6.95%
5% Assessment Adjustment (B) = 1 - (A) * 0.05					0.9919	0.9965

APPENDIX E

Summary of Program, Population, and Reimbursement Changes

This report assumes the reader is familiar with the State of Mississippi's MississippiCAN program, its benefits, and rate setting principles. The report was prepared solely to provide assistance to DOM to set SFY 2022 capitation rates for the MississippiCAN 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.

State of Mississippi Division of Medicaid
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Appendix E
Mississippi Division of Medicaid
Summary of Program, Population, and Reimbursement Changes

Change	Change Type	Effective Date	Impacted Rate Cells	Where Reflected in Rate Development
ASD Services	Program	July 1, 2019	SSI, Foster Care, MA Children, and Quasi-CHIP	Exhibit 2A
PDL Adjustment	Program	January 1, 2019, January 1, 2020, May 1, 2020, and January 1, 2021	All	Exhibits 1B, 1C, and 2A
Non-Facility 5% Assessment Application	Reimbursement	July 1, 2018	All	Exhibits 1A and 1B
OPPS Reimbursement	Reimbursement	July 1, 2018	All	Exhibits 1A, 1B, 1C, and 2A
Physician Administered Drug Reimbursement	Reimbursement	July 1, 2018	SSI and MA Adult (non-delivery)	Exhibit 2A
PRTF Services	Program	October 1, 2018	SSI, Foster Care, MA Children, Quasi-CHIP, and MYPAC	Exhibits 1B, 1C, 1D, and 2A
DRG Overpayments	Reimbursement	October 1, 2018	All	N/A
Usual and Customary Pharmacy Overpayments	Reimbursement	November 1, 2018	All	N/A
340B Pharmacy Overpayments	Reimbursement	January 1, 2019	All	Exhibit 1A
Physician Limit Expansion	Program	January 1, 2019	Excludes Children	Exhibit 2A
Dental and Orthodontic Reimbursement	Reimbursement	March 1, 2019	All	N/A
Zolgensma Carveout to FFS	Reimbursement	May 24, 2019	All	Exhibit 1A
ER Leveling Policy Adjustment	Reimbursement	July 1, 2019	All	Exhibit 1A
OP Dental Billing	Reimbursement	July 1, 2019	All	Exhibit 2A
Rx Limit Expansion	Program	July 1, 2019	Excludes Children	Exhibit 2A
Home Health Limit Expansion	Program	July 1, 2019	Excludes Children	Exhibit 2A
Quality Withhold	Program	July 1, 2019	All	Exhibit 4
IMD Services	Program	July 1, 2019	All	N/A
Rural Hospital Policy Adjuster	Program	July 1, 2019	All	N/A
Non-Emergency Transportation Contracting Change	Reimbursement	August 1, 2019	All	Exhibit 2A
Transition GME Payments to FFS	Reimbursement	October 1, 2019	All	Exhibit 2A
Increase Reimbursement for Emergency Transportation	Reimbursement	July 1, 2020	All	Exhibit 2A
COVID-19 Vaccine Administration Expense	Program	March 15, 2021	All	Exhibit 2A
SSI Children - COE Change	Program	July 1, 2021	SSI	Exhibit 1A
Removal of 5% Assessment	Reimbursement	July 1, 2021	All	Exhibit 2A
Dental Reimbursement Change	Reimbursement	July 1, 2021	All	Exhibit 2A

APPENDIX F

Capitation Rate Component Change Summary

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Appendix F.1		
Mississippi Division of Medicaid		
Projected SFY 2021 and SFY 2022 Exposures		
Cap Cell	SFY 2021 Exposures	SFY 2022 Exposures
Non-Newborn SSI / Disabled	762,254	759,634
Breast and Cervical Cancer	1,163	1,762
MA Adult	567,135	616,693
Pregnant Women	129,543	126,929
SSI / Disabled Newborn	6,173	4,920
Non-SSI Newborns 0 to 2 Months	83,431	75,599
Non-SSI Newborns 3 to 12 Months	260,307	243,840
Foster Care	90,204	81,472
MYPAC	8,194	9,765
MA Children	3,316,317	3,658,185
Quasi-CHIP	355,278	385,859
Total - All Cap Cells	5,580,000	5,964,659

Appendix F.2 Mississippi Division of Medicaid Components of SFY 2021 Capitation Rates							
Cap Cell	Medical Costs Excluding FSA PMPM	Non-Service Expenses PMPM ¹	Quality Withhold	FSA PMPM	Premium Tax PMPM on FSA	Total Capitation Rate Prior to Withhold	Total Capitation Rate after Withhold
Non-Newborn SSI / Disabled	\$1,052.26	\$126.84	(\$11.79)	\$136.15	\$4.21	\$1,319.46	\$1,307.67
Breast and Cervical Cancer	\$3,315.51	\$375.77	(\$36.91)	\$457.50	\$14.15	\$4,162.93	\$4,126.02
MA Adult	\$471.65	\$62.98	(\$5.35)	\$61.53	\$1.90	\$598.06	\$592.72
Pregnant Women	\$1,059.82	\$127.67	(\$11.87)	\$248.85	\$7.70	\$1,444.04	\$1,432.16
SSI / Disabled Newborn	\$8,324.00	\$926.65	(\$92.51)	\$2,340.47	\$72.39	\$11,663.50	\$11,571.00
Non-SSI Newborns 0 to 2 Months	\$1,882.26	\$218.13	(\$21.00)	\$614.18	\$19.00	\$2,733.57	\$2,712.57
Non-SSI Newborns 3 to 12 Months	\$249.32	\$38.53	(\$2.88)	\$30.36	\$0.94	\$319.14	\$316.27
Foster Care	\$555.79	\$72.23	(\$6.28)	\$128.34	\$3.97	\$760.33	\$754.05
MYPAC	\$3,732.45	\$421.63	(\$41.54)	\$189.61	\$5.86	\$4,349.55	\$4,308.01
MA Children	\$184.10	\$31.35	(\$2.15)	\$16.53	\$0.51	\$232.48	\$230.33
Quasi-CHIP	\$184.08	\$31.35	(\$2.15)	\$13.84	\$0.43	\$229.69	\$227.54
Total - All Cap Cells¹							
Using SFY 2021 Exposures	\$401.56	\$55.27	(\$4.57)	\$56.97	\$1.76	\$515.56	\$510.99
Using SFY 2022 Exposures	\$385.74	\$53.53	(\$4.39)	\$53.18	\$1.64	\$494.10	\$489.71
Total Expenditures							
Using SFY 2021 Exposures	\$2,240,692,366	\$308,405,304	(\$25,490,977)	\$317,886,793	\$9,831,550	\$2,876,816,013	\$2,851,325,037
Using SFY 2022 Exposures	\$2,300,822,205	\$319,289,720	(\$26,201,119)	\$317,209,277	\$9,810,596	\$2,947,131,797	\$2,920,930,678

¹ Excludes exposures for the delivery kick payment cap cell.

² "Non-Benefit Expenses PMPM" include margin, administrative costs, and premium tax prior to MHAP. Premium taxes for both the FSA and TPP are included in separate columns.

Appendix F.3 Mississippi Division of Medicaid Components of SFY 2022 Capitation Rates							
Cap Cell	Medical Costs Excluding FSA PMPM	Non-Service Expenses PMPM ¹	Quality Withhold	FSA PMPM	Premium Tax PMPM on FSA	Total Capitation Rate Prior to Withhold	Total Capitation Rate after Withhold
Non-Newborn SSI / Disabled	\$1,068.13	\$132.57	(\$12.01)	\$123.05	\$3.81	\$1,327.55	\$1,315.55
Breast and Cervical Cancer	\$3,424.36	\$399.83	(\$38.24)	\$413.08	\$12.78	\$4,250.04	\$4,211.80
MA Adult	\$437.09	\$60.99	(\$4.98)	\$50.55	\$1.56	\$550.19	\$545.21
Pregnant Women	\$1,059.37	\$131.58	(\$11.91)	\$228.56	\$7.07	\$1,426.57	\$1,414.67
SSI / Disabled Newborn	\$7,861.86	\$903.16	(\$87.65)	\$1,988.46	\$61.50	\$10,814.98	\$10,727.33
Non-SSI Newborns 0 to 2 Months	\$1,875.04	\$224.10	(\$20.99)	\$563.07	\$17.41	\$2,679.62	\$2,658.63
Non-SSI Newborns 3 to 12 Months	\$248.70	\$39.62	(\$2.88)	\$27.45	\$0.85	\$316.62	\$313.73
Foster Care	\$609.85	\$80.59	(\$6.90)	\$128.41	\$3.97	\$822.82	\$815.91
MYPAC	\$3,805.00	\$443.00	(\$42.48)	\$196.87	\$6.09	\$4,450.96	\$4,408.48
MA Children	\$189.73	\$32.93	(\$2.23)	\$15.04	\$0.47	\$238.17	\$235.94
Quasi-CHIP	\$191.61	\$33.15	(\$2.25)	\$12.33	\$0.38	\$237.47	\$235.22
Total - All Cap Cells¹							
Using SFY 2021 Exposures	\$404.38	\$57.28	(\$4.62)	\$51.33	\$1.59	\$514.58	\$509.96
Using SFY 2022 Exposures	\$388.51	\$55.48	(\$4.44)	\$47.88	\$1.48	\$493.36	\$488.92
Total Expenditures							
Using SFY 2021 Exposures	\$2,256,455,506	\$319,632,212	(\$25,760,877)	\$286,416,052	\$8,858,228	\$2,871,361,997	\$2,845,601,120
Using SFY 2022 Exposures	\$2,317,339,863	\$330,928,546	(\$26,482,684)	\$285,603,168	\$8,833,088	\$2,942,704,665	\$2,916,221,981

¹ "Non-Benefit Expenses PMPM" include margin, administrative costs, and premium tax prior to MHAP. Premium taxes for each component of the MHAP are included in separate columns.

APPENDIX G

CMS Rate Setting Checklist

This report assumes the reader is familiar with the State of Mississippi's MississippiCAN program, its benefits, and rate setting principles. The report was prepared solely to provide assistance to DOM to set SFY 2022 capitation rates for the MississippiCAN 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.

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CMS Rate Setting Checklist

This section of the report lists each item in the November 10, 2014 CMS checklist and discusses how DOM addresses each issue and / or directs the reader to other parts of this report. CMS uses the rate setting checklist to review and approve a state's Medicaid capitation rates.

AA.1.0 – Overview of Rates Being Paid under the Contract

The MississippiCAN state fiscal year (SFY) 2022 capitation rates are developed using Mississippi FFS Medicaid data, CCO encounter data, and CCO financial reporting data for a comparable population to that enrolled in CCOs. DOM calculates state-set rates by rate category on a statewide basis with area adjustments based on an enrolled member's county of residence.

AA.1.1 – Actuarial Certification

Please refer to Appendix I for our Actuarial Certification of the SFY 2022 capitation rates. The SFY 2022 MississippiCAN capitation rates have been 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.

AA.1.2 – Projection of Expenditures

Exhibit 12 includes a projection of total expenditures and Federal-only expenditures based on projected SFY 2022 CCO enrollment and the SFY 2022 capitation rates. The fiscal impact of the SFY 2022 capitation rates is \$3.238 billion, with \$2.636 billion in federal funding. This is an estimated \$0.193 billion increase in federal funding over capitation rates for SFY 2021.

AA.1.3 – Risk Contracts

The MississippiCAN program meets the criteria of a risk contract.

AA.1.4 – Modifications

The SFY 2022 rates documented in this report are the preliminary capitation rates for the SFY 2022 MississippiCAN contracts. They will need to be updated to address certain items outlined in the rate narrative.

Note: There is no AA.1.5 on the Rate Setting Checklist

AA.1.6 – Limit on Payment to Other Providers

It is our understanding that no payments are made to providers other than those made by participating CCOs for services available under the contract.

AA.1.7 – Risk and Profit

Targeted margin is considered as part of final rate development.

AA.1.8 – Family Planning Enhanced Match

DOM claims an enhanced match for family planning services for the populations covered under this program. The PMPM value of services included in the MississippiCAN capitation rates are included in Exhibit 11.

AA.1.9 – Indian Health Service (IHS) Facility Enhanced Match

DOM claims an enhanced match for Indian Health Services (IHS) for the populations covered under this program. The PMPM value of services included in the MississippiCAN capitation rates are included in Exhibit 11.

AA.1.10 – Newly Eligible Enhanced Match

Mississippi did not expand eligibility as part of the Affordable Care Act.

AA.1.11 – Retroactive Adjustments

The SFY 2022 rates documented in this report are the preliminary capitation rates for the SFY 2022 MississippiCAN contracts. They will need to be updated to address certain items outlined in the rate narrative.

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CMS Rate Setting Checklist

AA.2.0 – Based Only Upon Services Covered Under the State Plan

The base data utilization and cost data is Medicaid FFS, CCO encounter, and CCO financial reporting data only for populations that are eligible to enroll in a CCO.

Only State Plan services that are covered under the MississippiCAN contract have been included in the rate development.

AA.2.1 – Provided Under the Contract to Medicaid-eligible Individuals

Data for FFS populations not eligible to enroll in the MississippiCAN program has been excluded from the base data used in rate development. Please refer to Appendices A and B for details.

AA.2.2 – Data Sources

The base year utilization and cost data is calendar year (CY) 2018 and CY 2019 CCO encounter and financial reporting data for all populations with the exception of the MYPAC rate cell. Q1 to Q3 2018 FFS and CY 2019 encounter data is used as the base period data for the MYPAC rate cell.

AA.3.0 – Adjustments to Base Year Data

All adjustments to the base data are discussed in Section III. In addition, each item in the checklist is addressed in items AA.3.1 to AA.3.17 below.

AA.3.1 – Benefit Differences

The base data used to calculate the capitation rates has been adjusted to only include services covered under the CCO contracts.

AA.3.2 – Administrative Cost Allowance Calculations

The CCO capitation rates include explicit administrative allowances by rate cell. Please see Section IV for more details.

AA.3.3 – Special Populations' Adjustments

The base data used to calculate the capitation rates is consistent with the CCO population and no special population adjustment was necessary.

AA.3.4 – Eligibility Adjustments

The base CCO financial reporting data and encounter data only reflect experience for time periods where members were enrolled in a CCO. FFS experience was limited to reflect only individuals that will be eligible for MississippiCAN. See Appendix A for a discussion of eligibility criterion applied.

AA.3.5 – Third Party Liability (TPL)

The CCOs are responsible for the collection of any TPL recoveries for all services. The capitation rates include a 0.999 adjustment to reflect additional TPL recoveries that are not reflected in the base year encounter data, consistent with recent DOM experience. The capitation rates also include a 0.992 adjustment to reflect additional TPL recoveries that are not reflected in the Q1 to Q3 2018 FFS data underlying the MYPAC rate cell, consistent with recent DOM experience.

AA.3.6 – Indian Health Care Provider Payments

The CCOs are responsible for the entirety of the Indian Health Care payments, which are fully reflected in encounters.

AA.3.7 – DSH Payments

DSH payments will continue to be paid outside of capitation rates for members enrolled in MississippiCAN.

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CMS Rate Setting Checklist

AA.3.8 – FQHC and RHC Reimbursement

DOM has chosen to include the per-encounter FQHC and RHC reimbursement in the MississippiCAN capitation rates to provide a steadier cash flow to the RHCs and FQHCs that serve the MississippiCAN population. The CCOs are expected to reimburse FQHCs and RHCs at DOM's per-encounter rates. DOM will monitor the utilization of services at FQHCs and RHCs under MississippiCAN to ensure services are not diverted from FQHCs and RHCs to other providers.

AA.3.9 – Graduate Medical Education (GME)

GME costs were historically included in the DRG payment methodology for inpatient services. Effective October 1, 2019, all GME payments are made outside of MississippiCAN capitation rates by DOM. An adjustment is included in rate development to remove these costs since they are included in the base period data.

AA.3.10 – Copayments, Coinsurance, and Deductibles in Capitated Rates

The MississippiCAN program does not include member cost sharing. All FFS member cost sharing amounts were added back into the capitation rate calculation.

AA.3.11 – Medical Cost / Trend Inflation

The utilization and unit cost trends used to project expenditures from the base period to SFY 2022 are based on projections of future medical cost inflation.

We are comfortable that the trend rates represent an appropriate expected change in per capita cost between the base period and SFY 2022.

AA.3.12 – Utilization Adjustments

Utilization trend is included in AA.3.11. In addition, a directed fee schedule adjustment is applied for inpatient and outpatient services to provide total directed payments of \$285.6 million for SFY 2022 as a component of the Mississippi Hospital Access Program (MHAP).

AA.3.13 – Utilization and Cost Assumptions

The SFY 2022 capitation rates will use the CDPS + Rx risk adjuster to risk adjust the Non-Newborn SSI / Disabled, MA Adult, MA Children, and Quasi-CHIP rates for each participating CCO. CDPS + Rx uses beneficiaries' medical and prescription drug claim information to develop a risk score for each individual. A custom risk adjustment model was developed for the Foster Care rate cell using information from members' enrollment information. Section IV: Step 6 explains how the risk scores are calculated and applied to the base capitation rate to calculate separate rates for each participating CCO reflecting their member population.

AA.3.14 – Post-Eligibility Treatment of Income (PETI)

Not applicable.

AA.3.15 – Incomplete Data Adjustment

The capitation rates include an adjustment to reflect Incurred but Not Reported (IBNR) claims. Please refer to Section III: Step 1 for more information on the development of these adjustment factors.

Please see Section III: Step 1 for a discussion of the comparison of encounter data to financial reporting and resulting adjustments applied.

AA.3.16 – Primary Care Rate Enhancement

No adjustment was made to reimbursement for primary care services, as DOM's reimbursement methodology for these services is consistent between the base period and SFY 2022.

AA.3.17 – Health Homes

Not applicable.

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CMS Rate Setting Checklist

AA.4.0 – Establish Rate Category Groupings

Please refer to Appendix A of the report.

AA.4.1 – Eligibility Categories

Please refer to Appendix A of the report. Rates vary by broad eligibility category.

AA.4.2 – Age

Please refer to Appendix A of the report. Rates generally do not vary by age beyond differences for newborns, children, and adults. Age and gender, however, are components of the CDPS + Rx risk adjuster.

AA.4.3 – Gender

Please refer to Appendix A of the report. Rates do not vary by gender. Age and gender, however, are components of the CDPS + Rx risk adjuster.

AA.4.4 – Locality / Region

Please refer to Appendix A of this report. Rates vary across three regions.

AA.4.5 – Risk Adjustments

The SFY 2022 capitation rates will use the CDPS + Rx risk adjuster to risk adjust the Non-Newborn SSI / Disabled, MA Adult, MA Children, and Quasi-CHIP rates for each participating CCO. CDPS + Rx uses beneficiaries' medical and prescription drug claim information to develop a risk score for each individual. A custom risk adjustment model was developed for the Foster Care rate cell using information from members' enrollment information. Section IV: Step 6 explains how the risk scores are calculated and applied to the base capitation rate to calculate separate rates for each CCO reflecting their member population. Risk adjustment will be budget-neutral to DOM. This risk sharing mechanism is developed in accordance with generally accepted actuarial principles and practices.

AA.5.0 – Data Smoothing

We did not perform any data smoothing.

AA.5.1 – Cost-Neutral Data Smoothing Adjustment

We did not perform any data smoothing.

AA.5.2 – Data Distortion Assessment

Our review of the base CCO financial reporting and encounter data did not detect any material distortions or outliers.

AA.5.3 – Data Smoothing Techniques

Area adjustments of statewide rates are incorporated into the rate structure to account for potential variation in regional enrollment between CCOs.

AA.5.4 – Risk Adjustments

The SFY 2022 capitation rates will use the CDPS + Rx risk adjuster to risk adjust the Non-Newborn SSI / Disabled, MA Adult, MA Children, and Quasi-CHIP rates for each participating CCO. CDPS + Rx uses beneficiaries' medical and prescription drug claim information to develop a risk score for each individual. A custom risk adjustment model was developed for the Foster Care rate cell using information from members' enrollment information. Section IV: Step 6 explains how the risk scores are calculated and applied to the base capitation rate to calculate separate rates for each CCO reflecting their member population. Risk adjustment will be budget-neutral to DOM. This risk sharing mechanism is developed in accordance with generally accepted actuarial principles and practices.

AA.6.0 – Stop Loss, Reinsurance, or Risk Sharing Arrangements

The program includes a minimum MLR requirement of 87.5% of revenue. The sum of medical expenses and health care quality initiative (HCQI) expenses, must meet or exceed 87.5% of revenue. Revenue for premium taxes and HIF

APPENDIX G

CMS Rate Setting Checklist

are excluded from the MLR calculation. If the 87.5% threshold is not met, CCOs return revenue to DOM until the threshold is met. This mechanism has been developed in accordance with applicable regulation and generally accepted actuarial principles and practices.

AA.6.1 – Commercial Reinsurance

DOM does not require entities to purchase commercial reinsurance.

AA.6.2 – Stop-Loss Program

Please see AA.6.0.

AA.6.3 – Risk Corridor Program

Capitation rates for SFY 2022 will be subject to a risk corridor program. The risk corridor is designed to protect against uncertainty in the capitation rates due to COVID-19. Section IV: Step 8 describes how the risk corridor will be applied in SFY 2022 and the calculation of the risk corridor settlements.

AA.7.0 – Incentive Arrangements

Not applicable.

AA.7.1 – Electronic Health Records (EHR) Incentive Payments

Not applicable.

APPENDIX H

CMS Managed Care Rate Setting Guide Response

This report assumes the reader is familiar with the State of Mississippi's MississippiCAN program, its benefits, and rate setting principles. The report was prepared solely to provide assistance to DOM to set SFY 2022 capitation rates for the MississippiCAN 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.

State of Mississippi Division of Medicaid
SFY 2022 MississippiCAN Preliminary Rate Calculation and Certification

April 21, 2021

APPENDIX H

Responses to 2020-2021 CMS Managed Care Rate Development Guide

I. RESPONSES TO 2020-2021 CMS MANAGED CARE RATE DEVELOPMENT GUIDE

SECTION I. MEDICAID MANAGED CARE RATES

1. General Information

- Rate period – This report documents and certifies capitation rates in effect from July 1, 2021 to June 30, 2022 (SFY 2022).
- Actuarial rate certification – See Appendix I.
- Final capitation rates – See Exhibit 4.
- Program descriptions – Please refer to the following sections:
 - Section II – MississippiCAN program background
 - Appendix A – Rate cell definitions
 - Section IV: Step 4 – Background on the quality withhold applied in SFY 2022
- Medical Loss Ratio (MLR) – The program includes a minimum MLR requirement of 87.5% of revenue. The sum of medical expenses, directed payments, and health care quality initiative (HCQI) expenses, must meet or exceed 87.5% of revenue. Revenue for premium taxes and HIF are excluded from the MLR calculation. If the 87.5% threshold is not met, CCOs return revenue to DOM until the threshold is met. This mechanism has been developed in accordance with applicable regulation and generally accepted actuarial principles and practices.
- Federal Medical Assistance Percentage (FMAP) – DOM receives an enhanced FMAP for family planning services, Indian health services, COVID-19 vaccination administration fees, and Quasi-CHIP members that prior to the Affordable Care Act were covered under the CHIP program. Any differences in capitation rates according to covered populations are based on valid rate development standards and not based on the FMAP associated with the covered populations.
- Cross-subsidies – Rate groups do not cross-subsidize other rate groups.
- Rate change from SFY 2021 capitation rates – See Section I.
- Known rate amendments – The capitation rates included in this report will require recertification to account for the following:
 - CCO specific MHAP and MAPS payments made to providers. This initial certification includes a PMPM estimate of these amounts across all CCOs.
 - As noted in Section IV: Step 1, the acuity adjustment included in the preliminary rates will be updated based upon actual enrollment in the applicable rate cells.
 - We anticipate that these adjustments will be made at the same time and an amendment will be submitted by February 2023.

2. Data

- Service data sources – See Appendix B.
- Validation and quality adjustments – See Section III for encounter data and financial reporting validation.
- Changes in data sources – Base period FFS, CCO encounter, and CCO financial data was updated from calendar year (CY) 2017 and CY 2018 to CY 2018 and CY 2019.
- Potential Future Data improvements – We anticipate no major enhancements to data collection in the future.
- Other data adjustments – See Appendix B for descriptions of reallocations of financial data using encounter data relationships for subcapitated claims and maternity costs. See Section III: Step 1 for a description of

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Responses to 2020-2021 CMS Managed Care Rate Development Guide

adjustments applied to encounter data. No adjustments were applied to the data other than those outlined in that section.

- Blending of data sources – See Section III: Step 4.
- Data reliance – See Appendix J.

3. Projected Benefit Costs and Trends

- Assumptions used to project benefit costs do not vary based on the rate of federal financial participation associated with the covered populations.
- Projected benefit cost trends:
 - Annual trend assumptions – Section III: Steps 2 and 3 outline the trend assumptions used from CY 2018 to CY 2019 for populations using two years of claims experience. Section IV: Step 1 outlines the trend assumptions from CY 2019 to the rating period. Negative unit cost trends for CY 2019 to the rating period for inpatient hospital services, outpatient hospital services, and physician services shown in Table 16 are due to decreases in fee schedules over time.

Additionally, negative utilization and unit cost trend assumptions for pharmacy services are shown in Tables 10, 21, 22, and 23. These trends reflect recent historical patterns in pharmacy experience.

- Reimbursement changes – Section IV: Step 1 describes the reimbursement changes between the base period and rating period.
- In-lieu-of services – CCOs do not provide any material amounts of in-lieu-of services.
- IMD services – IMD services are covered beginning in SFY 2020. However, material amounts of in-lieu of services are not anticipated to be provided through IMDs. Adjustments were made to the base period data for IMD services since they were not covered during the base period in Section III: Step 1 of the capitation rate report.
- Mental Health Parity and Addiction Equity Act – No additional services were necessary to add to the program to achieve compliance with the act.
- Retrospective eligibility periods – No consideration for retroactive eligibility periods is included in the base data or rate development, because such services are covered under FFS.
- Overpayments to providers – Section III, Step 1 summarizes recoveries for overpayments to providers by CCOs and how these recoveries are accounted for when summarizing the base data used to develop SFY 2022 capitation rates.
- Changes in covered services and benefits:
 - Effective January 1, 2019, limits on physician visits are increased from 12 visits to 16 visits. Please see Section III: Steps 2 and 3 for a description of how these services are included in capitation rates.
 - Effective July 1, 2019, limits on pharmacy scripts will increase from 5 scripts per member per month to 6 scripts per member per month and limits on home health services will increase from 25 visits to 36 visits. Please see Section IV: Step 1 for a description of how these services are included in capitation rates.
 - Starting January 2017, MississippiCAN began offering additional screening and treatment services for MississippiCAN members with autism spectrum disorder (ASD). However, utilization of those services has been slow to materialize. An adjustment is included in SFY 2022 capitation rates to reflect expected additional utilization of these services due to increases in provider fees. Please see Section IV: Step 1 for a description of this adjustment.
 - Effective October 1, 2018, stays in psychiatric residential treatment facilities (PRTF) are covered as part of the MississippiCAN program. Please see Section III: Steps 2 and 3 for a description of how these services are included in capitation rates.

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Responses to 2020-2021 CMS Managed Care Rate Development Guide

- Other adjustments:
 - Population changes adjustments were applied to reflect the following:
 - Population acuity adjustment due to reduction in membership in the MA Adult, MA Children and Quasi-CHIP rate cells between the base period and rating period, as documented in Section IV: Step 1.
 - Some children in the Non-Newborn SSI / Disabled rate cell were historically moved into FFS after a PRTF stay. Starting in SFY 2022, these individuals will remain in the MississippiCAN program. An adjustment was applied in Section III: Step 1 to reflect this population change.
 - Managed care savings were applied to the FFS experience used to develop the PRTF adjustments as documented in Section IV: Step 2 and 3.
 - Mississippi Hospital Access Program (MHAP) Fee Schedule Adjustment (FSA) and Quality Incentive Payment Pool (QIPP) – See Section IV: Step 5 for a discussion of the components of MHAP.
 - Area relativity factors – Please see Section IV: Step 3 for a discussion of the area factor development for the North, Central, and South regions.
- Final projected benefit costs – See Exhibit 4.
- Conditions of any litigation to which the state is subjected – Not applicable; no impact on rates.

4. Special Contract Provisions Related to Payment

- Incentive Arrangements – Not applicable.
- Withhold Arrangements – A quality withhold will be implemented for the SFY 2022 capitation rates. Please see Section IV: Step 4 for a description of the quality withhold.
- Risk sharing
 - The program includes a minimum MLR requirement of 87.5% of revenue. The sum of medical expenses, directed payments, and health care quality initiative (HCQI) expenses, must meet or exceed 87.5% of revenue. Revenue for premium taxes and HIF are excluded from the MLR calculation. If the 87.5% threshold is not met, MCOs return revenue to DOM until the threshold is met. This mechanism has been developed in accordance with applicable regulation and generally accepted actuarial principles and practices.
 - For SFY 2022 the program is subject to a risk corridor. Please see Section IV: Step 8 for details of the implementation of this risk corridor.
- Delivery System and Provider Payment Initiatives – Not applicable.
- Pass Through Payments – Not applicable.

5. Projected Non-Benefit Costs

- Assumptions used to project non-benefit costs do not vary based on the rate of federal financial participation associated with the covered populations.
- Administrative cost data, projected costs, premium tax and margin – See Section IV: Step 2.
- Health Insurer Fee (HIF) treatment – Not applicable for SFY 2022.

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Responses to 2020-2021 CMS Managed Care Rate Development Guide

6. Risk Adjustment and Acuity Adjustments

- Risk adjustment – See Section IV: Step 6. During the development of the custom Mississippi risk adjustment model we measured an R-squared value of 11% for MA Children and Quasi-CHIP, 17% for MA Adults, and 26% for Non-Newborn SSI / Disabled. These weights were used in the most recent risk adjustment results (effective for January 2021 to June 2021) which resulted in risk scores that ranged from 0.93 to 1.05 depending on CCO, region and rate cell.

A custom risk adjustment model was developed for the Foster Care rate cell using information from members' enrollment information. This model was used in the most recent risk adjustment results (effective for January 2021 to June 2021) which resulted in risk scores that ranged from 0.82 to 1.18 depending on CCO, region and rate cell.

- Acuity Adjustments – Please see Section IV: Step 1 for a description of the population acuity adjustments applied to the MA Adult, MA Children, and Quasi-CHIP rate cells.

SECTION II. MEDICAID MANAGED CARE RATES WITH LONG-TERM SERVICES

This section does not apply as MississippiCAN is not a long-term care service program.

SECTION III. NEW ADULT POPULATION CAPITATION RATES

This section does not apply as the state of Mississippi has not expanded coverage as a result of the Affordable Care Act.

APPENDIX I

Actuarial Certification of SFY 2022 MississippiCAN Capitation Rates

This report assumes the reader is familiar with the State of Mississippi's MississippiCAN program, its benefits, and rate setting principles. The report was prepared solely to provide assistance to DOM to set SFY 2022 capitation rates for the MississippiCAN 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.

State of Mississippi Division of Medicaid
SFY 2022 MississippiCAN Preliminary Rate Calculation and Certification

April 21, 2021



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Senior Consulting Actuary

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April 21, 2021

**Mississippi Division of Medicaid
Capitated Contracts Ratesetting
Actuarial Certification
SFY 2022 MississippiCAN 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 Mississippi Coordinated Access Network (MississippiCAN) coordinated care capitation rates for July 1, 2021 to June 30, 2022 (SFY 2022) for filing with the Centers for Medicare and Medicaid Services (CMS). 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, 438.5, 438.6, and 438.7
- CMS "Appendix A, PAHP, PIHP, and MCO Contracts Financial Review Documentation for At-risk Capitated Contracts Ratesetting dated November 10, 2014"
- 2020 to 2021 Medicaid Managed Care Rate Development Guide
- Actuarial Standard of Practice 49 and other applicable standards of practice

I examined the actuarial assumptions and actuarial methods used in setting the capitation rates for SFY 2022 dated April 21, 2021 and accompanying this certification.

To the best of my information, knowledge, and belief, for the SFY 2021 period, the capitation rates offered by DOM are in compliance with the relevant requirements of 42 CFR 438.4. The attached actuarial report 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. This certification includes all prospective health plan payments, as well as the components of the MHAP and MAPS programs that will be settled retrospectively.

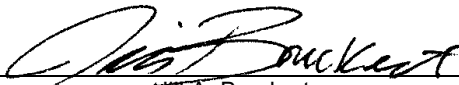
In making my opinion, I relied upon the accuracy of the underlying claim and eligibility data records and other information prepared by DOM and participating CCOs. I did not audit the data and calculations, but did review them for reasonableness and consistency and did not find material defects. In other 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 J of the rate report issued on April 21, 2021.

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 MississippiCAN program, Medicaid coordinated care programs, 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.



Jill A. Bruckert
Member, American Academy of Actuaries
Senior Consulting Actuary
April 21, 2021

APPENDIX J

Data Reliance Letter

This report assumes the reader is familiar with the State of Mississippi's MississippiCAN program, its benefits, and rate setting principles. The report was prepared solely to provide assistance to DOM to set SFY 2022 capitation rates for the MississippiCAN 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.

State of Mississippi Division of Medicaid
SFY 2022 MississippiCAN Preliminary Rate Calculation and Certification

April 21, 2021



MISSISSIPPI DIVISION OF
MEDICAID

April 20, 2021

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

Re: Data Reliance for Actuarial Certification of SFY 2022 MississippiCAN Capitation Rates

Dear Jill:

I, Jennifer Wentworth, Deputy Administrator for Finance, 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 capitation rates was prepared under my direction and, to the best of my knowledge and belief, is accurate, complete, and consistent with the data used to develop the capitation rates. Capitation rates are effective July 1, 2021 to June 30, 2022.

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 October 2019
 - b. Encounter claims through December 2020
 - c. Medicaid eligibility through December 2020
2. Data from DOM's vendor Myers and Stauffer:
 - a. Detailed encounter claim status reports, including identification of duplicative or voided claims
3. Supporting documentation provided by DOM:
 - a. Documentation of historical FFS third party liability (TPL) recoveries
 - b. Documentation of \$2.7 million of TPL recoveries by DOM for MississippiCAN claims incurred in calendar year (CY) 2019
 - c. Program and / or reimbursement changes as a result of SB 2799 passed March 30, 2021
 - i. Removal of 5% provider assessment effective July 1, 2021
 - ii. Preventative and diagnostic dental reimbursement increase of 5% effective July 1, 2021, achieved through the removal of the 5% provider assessment
 - iii. No reimbursement changes after July 1, 2021, unless federally required
 - d. State fiscal year (SFY) 2022 Mississippi Hospital Access Program (MHAP) total funding amount of \$533,110,956 along with splits for a quality incentive payment pool (QIPP) amount of \$247,507,788, the inpatient fee schedule adjustment (FSA) amount of

- \$199,922,218, and the outpatient FSA amount of \$85,680,950 to be used in capitation rate development
- e. SFY 2022 Mississippi Medicaid Access to Physician Services (MAPS) funding amount of \$38,783,002
 - f. Quality withhold parameters for SFY 2022
 - g. Estimated increase in Autism Spectrum Disorder (ASD) services costs for SFY 2022 compared to CY 2019 due to the ramp up of services after the fee schedule change
 - h. Logic for identifying members eligible for the MYPAC rate cell
 - i. Logic for identifying psychiatric residential treatment facility (PRTF) claims to be included for MississippiCAN members and estimated 10% savings due to the inclusion in MississippiCAN
 - j. Logic for identifying Institution for Mental Disease (IMD) facilities
 - k. Files summarizing claims for Hospital Presumptive Eligibility (HPE) newborns
 - l. Files summarizing individuals in the Non-Newborn SSI / Disabled rate cell moved to FFS due to a PRTF stay in CY 2019
 - m. Inpatient DRG, outpatient APC, and professional fee re-pricing impacts for July 2019, July 2020, and July 2021 prepared by Conduent
 - n. Estimate of the impact of OP dental reimbursement changes provided by Conduent
 - o. OPPS reimbursement methodology changes for July 2018, including the removal of the 5% provider assessment on outpatient hospital services
 - p. Detailed mapping of services and providers previously eligible for the 5% assessment
 - q. Capitation reports showing monthly membership through February 2021
 - r. PDL change analysis files and supporting exhibits provided by Change Health Care
 - s. MLR reports for CY 2018 through September 2020
 - t. List of products reimbursed as clinician administered drugs and implantable drug system devices (CADDs)
 - u. Confirmation DOM is carving costs related to Zolgensma out of MississippiCAN for SFY 2022 and no other drugs are expected to be carved out of MississippiCAN for SFY 2022
 - v. Estimated costs for graduate medical education (GME) in SFY 2018, SFY 2019, and

Jill A. Bruckert
Milliman, Inc.
April 20, 2021
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January to September 2019

- w. Risk corridor parameters for SFY 2022
- x. Estimated fee schedule increase for the ambulance reimbursement change effective July 1, 2020
- y. Fee schedule for COVID-19 vaccine administration costs for SFY 2022 and vaccine uptake rates by population
- z. Anticipated end of the COVID-19 public health emergency on December 31, 2021
- aa. File summarizing claims impacted by an emergency room (ER) leveling policy provided by the relevant CCO
- bb. 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 data. Milliman relied on Myers and Stauffer's review of encounter data for duplicative or voided claims. Milliman relied on the CCOs to provide accurate CY 2018 and CY 2019 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.



Jennifer Wentworth
Deputy Administrator for Finance
April 20, 2021

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