STATE OF TEXAS
MEDICAID MANAGED CARE
STAR HEALTH PROGRAM RATE SETTING
STATE FISCAL YEAR 2022

Prepared for:
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I. Introduction

Rudd and Wisdom, Inc. has been retained by the Texas Health and Human Services Commission (HHSC) to develop a fiscal year 2022 (FY2022, September 2021 through August 2022) premium rate for the STAR Health program. STAR Health is a managed health care program for Foster Care clients in Texas implemented on April 1, 2008. A single managed care organization, Superior Health Plan (Superior), covers this population in all 254 counties (statewide). This report presents the rating methodology and assumptions used in developing the FY2022 premium rate.

Rudd and Wisdom has provided actuarial services to the Texas Medicaid program for over 30 years. We have participated in the state's managed care rating process since its inception in 1993. We have worked closely with HHSC staff in developing the FY2022 STAR Health premium rate.

Rudd and Wisdom has relied on the following data sources as provided by HHSC and Superior, the managed care organization that administers the STAR Health program.

- Monthly STAR Health enrollment for the period September 2012 through March 2021 with a projection through August 2022. These enrollment figures were provided by HHS System Forecasting staff.

- Claim lag reports provided by Superior for the period September 2017 through February 2021. These reports include monthly paid claim amounts by month of service.

- Information provided by Superior on high volume claimants during the experience period.

- Financial Statistical Reports (FSR) from the health plan for FY2017, FY2018, FY2019, FY2020 and the first six months of FY2021. The FSR contains detailed information regarding monthly enrollment, revenue, incurred claims and administrative expenses, as reported by the HMO. These reports are prepared by the health plan and are audited by an external audit organization. A health plan that participates in multiple programs and/or service areas submits a separate FSR for each individual area and program combination.

- Information from Superior regarding current and projected reinsurance premium rates.

- Information from Superior regarding current and projected payment rates for certain capitated services, such as dental and radiology.

    - Subcapitated services make up approximately 4.5% of total plan cost and are primarily dental services. Information about these arrangements was provided by Superior and verified with the audited FSRs. These items were reviewed for reasonableness by comparing the reported expense amounts to those expenses in other programs along with the historical dental expenditures within the STAR Health program.

- Information from both HHSC and Superior regarding recent changes in covered services and provider reimbursement under the Medicaid program.

- Information provided by HHSC regarding the expected impact of FY2020, FY2021 and FY2022 Medicaid provider reimbursement rate changes.

- Information provided by HHSC regarding FY2019 and FY2020 health plan claims cost by type of service for certain services. This information was obtained from the encounter database.

- Current (FY2021) STAR Health premium rate.

After accumulating all of the information to be used in the rate setting process, a comparison of the various sources of claims data was performed to check for consistency. We compared (i) the claim lag reports provided by Superior, (ii) the claim amounts reported in the FSRs and (iii) the claim amounts in the encounter data files. The three data sources are compared to ensure consistent results such that the three are considered interchangeable in aggregate. Although interchangeable in total, each data source has a unique role in the analysis. FSR data provides high level summary information of claims data, subcapitated expenses, reinsurance expenses and administrative costs. In some cases, this information is available at the risk group level while for others it is only provided as an aggregated total. MCO summary reports provide HHSC-specified data points at a more granular level such as subcapitated expenses by service, claim lag data by type of service, other medical expenses and large claimant information. The detail encounter data provides claim data at the most granular level including information for individual claims such as provider, procedure code, diagnostic information, etc. The use of these multiple data sources allows for a dynamic, flexible rating model that is not constrained to the data limitations of a single source.

All data requested by the actuary was provided by HHSC and the participating MCO. Although the above data was reviewed for reasonableness, Rudd and Wisdom did not audit the data.

In addition to the review for reasonableness performed by Rudd and Wisdom, HHSC employs the Institute for Child Health Policy (ICHP) as an External Quality Review Organization (EQRO). ICHP reviews the detail encounter data and provides certification of the data quality. Below is an excerpt from their data certification report:

The EQRO considers the required data elements for all MCO-SA combinations in all programs to be accurate and complete, meeting the following components of Texas Government Code § 533.0131 for data certification purposes:

1. *The encounter data for the most recent measurement year are complete, accurate, and reliable.*
2. *No statistically significant variability in the encounter data is attributable to incompleteness, inaccuracy, or other deficiency as compared to equivalent data for similar populations and when evaluated against professionally accepted standards.*

Based on the review of the data by the EQRO, HHSC and Rudd and Wisdom, we have concluded that all data sources are consistent, complete and accurate. It is our opinion that the data collected for the rate development is high quality and we have no concerns over the availability or applicability to the FY2022 rate development. The accumulation of data sources noted above has

been assigned full credibility. Given the history of managed care data available for the STAR Health program the rate development is based exclusively on managed care data.

II. Overview of the Rate Setting Methodology

This report details the development of the medical, prescription drug and non-emergency medical transportation (NEMT) components of the STAR Health premium rate. The three components are developed separately but follow similar methodologies in their calculations.

The actuarial model used to derive the FY2022 STAR Health premium rate relies primarily on historical health plan experience. The historical claims experience for the program was analyzed and estimates for the base period were developed. Due to the significant impact of COVID-19 and the public health emergency (PHE) we have made adjustments to the standard base periods typically used in prior rate settings. Beginning March 2020, all Medicaid programs experienced significant declines in the average cost due to large scale shutdowns and deferral of services. As a result, we have determined that the March 2020 through August 2020 data is not indicative of future cost patterns. The base period for all rating components has been defined as March 2019 through February 2020 which is the most recent twelve-month period which includes claims not impacted by COVID-19 and the subsequent PHE. Estimates of the base period included an evaluation of incurred but unpaid claims (IBNR). Given the extensive runout beyond the base period, the IBNR estimates are immaterial. The IBNR estimate is based on claims paid through February 2021 and represents the following percentage of claims by type of service:

- Medical - 0.0%
- Prescription Drug – 0.0%
- NEMT – 0.0%

These estimates were then projected forward to FY2022 using assumed trend rates. Other plan expenditures such as capitated amounts, reinsurance costs and administrative expenses were added to the claims component in order to project the total FY2022 cost under the plan.

Only one health plan provides services under the STAR Health program. The health plan is reimbursed using a single premium rate which does not vary by age, gender or area. The STAR Health program covers the entire state of Texas. The services used in the analysis include the following:

- Inpatient Hospital
- Outpatient Hospital
- Physician Services
- Other Professional Services
- Lab, X-ray and Radiology Services
- Medical Supplies
- Behavioral Health Services
- EPSDT Medical Services
- Family Planning and Genetics Services
- Comprehensive Care Program Services
- Vision Services
- Hearing Services
- Home Health Services

- Emergency Room Services
- Ambulance Services
- Dental and Orthodontia Services
- Prescription Drugs
- Non-Emergency Medical Transportation Services

Examples of services specifically excluded from the analysis include:

- Texas Health Steps environmental lead investigation (ELI)
- ECI Case Management
- ECI Specialized Skills Training
- Case Management for CPW
- Texas School Health and Related Services (SHARS)
- HHSC Blind Children's Vocational Discovery and Development Program
- Tuberculosis services provided by DSHS-approved providers (directly observed therapy and contact investigation)
- Certain high cost carve-out prescription drugs

All expenses related to these, any other non-capitated services and any value-added services have been excluded from the FY2022 rating analysis.

We projected the FY2022 cost by estimating base period average claims cost and then applying trend and other adjustment factors. These adjustment factors are described in Section III of this report. We added capitation expenses for services capitated by Superior (such as radiology and dental services), a net cost of reinsurance, a reasonable provision for administrative expenses, taxes and risk margin.

The analysis of base period claims experience attempted to identify and adjust for any distortions in the data. Significant variations in experience, including the impact from unusually large individual claims, were investigated; however, no adjustments were deemed necessary.

Attachment 1 to this report provides a description of the calculation of the FY2022 STAR Health premium rate. Attachment 2 contains a summary of recent program incurred claims experience. Attachment 3 summarizes the development of the trend assumptions. Attachment 4 details the calculation of the rate adjustment factors for provider rate changes. Attachment 5 details the calculation of the continuing impact of the PHE on FY2022 program costs. Attachment 6 details the calculation of the Community First Choice (CFC) component of the premium which is eligible for an enhanced federal match rate. Attachment 7 provides the required index summarizing the applicable sections from the 2021-2022 Medicaid Managed Care Rate Development Guide.

III. Adjustment Factors

This section contains a description of the adjustment factors used in the STAR Health rate setting process.

Trend Factors - Medical

The rating methodology uses assumed medical trend factors to adjust the base period claims cost to the rating period. The medical trend factor used in this analysis is a combination of utilization and inflation components. The projected trend rate assumptions were developed by the actuary based on an analysis of historical experience for STAR Health clients and the actuary's professional judgment regarding future cost increases. All historical trends have been calculated as the average cost per member per month during a specified time period (monthly, quarterly or annually) compared to the same time period from the previous year. For example, the FY2018 trend has been calculated as the change in average cost per member per month during the period September 1, 2017 through August 31, 2018 (FY2018) compared to the average cost per member per month during the period September 1, 2016 through August 31, 2017 (FY2017). The experience trends for all time periods were adjusted to remove the impact of various provider reimbursement changes and other changes that have impacted the program.

The trend assumption was calculated as the average trend during FY2017, FY2018, FY2019 and the first six months of FY2020 and equals 4.6%. STAR Health trends after March 1, 2020 were not considered due to the significant impact the COVID-19 pandemic had on expenditures. During the public health emergency, the STAR Health program has experienced abnormally low trends that are not indicative of future cost growth.

Trend Factors – Rx

The rating methodology uses assumed pharmacy trend factors to adjust the base period claims cost to the rating period. The trend assumptions were developed by the actuary based on an analysis of recent pharmacy claims experience for STAR Health clients and the actuary's professional judgment regarding anticipated future cost changes. The trend rate assumption is the same for all clients and all service areas.

The trend analysis included a review of STAR Health utilization and cost experience data paid through March 31, 2021. Incurred monthly utilization (days supply per member) and cost per service (plan payments per days supply) statistics were developed by drug type (brand, generic and specialty) through February 2021. From this experience, the average annual utilization and cost per service were determined for each of the five 12-month periods ending February 2021.

Due to the impact on healthcare utilization and cost from the COVID-19 pandemic and the PHE, experience after February 2020 was deemed unusable for purposes of developing trend projections. As a result, we have used the four 12-month periods ending February 2020 in our trend analysis in order to exclude pandemic-related experience.

Certain drugs and drug categories are excluded from the pharmacy trend analysis. Direct-acting antivirals (DAA) used for the treatment of the Hepatitis C virus and the drug Orkambi were carved in to the managed care contract effective September 1, 2018 but they were excluded from the trend analysis due to their extraordinary one-time impact on recent trends. Please note that effective March 1, 2021, Hepatitis C DAAs have been carved out of the managed care arrangement due to significant changes to the prior authorization criteria for these medications. In addition to these drugs, experience for the drugs Tamiflu and Makena were removed from our trend analysis. Tamiflu was removed due to the significant variation in the intensity of flu season from year to year. Makena was removed due to its one-time distortion of pharmacy trends for pregnant women. Beginning this rate cycle, hemostatic agents are also excluded from the pharmacy trend analysis. Effective September 1, 2020, hemophilia medications were carved out of the managed care arrangement. Please note that while excluded from the pharmacy trend analysis, the historical managed care claims for all of these drugs were included in the base period experience used in developing the pharmacy component of the rates. Factors were later applied to adjust for the carve-out of Hepatitis C DAAs and hemostatics.

The STAR Health pharmacy trend assumptions for the remainder of FY2020 and all of FY2021 and FY2022 were developed using the following formula. For each risk group/drug type combination, the utilization and cost per service trend assumptions were set equal to one-sixth of the experience trend rate for the 12-month period ending February 2018 plus two-sixths of the experience trend rate for the 12-month period ending February 2019 plus three-sixths of the experience trend rate for the 12-month period ending February 2020. The final cost trend assumptions were then determined by applying the assumed utilization and cost per service trends by individual drug type to actual experience for the 12-month period ending February 2020 and combining the results into a single trend assumption. Attachment 3 – Exhibit B presents a summary of the historical pharmacy trend analysis.

The preferred drug list (PDL) changes implemented in 2019 had a material impact on pharmacy cost and trends. As a result, recent pharmacy experience trends will tend to understate the expected underlying trend. In order to correct for this understatement, we developed adjustment factors to restate pharmacy experience for the three most recent 12-month periods assuming that the PDL changes had not been implemented.

Attachment 3 – Exhibit C presents these adjustment factors and the resulting pharmacy trend assumptions used for the STAR Health program. We selected a prospective pharmacy trend assumption of 1.7% per annum.

Please note that the MCO was provided a detailed trend analysis file which included the historical utilization and cost experience as well as all of the formulas and assumptions used in developing the trend assumptions.

Trend Factors – NEMT

The rating methodology uses assumed trend factors to adjust the base period claims cost to the rating period. The NEMT trend factors used in this analysis are a combination of utilization and inflation components. The NEMT trend factors were developed using a combination of i)

actual statewide NEMT trend experience for all Medicaid managed care programs and ii) the industry trend from the Consumer Price Index published by the Bureau of Labor Statistics for transportation services. The annual trend assumption of 3.30% was used in the rating analysis to project historical experience forward to the rating period. Attachment 3 – Exhibit D presents a summary of the NEMT trend analysis.

Provider Reimbursement Adjustments

Medicaid provider reimbursement changes were recognized for the following services: hospital inpatient reimbursement revisions, potentially preventable readmission (PPR) reimbursement reductions, potentially preventable complications (PPC) reimbursement reductions, therapy reimbursement revisions, rural hospital outpatient reimbursement revisions and private duty nursing reimbursement revisions.

The rating adjustments for these provider reimbursement changes were calculated by applying actual health plan encounter data to the old and new reimbursement basis and the resulting impact determined. Attachment 4 presents a summary of the derivation of these adjustment factors.

DRG Grouper Revision

Retroactive to October 1, 2019 the DRG Grouper used to reimburse inpatient claims was revised from Version 37 to Version 36. A portion of the base period, October 2019 through February 2020, was reimbursed under Version 37 and must be adjusted. Attachment 4 presents a summary of the derivation of this adjustment factor.

Potentially Preventable Readmission Quality Improvement

Effective September 1, 2019, HHSC began utilizing an adjustment to the base period data that analyzes inefficiencies and potentially preventable expenses that unnecessarily increase managed care costs. This analysis was performed using the 3M™ PPR methodology which is a computerized algorithm to identify readmissions with a plausible clinical relationship to the care rendered during or immediately following a prior hospital admission. An expected reduction of PPR events of 10% has been applied for FY2022. Attachment 4 presents a summary of the derivation of the adjustment factor.

Readmissions are an indicator of quality of care because they may reflect poor clinical care and poor coordination of services either during hospitalization or in the immediate post discharge period. A potentially preventable readmission is a readmission (return hospitalization within the specified readmission time interval) that is clinically related to the initial hospital admission. HHSC expects the MCOs to provide their members with timely access to appropriate care at the proper level by coordinating care across the entire continuum of the health care spectrum. Preventable readmissions should be avoided through high-quality outpatient care thus improving efficiency of the managed care programs.

Removal of Invalid Clinician Administered Drugs (CADs)

By HHSC rule, all outpatient medical claims for clinician-administered drugs must contain a Healthcare Common Procedure Coding System (HCPCS) code, an NDC number, the NDC unit of measure, and the NDC quantity. The MCO must edit claims using the Texas HHSC NDC to HCPCS Crosswalk file. If such a claim is missing the NDC information, or the NDC is not valid for the corresponding HCPCS code, then the drug is not considered a covered Medicaid benefit and the MCO must deny or reject the entire claim or claim line item. As a result, the base period data was reviewed and clinician administered drugs which were submitted under an invalid NDC were excluded from the rating analysis. Attachment 4 presents a summary of the derivation of this adjustment factor.

Federally Qualified Health Center (FQHC) Wrap Payment Removal

Effective September 1, 2017, MCOs were no longer required to reimburse FQHCs the full encounter rate. The MCOs are expected to reimburse FQHCs at a rate that is comparable to the reimbursement of all other non-FQHC providers providing similar services. Subsequently, the FQHC will be reimbursed by HHSC up to their full encounter rate outside of the capitation rate. The rating adjustment was calculated by collecting the FQHC wrap payments paid by the MCOs during the base period. Attachment 4 presents a summary of the derivation of this adjustment factor.

Preferred Drug List Changes

HHSC has implemented significant changes to the Preferred Drug List (PDL) over the past several years. These changes include some of the program's highest expenditure drugs and have had a significant impact on managed care pharmacy cost. Effective July 1, 2019 brand name Nexium capsules changed to non-preferred status. Effective July 1, 2021 brand name Stimulants and Related Agent drugs such as Focalin XR, Adderall XR and Concerta ER changed to preferred status. We developed adjustment factors to reflect the anticipated cost impact of these PDL changes. Attachment 4 includes additional information regarding the application of the PDL changes adjustment factors.

Hemostatic Drug Carve-Out

Effective September 1, 2020, HHSC carved out all hemostatic drugs from the managed care capitated arrangement. These drugs continue to be covered services under the program but are funded through a non-risk arrangement. Hemostatic drugs are rare and extremely high cost. In one example, the cost of a single hemophilia drug for a single plan participant is over $10 million per year. The purpose of this carve-out is to improve the balance of risk between various MCOs. The hemostatic carve out adjustment factors are based on actual experience of the program and are determined by comparing the hemostatic drug experience to the base period claims cost by service area and risk group. There was no utilization for Hemostatic drugs in the base period for the STAR Health program and therefore no such adjustment is needed for FY2022.

Hepatitis C Drug Carve-Out

Effective March 1, 2021, HHSC changed the prior authorization requirements for Hepatitis C Direct Acting Antiviral (DAA) drugs. As a result, HHSC carved out all Hepatitis C DAA drugs from the managed care capitated arrangement. These drugs continue to be covered services under the program but are funded through a non-risk arrangement. There was no utilization of Hepatitis C drugs in the base period for the STAR Health program and therefore no such adjustment is needed for FY2022.

NEMT Adjustments

Effective January 1, 2021, reimbursement for Individual Transportation Participant (ITP) service decreased to $0.56 per mile. The base period claims cost for ITP service has been adjusted to reflect this change. Attachment 4 includes additional information regarding the application of the ITP adjustment factors.

H.B. 1576 allows Transportation Network Companies (TNC) such as Uber and Lyft to participate in the Medicaid program. An adjustment was applied to reflect i) the cost difference between TNC and traditional demand response providers and ii) expected impact on overall NEMT utilization. We assumed the TNC cost per trip would be 15% less than traditional demand response providers for trips under 15 miles. In addition, we assumed 10% of current utilization would shift to TNCs and utilization would increase by 2.5% for demand response service trips under 15 miles. Attachment 4 includes additional information regarding the TNC adjustment factors.

Public Health Emergency (PHE) Related Cost Adjustment

Beginning in March 2020 and continuing into 2021, the PHE has had a significant impact on average STAR Health expenditures. Enrollment has grown by nearly 30% and average medical and pharmacy claims have dropped significantly. A rating adjustment was calculated in order to estimate the continued impact of the PHE on average program cost in FY2022 as enrollment continues to increase and we have yet to see an abatement in the reduced program costs. Attachment 5 presents a summary of the derivation of this adjustment factor.

Community First Choice Initiative

Effective June 1, 2015, Texas began providing CFC services to individuals who:

- have a physical or intellectual disability,
- meet categorical coverage requirements for Medicaid or meet financial eligibility for home and community-based services, and
- meet an institutional level of care.

The CFC services include:

- Help with activities of daily living and health-related tasks through hands-on assistance, supervision or cueing.

- Services to help the individual learn how to care for themselves.
- Backup systems or ways to ensure continuity of services and supports.
- Training on how to select, manage and dismiss attendants.

As a result of CFC, Texas is eligible for an enhanced federal match rate on all CFC eligible services. The calculation of the CFC portion of the rate is detailed in Attachment 6.

COVID-19

In addition to the PHE-related cost adjustment discussed above, the most significant impact that COVID-19 and the resulting PHE had on the FY2022 rate development was the significant reduction in claims during FY2020. As a result, the base period was altered such that all data beyond February 2020 was deemed to have no credibility and was excluded from the base period and all trend and adjustment factor calculations. The duration of the cost reduction and expectations for FY2022 vary significantly by program. For the STAR Health population, the most significant reductions occurred during the period March 2020 through August 2020; however, the increased enrollment and reduced average cost have continued into FY2021 with little sign of abatement. During the first half of FY2021 the average cost per member per month and average trends by quarter continue to be lower than the normal levels and it is expected that the impact of the pandemic and the PHE on the STAR Health program will continue into FY2022.

In addition to adjusting the base period used in the FY2022 rate development, we have also applied a PHE-related cost adjustment as discussed in Attachment 5. As implemented in FY2021, to mitigate the risk to both HHSC and the MCOs resulting from COVID-19, the following actions will be continued for FY2022:

- COVID-19 related expenditures such as testing and treatment will be excluded from the capitation rates and paid via non-risk arrangements.
- HHSC and its actuaries will collect additional information from the participating MCOs during the summer and fall of 2021 to determine if a retroactive adjustment is necessary to properly account for COVID-19 related impacts to program expenditures.
- HHSC is making revisions to the experience rebate tiers for FY2022 only. The revised structure will limit the opportunity for excessive profitability should the reduction in cost associated with the PHE extend longer than anticipated. The table below presents the revised experience rebate structure.

Pre-tax Income as a % of Revenues	MCO Share	HHSC Share
≤ 3%	100%	0%
> 3% and ≤ 5%	80%	20%
> 5% and ≤ 7%	0%	100%
> 7% and ≤ 9%	0%	100%
> 9% and ≤ 12%	0%	100%
> 12%	0%	100%

IV. Administrative Fees, Taxes and Risk Margin

The rating methodology includes an explicit provision for administrative services. The amount allocated for administrative expenses in the medical premium rate is $30.00 pmpm plus 5.25% of gross premium. The amount allocated for administrative expenses in the prescription drug premium rate is $1.60 pmpm. The amount allocated for administrative expenses in the NEMT premium rate is $0.18 pmpm plus 22% of gross premium. These amounts are intended to provide for all administrative-related services performed by the health plan.

The administrative fee amounts were determined based on a review of the administrative expenses of the health plan as reported in their audited Financial Statistical Reports (FSRs). The table below summarizes the reported administrative expenses for the past five fiscal years for the STAR Health program.

FY17	$79.77
FY18	$84.19
FY19	$78.19
FY20	$88.52
FY21	$85.67
5 Year Average	$83.27

Based on the administrative fee formula included in the rate development, the average administrative expense included in the capitation rate (medical and pharmacy components combined) is approximately $83 which is in line with the historical average cost. The fixed and variable components of the administrative cost assumption are not intended to account for different administrative cost categories. The combined administrative assumption is intended to be a reasonable amount to cover all administrative costs. This formula is reviewed annually to ensure consistency with the reported administrative costs. For informational purposes the $30 fixed component of the medical administrative expense formula breaks down into two categories:

- Quality Improvement - $15.00
- General Administration - $15.00

The quality improvement amount is primarily attributed to service coordination expenses and also includes services such as disease management, health information technology and wellness services among other items.

The premium rate also includes provisions for premium tax (1.75% of premium), maintenance tax ($0.0725 pmpm) and a risk margin (1.5% of premium). The premium tax and maintenance tax are based on Texas Department of Insurance requirements.

V. Summary

The FY2022 total premium rate for the STAR Health program is $1,075.99 per member per month. The total premium rate is made up of the total medical component of $969.55, the prescription drug component of $104.52 and the NEMT component of $1.92. This rate will be effective for the period September 1, 2021 through August 31, 2022. Attachment 1 shows the derivation of the premium rate.

A single rate cell or risk group has been deemed appropriate for STAR Health because the program is served by a single managed care plan and the overall demographics of the program have not varied significantly from year to year. Any changes in the acuity of the population are captured in the trend assumption as these ongoing changes are reflected in the historical claims experience which is used to develop the rating trend assumptions.

As noted in Section III, Texas is eligible for an enhanced match rate for CFC services. CFC services of $2.87 pmpm are a component of the total rate. Further information regarding the calculation of this amount can be found in Attachment 6.

VI. Actuarial Certification of FY2022 STAR Health Premium Rate

We, Evan L. Dial, Khiem D. Ngo, David G. Wilkes and Dustin J. Kim are with the firm of Rudd and Wisdom, Inc., Consulting Actuaries. Three are Fellows of the Society of Actuaries (FSAs) and one is an Associate of the Society of Actuaries (ASA). We are all members of the American Academy of Actuaries and meet the Academy's qualification standards for rendering this opinion.

Rudd and Wisdom has been retained by the Texas Health and Human Services Commission (HHSC) to assist in the development of the STAR Health premium rate for the period September 1, 2021 through August 31, 2022 and to provide the actuarial certification required under Centers for Medicare and Medicaid Services (CMS) requirements 42 CFR 438.4.

We certify that the STAR Health premium rate developed by HHSC and Rudd and Wisdom satisfies the following:

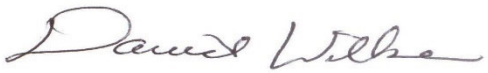
(a) The premium rate has been developed in accordance with generally accepted actuarial principles and practices;
(b) The premium rate is appropriate for the populations and services covered under the managed care contract; and
(c) The premium is actuarially sound as defined in the regulations.

We have relied on historical experience data and program information provided to us by HHSC. We have reviewed the data for reasonableness but have not audited the data.

The assumptions, methodologies and factors used in developing the certified capitation rates are based on valid rate development standards and represent actual cost differences in providing covered services to the covered populations, and these differences do not vary with the rate of FFP associated with the covered populations. All rates have been developed based on the actual managed care experience of the covered populations. Any services subject to varying FFP have been separately identified and documented throughout this report.

Please note that actual health plan contractor experience will differ from these projections. Rudd and Wisdom has developed these rates on behalf of the State to demonstrate compliance with the CMS requirements under 42 CFR 438.3(c), 438.3(e), 438.4, 438.5, 438.6 and 438.7. Any health plan contracting with the State should analyze its own projected premium needs before deciding whether to contract with the State.

Evan L. Dial, F.S.A., M.A.A.A.



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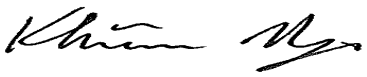

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VII. Attachments

Attachment 1

Summary of FY2022 STAR Health Rating Analysis

Exhibit A presents summary information regarding the FY2022 STAR Health medical rate development. Included on the exhibit are base period (March 2019 through February 2020) experience, projected FY2022 enrollment, trend and provider reimbursement adjustment factors, assumed capitation rates, reinsurance and administrative costs.

The actuarial model used to derive the FY2022 STAR Health premium rate relies primarily on historical health plan experience. The historical claims experience for the program was analyzed and estimates for the base period were developed. These estimates were then projected forward to FY2022 using assumed trend rates. Other plan expenditures such as capitated amounts, reinsurance costs and administrative expenses were added to the claims component in order to project the total FY2022 cost under the plan.

Reinsurance is provided through an affiliated provider therefore the net cost of reinsurance has been set at $0.00. Any reinsurance premium paid to this affiliated provider is assumed to be offset by reinsurance recoveries.

Exhibit B presents summary information regarding the FY2022 STAR Health prescription drug rate development. Included on the exhibit are base period (March 2019 through February 2020) experience, projected FY2022 enrollment, trend and provider reimbursement adjustment factors and administrative costs.

Exhibit C presents summary information regarding the FY2022 STAR Health NEMT rate development. Included on the exhibit are base period (March 2019 through February 2020) experience, projected FY2022 enrollment, trend and provider reimbursement adjustment factors and administrative costs.

Only one health plan provides services through the STAR Health program. The health plan is reimbursed using a single premium rate which does not vary by age, gender or area.

Exhibit D presents a comparison of the projected expenditures under the current (FY2021) premium rates and the FY2022 premium rates. The projection is split by medical, pharmacy and NEMT.

The primary cost driver behind the rate reduction is the continued impact of the PHE on enrollment and average cost. The PHE has resulted in significant enrollment growth and large reductions in the average cost for all services. While it is expected that the impact of COVID-19 and the PHE will eventually fade, such a return to “normal”, is not expected before December 31, 2021.

FY2022 STAR Health Rating Analysis
Rate Development for the STAR Health Program - Medical

	Rating Period FY2022 Total	PMPM
Base Period Used in Rating	3/2019-2/2020	
Base Period Experience		
Member Months	389,987	
Estimated Incurred Claims	292,505,596	750.04
Projected Rating Period Experience		
Member Months	472,969	
Assumed Annual Trend Rate		4.6 %
Provider Reimbursement Adjustment		-0.66 %
Hospital Reimbursement Adjustment		-0.39 %
PHE Related Cost Adjustment		-2.67 %
Projected Incurred Claims	382,314,004	808.33
Capitation Expenses		
Dental Services	19,391,749	41.00
Radiology	718,914	1.52
Settlements and Miscellaneous Expenses	2,941,870	6.22
Total	23,052,533	48.74
Reinsurance Expenses		
Gross Premium	0	0.00
Projected Reinsurance Recoveries	0	0.00
Net Reinsurance Cost	0	0.00
Administrative Expenses		
Fixed Amount	14,189,085	30.00
Percentage of Premium	24,074,797	5.25 %
Total	38,263,882	80.90
Premium Tax	8,024,932	1.75 %
Maintenance Tax pmpm	34,290	0.07
Risk Margin	6,878,514	1.50 %
Projected Premium	458,567,569	$ 969.55

FY2022 STAR Health Rating Analysis
Rate Development for the STAR Health Program - Prescription Drug

	Rating Period FY2022 Total	PMPM
Base Period Used in Rating	3/2019-2/2020	
Base Period Experience		
Member Months	389,987	
Estimated Incurred Claims	38,486,646	98.69
Other Costs/Refunds	-592,780	-1.52
Total Cost	37,893,865	97.17
Projected Rating Period Experience		
Member Months	472,969	
Assumed Annual Trend Rate		1.70 %
PDL Changes Adjustment		1.50 %
Hemophilia Carve-out Adjustment		0.00 %
Hep-C Carve-out Adjustment		0.00 %
PHE Related Cost Adjustment		-3.25 %
Projected Incurred Claims	47,072,938	99.53
Administrative Expenses	756,751	1.60
Premium Tax	865,108	1.75 %
Risk Margin	741,522	1.50 %
Projected Premium	49,434,771	$ 104.52

FY2022 STAR Health Rating Analysis
Rate Development for the STAR Health Program - NEMT

	Rating Period FY2022 Total	PMPM
Base Period Used in Rating	3/2019-2/2020	
Base Period Experience		
Member Months	389,987	
Estimated Incurred Claims		
Demand Response - Traditional >15 Miles	148,969	0.38
Demand Response - Traditional <= 15 Miles	37,940	0.10
Mileage Reimbursement	211,264	0.54
Meals	21,264	0.05
Lodging	46,986	0.12
Airfare	8,961	0.02
All Others	5,561	0.01
Total	480,946	1.23
Projected Rating Period Experience		
Member Months	472,969	
Assumed Annual Trend Rate		3.30 %
Seasonality Adjustment		0.00 %
TNC Adjustment		0.05 %
Mileage Reimbursement Adjustment		-1.45 %
PHE Adjustment		-4.37 %
Projected Incurred Claims	596,483	1.26
Administrative Expenses		
Fixed Amount	82,770	0.18
Percentage of Premium	199,782	22.00%
Total		
Premium Tax	15,892	1.75 %
Risk Margin	13,622	1.50 %
Projected Premium	908,101	$ 1.92

FY2022 STAR Health Rating Analysis

	Projected PMPM		Projected FY2022 Premium		
	FY2021 Rates	FY2022 Rates	FY2021 Rates	FY2022 Rates	% Rate Change
Medical	1,002.12	969.55	473,972,185	458,567,569	-3.3%
Pharmacy	104.86	104.52	49,595,581	49,434,771	-0.3%
NEMT	1.89	1.92	893,912	908,101	1.6%
Total	1,108.87	1,075.99	524,461,678	508,910,441	-3.0%

Attachment 2

STAR Health Incurred Claims Experience

The attached exhibits present a summary of STAR Health incurred claims experience by type of service during the base period used in the rate setting analysis. For each month during the experience period the exhibits show enrollment, claims incurred during the month and paid through February 28, 2021 and estimated incurred claims. All information has been provided by type of service.

FY2022 STAR Health Rating Analysis
Estimated STAR Health Incurred Claims

Month	Number of Members	Professional Claims Incurred and Paid	Completion Factor	Professional Estimated Incurred Claims	Estimated Incurred pmpm	Trend Factor
Sep-17	33,226	6,857,302	1.0000	6,857,302	206.38	
Oct-17	33,433	7,486,869	1.0000	7,486,869	223.94	
Nov-17	33,713	7,180,564	1.0000	7,180,564	212.99	
Dec-17	33,623	6,472,682	1.0000	6,472,682	192.51	
Jan-18	33,538	7,343,414	1.0000	7,343,414	218.96	
Feb-18	33,670	7,122,122	1.0000	7,122,122	211.53	
Mar-18	33,635	7,617,775	1.0000	7,617,775	226.48	
Apr-18	33,786	7,644,994	1.0000	7,644,994	226.28	
May-18	33,962	7,990,732	1.0000	7,990,732	235.28	
Jun-18	34,228	7,382,605	1.0000	7,382,605	215.69	
Jul-18	34,117	7,642,498	1.0000	7,642,498	224.01	
Aug-18	34,090	8,077,939	1.0000	8,077,939	236.96	
Sep-18	34,126	7,386,808	1.0000	7,386,808	216.46	1.049
Oct-18	34,296	8,461,405	1.0000	8,461,405	246.72	1.102
Nov-18	34,090	7,614,021	1.0000	7,614,021	223.35	1.049
Dec-18	33,488	6,946,358	1.0000	6,946,358	207.43	1.078
Jan-19	32,988	8,099,591	1.0000	8,099,591	245.53	1.121
Feb-19	33,042	7,611,085	1.0000	7,611,085	230.35	1.089
Mar-19	33,099	7,864,093	1.0000	7,864,093	237.59	1.049
Apr-19	32,934	8,039,334	1.0000	8,039,334	244.10	1.079
May-19	32,888	7,827,069	1.0000	7,827,069	237.99	1.012
Jun-19	32,782	7,110,460	1.0000	7,110,460	216.90	1.006
Jul-19	32,707	7,886,742	1.0000	7,886,742	241.13	1.076
Aug-19	32,715	7,975,010	1.0000	7,975,010	243.77	1.029
Sep-19	32,685	7,706,699	1.0000	7,706,699	235.79	1.089
Oct-19	32,771	8,636,956	1.0000	8,636,956	263.55	1.068
Nov-19	32,439	7,600,483	1.0000	7,600,483	234.30	1.049
Dec-19	31,825	7,363,026	1.0000	7,363,026	231.36	1.115
Jan-20	31,584	8,205,983	1.0000	8,205,983	259.81	1.058
Feb-20	31,558	7,768,377	1.0000	7,768,377	246.16	1.069
Mar-20	31,872	7,306,435	1.0000	7,306,435	229.24	0.965
Apr-20	32,916	6,781,797	1.0000	6,781,797	206.03	0.844
May-20	33,617	7,332,173	1.0000	7,332,173	218.11	0.916
Jun-20	34,349	8,012,472	1.0000	8,012,472	233.27	1.075
Jul-20	35,185	8,102,458	1.0000	8,102,458	230.28	0.955
Aug-20	36,297	7,992,383	1.0000	7,992,383	220.19	0.903
Sep-20	37,569	8,345,270	0.9990	8,353,623	222.36	0.943
Oct-20	38,755	8,482,172	0.9910	8,559,205	220.85	0.838
Nov-20	39,812	7,735,144	0.9790	7,901,066	198.46	0.847
Dec-20	40,741	7,659,206	0.9500	8,062,323	197.89	0.855
FY2018	405,021			88,819,494	219.30	
FY2019	399,155			92,821,976	232.55	1.060
FY2020	397,098			92,809,242	233.72	1.005
3/2019-2/2020	389,987			93,984,232	240.99	

FY2022 STAR Health Rating Analysis
Estimated STAR Health Incurred Claims

		Emergency Room				
Month	Number of Members	Claims Incurred and Paid	Completion Factor	Estimated Incurred Claims	Estimated Incurred pmpm	Trend Factor
Sep-17	33,226	543,309	1.0000	543,309	16.35	
Oct-17	33,433	670,050	1.0000	670,050	20.04	
Nov-17	33,713	647,763	1.0000	647,763	19.21	
Dec-17	33,623	692,657	1.0000	692,657	20.60	
Jan-18	33,538	715,357	1.0000	715,357	21.33	
Feb-18	33,670	622,804	1.0000	622,804	18.50	
Mar-18	33,635	629,662	1.0000	629,662	18.72	
Apr-18	33,786	601,651	1.0000	601,651	17.81	
May-18	33,962	603,532	1.0000	603,532	17.77	
Jun-18	34,228	576,431	1.0000	576,431	16.84	
Jul-18	34,117	509,256	1.0000	509,256	14.93	
Aug-18	34,090	586,555	1.0000	586,555	17.21	
Sep-18	34,126	636,237	1.0000	636,237	18.64	1.140
Oct-18	34,296	655,817	1.0000	655,817	19.12	0.954
Nov-18	34,090	624,957	1.0000	624,957	18.33	0.954
Dec-18	33,488	671,960	1.0000	671,960	20.07	0.974
Jan-19	32,988	664,487	1.0000	664,487	20.14	0.944
Feb-19	33,042	659,123	1.0000	659,123	19.95	1.078
Mar-19	33,099	644,278	1.0000	644,278	19.47	1.040
Apr-19	32,934	644,582	1.0000	644,582	19.57	1.099
May-19	32,888	565,621	1.0000	565,621	17.20	0.968
Jun-19	32,782	531,993	1.0000	531,993	16.23	0.964
Jul-19	32,707	552,432	1.0000	552,432	16.89	1.132
Aug-19	32,715	588,854	1.0000	588,854	18.00	1.046
Sep-19	32,685	647,263	1.0000	647,263	19.80	1.062
Oct-19	32,771	687,505	1.0000	687,505	20.98	1.097
Nov-19	32,439	725,256	1.0000	725,256	22.36	1.220
Dec-19	31,825	686,551	1.0000	686,551	21.57	1.075
Jan-20	31,584	649,184	1.0000	649,184	20.55	1.020
Feb-20	31,558	653,802	1.0000	653,802	20.72	1.039
Mar-20	31,872	571,000	1.0000	571,000	17.92	0.920
Apr-20	32,916	346,840	1.0000	346,840	10.54	0.538
May-20	33,617	473,697	1.0000	473,697	14.09	0.819
Jun-20	34,349	480,645	1.0000	480,645	13.99	0.862
Jul-20	35,185	545,915	1.0000	545,915	15.52	0.919
Aug-20	36,297	530,181	1.0000	530,181	14.61	0.812
Sep-20	37,569	567,209	0.9990	567,777	15.11	0.763
Oct-20	38,755	658,034	0.9910	664,010	17.13	0.817
Nov-20	39,812	643,392	0.9790	657,193	16.51	0.738
Dec-20	40,741	607,969	0.9500	639,968	15.71	0.728
FY2018	405,021			7,399,028	18.27	
FY2019	399,155			7,440,340	18.64	1.020
FY2020	397,098			6,997,838	17.62	0.945
3/2019-2/2020	389,987			7,577,320	19.43	

FY2022 STAR Health Rating Analysis
Estimated STAR Health Incurred Claims

Month	Number of Members	Outpatient Claims Incurred and Paid	Completion Factor	Estimated Incurred Claims	Estimated Incurred pmpm	Trend Factor
Sep-17	33,226	925,957	1.0000	925,957	27.87	
Oct-17	33,433	1,056,583	1.0000	1,056,583	31.60	
Nov-17	33,713	1,079,609	1.0000	1,079,609	32.02	
Dec-17	33,623	915,607	1.0000	915,607	27.23	
Jan-18	33,538	1,031,626	1.0000	1,031,626	30.76	
Feb-18	33,670	1,014,853	1.0000	1,014,853	30.14	
Mar-18	33,635	1,009,311	1.0000	1,009,311	30.01	
Apr-18	33,786	1,033,785	1.0000	1,033,785	30.60	
May-18	33,962	1,117,624	1.0000	1,117,624	32.91	
Jun-18	34,228	983,854	1.0000	983,854	28.74	
Jul-18	34,117	989,082	1.0000	989,082	28.99	
Aug-18	34,090	1,166,966	1.0000	1,166,966	34.23	
Sep-18	34,126	884,241	1.0000	884,241	25.91	0.930
Oct-18	34,296	1,121,747	1.0000	1,121,747	32.71	1.035
Nov-18	34,090	983,975	1.0000	983,975	28.86	0.901
Dec-18	33,488	977,899	1.0000	977,899	29.20	1.072
Jan-19	32,988	1,143,290	1.0000	1,143,290	34.66	1.127
Feb-19	33,042	1,063,048	1.0000	1,063,048	32.17	1.067
Mar-19	33,099	1,071,382	1.0000	1,071,382	32.37	1.079
Apr-19	32,934	1,095,317	1.0000	1,095,317	33.26	1.087
May-19	32,888	1,147,793	1.0000	1,147,793	34.90	1.061
Jun-19	32,782	1,035,581	1.0000	1,035,581	31.59	1.099
Jul-19	32,707	1,074,859	1.0000	1,074,859	32.86	1.134
Aug-19	32,715	1,088,620	1.0000	1,088,620	33.28	0.972
Sep-19	32,685	993,651	1.0000	993,651	30.40	1.173
Oct-19	32,771	1,208,437	1.0000	1,208,437	36.88	1.127
Nov-19	32,439	1,086,782	1.0000	1,086,782	33.50	1.161
Dec-19	31,825	1,015,108	1.0000	1,015,108	31.90	1.092
Jan-20	31,584	1,114,614	1.0000	1,114,614	35.29	1.018
Feb-20	31,558	1,014,695	1.0000	1,014,695	32.15	0.999
Mar-20	31,872	864,936	1.0000	864,936	27.14	0.838
Apr-20	32,916	784,709	1.0000	784,709	23.84	0.717
May-20	33,617	1,235,722	1.0000	1,235,722	36.76	1.053
Jun-20	34,349	1,334,304	1.0000	1,334,304	38.85	1.230
Jul-20	35,185	1,301,978	1.0000	1,301,978	37.00	1.126
Aug-20	36,297	1,263,511	1.0000	1,263,511	34.81	1.046
Sep-20	37,569	1,469,311	0.9990	1,470,782	39.15	1.288
Oct-20	38,755	1,476,691	0.9910	1,490,102	38.45	1.043
Nov-20	39,812	1,254,073	0.9790	1,280,974	32.18	0.960
Dec-20	40,741	1,278,244	0.9500	1,345,520	33.03	1.035
FY2018	405,021			12,324,858	30.43	
FY2019	399,155			12,687,753	31.79	1.045
FY2020	397,098			13,218,447	33.29	1.047
3/2019-2/2020	389,987			12,946,839	33.20	

FY2022 STAR Health Rating Analysis
Estimated STAR Health Incurred Claims

Month	Number of Members	Inpatient Claims Incurred and Paid	Completion Factor	Estimated Incurred Claims	Estimated Incurred pmpm	Trend Factor
Sep-17	33,226	4,744,401	1.0000	4,744,401	142.79	
Oct-17	33,433	5,319,312	1.0000	5,319,312	159.10	
Nov-17	33,713	6,777,879	1.0000	6,777,879	201.05	
Dec-17	33,623	5,194,105	1.0000	5,194,105	154.48	
Jan-18	33,538	5,538,113	1.0000	5,538,113	165.13	
Feb-18	33,670	7,138,066	1.0000	7,138,066	212.00	
Mar-18	33,635	4,471,839	1.0000	4,471,839	132.95	
Apr-18	33,786	6,478,630	1.0000	6,478,630	191.75	
May-18	33,962	4,862,022	1.0000	4,862,022	143.16	
Jun-18	34,228	5,906,099	1.0000	5,906,099	172.55	
Jul-18	34,117	5,437,315	1.0000	5,437,315	159.37	
Aug-18	34,090	6,826,526	1.0000	6,826,526	200.25	
Sep-18	34,126	6,577,980	1.0000	6,577,980	192.76	1.350
Oct-18	34,296	5,635,932	1.0000	5,635,932	164.33	1.033
Nov-18	34,090	5,246,802	1.0000	5,246,802	153.91	0.766
Dec-18	33,488	5,876,013	1.0000	5,876,013	175.47	1.136
Jan-19	32,988	8,916,736	1.0000	8,916,736	270.30	1.637
Feb-19	33,042	4,969,468	1.0000	4,969,468	150.40	0.709
Mar-19	33,099	7,457,002	1.0000	7,457,002	225.29	1.695
Apr-19	32,934	7,660,642	1.0000	7,660,642	232.61	1.213
May-19	32,888	6,311,722	1.0000	6,311,722	191.92	1.341
Jun-19	32,782	5,144,170	1.0000	5,144,170	156.92	0.909
Jul-19	32,707	5,582,488	1.0000	5,582,488	170.68	1.071
Aug-19	32,715	5,116,670	1.0000	5,116,670	156.40	0.781
Sep-19	32,685	7,078,537	1.0000	7,078,537	216.57	1.124
Oct-19	32,771	8,452,000	1.0000	8,452,000	257.91	1.569
Nov-19	32,439	6,008,716	1.0000	6,008,716	185.23	1.204
Dec-19	31,825	6,213,910	1.0000	6,213,910	195.25	1.113
Jan-20	31,584	6,333,442	1.0000	6,333,442	200.53	0.742
Feb-20	31,558	5,906,481	1.0000	5,906,481	187.16	1.244
Mar-20	31,872	5,465,501	1.0000	5,465,501	171.48	0.761
Apr-20	32,916	4,653,603	1.0000	4,653,603	141.38	0.608
May-20	33,617	5,509,813	1.0000	5,509,813	163.90	0.854
Jun-20	34,349	4,805,520	1.0000	4,805,520	139.90	0.892
Jul-20	35,185	6,369,659	1.0000	6,369,659	181.03	1.061
Aug-20	36,297	6,462,222	1.0000	6,462,222	178.04	1.138
Sep-20	37,569	4,810,321	0.9990	4,815,136	128.17	0.592
Oct-20	38,755	5,606,129	0.9910	5,657,042	145.97	0.566
Nov-20	39,812	6,098,082	0.9790	6,228,888	156.46	0.845
Dec-20	40,741	4,502,590	0.9500	4,739,569	116.34	0.596
FY2018	405,021			68,694,306	169.61	
FY2019	399,155			74,495,625	186.63	1.100
FY2020	397,098			73,259,405	184.49	0.988
3/2019-2/2020	389,987			77,265,781	198.12	

FY2022 STAR Health Rating Analysis
Estimated STAR Health Incurred Claims

		Vision				
Month	Number of Members	Claims Incurred and Paid	Completion Factor	Estimated Incurred Claims	Estimated Incurred pmpm	Trend Factor
Sep-17	33,226	132,416	1.0000	132,416	3.99	
Oct-17	33,433	139,156	1.0000	139,156	4.16	
Nov-17	33,713	117,188	1.0000	117,188	3.48	
Dec-17	33,623	103,986	1.0000	103,986	3.09	
Jan-18	33,538	135,588	1.0000	135,588	4.04	
Feb-18	33,670	132,641	1.0000	132,641	3.94	
Mar-18	33,635	125,100	1.0000	125,100	3.72	
Apr-18	33,786	126,634	1.0000	126,634	3.75	
May-18	33,962	142,325	1.0000	142,325	4.19	
Jun-18	34,228	121,238	1.0000	121,238	3.54	
Jul-18	34,117	135,909	1.0000	135,909	3.98	
Aug-18	34,090	150,993	1.0000	150,993	4.43	
Sep-18	34,126	117,079	1.0000	117,079	3.43	0.861
Oct-18	34,296	152,516	1.0000	152,516	4.45	1.068
Nov-18	34,090	122,537	1.0000	122,537	3.59	1.034
Dec-18	33,488	98,094	1.0000	98,094	2.93	0.947
Jan-19	32,988	134,784	1.0000	134,784	4.09	1.011
Feb-19	33,042	126,535	1.0000	126,535	3.83	0.972
Mar-19	33,099	117,858	1.0000	117,858	3.56	0.957
Apr-19	32,934	131,151	1.0000	131,151	3.98	1.062
May-19	32,888	116,651	1.0000	116,651	3.55	0.846
Jun-19	32,782	123,915	1.0000	123,915	3.78	1.067
Jul-19	32,707	147,458	1.0000	147,458	4.51	1.132
Aug-19	32,715	151,600	1.0000	151,600	4.63	1.046
Sep-19	32,685	134,594	1.0000	134,594	4.12	1.200
Oct-19	32,771	132,196	1.0000	132,196	4.03	0.907
Nov-19	32,439	112,750	1.0000	112,750	3.48	0.967
Dec-19	31,825	103,197	1.0000	103,197	3.24	1.107
Jan-20	31,584	92,667	1.0000	92,667	2.93	0.718
Feb-20	31,558	83,494	1.0000	83,494	2.65	0.691
Mar-20	31,872	66,328	1.0000	66,328	2.08	0.584
Apr-20	32,916	20,679	1.0000	20,679	0.63	0.158
May-20	33,617	57,193	1.0000	57,193	1.70	0.480
Jun-20	34,349	85,689	1.0000	85,689	2.49	0.660
Jul-20	35,185	86,368	1.0000	86,368	2.45	0.544
Aug-20	36,297	85,121	1.0000	85,121	2.35	0.506
Sep-20	37,569	102,339	0.9990	102,441	2.73	0.662
Oct-20	38,755	90,137	0.9910	90,955	2.35	0.582
Nov-20	39,812	90,237	0.9790	92,172	2.32	0.666
Dec-20	40,741	74,103	0.9500	78,003	1.91	0.590
FY2018	405,021			1,563,174	3.86	
FY2019	399,155			1,540,176	3.86	1.000
FY2020	397,098			1,060,276	2.67	0.692
3/2019-2/2020	389,987			1,447,530	3.71	

FY2022 STAR Health Rating Analysis
Estimated STAR Health Incurred Claims

		Other - PDN, DME, Therapy				
Month	Number of Members	Claims Incurred and Paid	Completion Factor	Estimated Incurred Claims	Estimated Incurred pmpm	Trend Factor
Sep-17	33,226	6,484,844	1.0000	6,484,844	195.17	
Oct-17	33,433	6,875,275	1.0000	6,875,275	205.64	
Nov-17	33,713	6,743,484	1.0000	6,743,484	200.03	
Dec-17	33,623	6,585,960	1.0000	6,585,960	195.88	
Jan-18	33,538	6,872,922	1.0000	6,872,922	204.93	
Feb-18	33,670	6,412,390	1.0000	6,412,390	190.45	
Mar-18	33,635	7,075,772	1.0000	7,075,772	210.37	
Apr-18	33,786	7,038,337	1.0000	7,038,337	208.32	
May-18	33,962	7,360,575	1.0000	7,360,575	216.73	
Jun-18	34,228	7,267,123	1.0000	7,267,123	212.32	
Jul-18	34,117	7,365,240	1.0000	7,365,240	215.88	
Aug-18	34,090	7,647,566	1.0000	7,647,566	224.33	
Sep-18	34,126	7,409,061	1.0000	7,409,061	217.11	1.112
Oct-18	34,296	8,003,471	1.0000	8,003,471	233.36	1.135
Nov-18	34,090	7,635,032	1.0000	7,635,032	223.97	1.120
Dec-18	33,488	7,814,600	1.0000	7,814,600	233.36	1.191
Jan-19	32,988	8,279,282	1.0000	8,279,282	250.98	1.225
Feb-19	33,042	7,445,324	1.0000	7,445,324	225.33	1.183
Mar-19	33,099	8,105,689	1.0000	8,105,689	244.89	1.164
Apr-19	32,934	8,022,860	1.0000	8,022,860	243.60	1.169
May-19	32,888	8,162,290	1.0000	8,162,290	248.18	1.145
Jun-19	32,782	7,649,356	1.0000	7,649,356	233.34	1.099
Jul-19	32,707	8,340,374	1.0000	8,340,374	255.00	1.181
Aug-19	32,715	8,491,728	1.0000	8,491,728	259.57	1.157
Sep-19	32,685	8,513,059	1.0000	8,513,059	260.46	1.200
Oct-19	32,771	8,984,242	1.0000	8,984,242	274.15	1.175
Nov-19	32,439	8,191,205	1.0000	8,191,205	252.51	1.127
Dec-19	31,825	8,097,245	1.0000	8,097,245	254.43	1.090
Jan-20	31,584	8,559,370	1.0000	8,559,370	271.00	1.080
Feb-20	31,558	8,166,477	1.0000	8,166,477	258.78	1.148
Mar-20	31,872	8,495,856	1.0000	8,495,856	266.56	1.088
Apr-20	32,916	8,028,199	1.0000	8,028,199	243.90	1.001
May-20	33,617	8,233,349	1.0000	8,233,349	244.92	0.987
Jun-20	34,349	8,598,963	1.0000	8,598,963	250.34	1.073
Jul-20	35,185	8,779,577	1.0000	8,779,577	249.53	0.979
Aug-20	36,297	8,801,655	1.0000	8,801,655	242.49	0.934
Sep-20	37,569	8,841,850	0.9990	8,850,701	235.59	0.905
Oct-20	38,755	9,254,013	0.9910	9,338,055	240.95	0.879
Nov-20	39,812	8,667,135	0.9790	8,853,049	222.37	0.881
Dec-20	40,741	8,925,131	0.9500	9,394,875	230.60	0.906
FY2018	405,021			83,729,488	206.73	
FY2019	399,155			95,359,067	238.90	1.156
FY2020	397,098			101,449,197	255.48	1.069
3/2019-2/2020	389,987			99,283,895	254.58	

FY2022 STAR Health Rating Analysis
Estimated STAR Health Incurred Claims

		Total - Medical				
Month	Number of Members	Claims Incurred and Paid	Completion Factor	Estimated Incurred Claims	Estimated Incurred pmpm	Trend Factor
Sep-17	33,226	19,688,229	1.0000	19,688,229	592.55	
Oct-17	33,433	21,547,245	1.0000	21,547,245	644.49	
Nov-17	33,713	22,546,488	1.0000	22,546,488	668.78	
Dec-17	33,623	19,964,996	1.0000	19,964,996	593.79	
Jan-18	33,538	21,637,019	1.0000	21,637,019	645.15	
Feb-18	33,670	22,442,876	1.0000	22,442,876	666.55	
Mar-18	33,635	20,929,459	1.0000	20,929,459	622.25	
Apr-18	33,786	22,924,031	1.0000	22,924,031	678.51	
May-18	33,962	22,076,810	1.0000	22,076,810	650.04	
Jun-18	34,228	22,237,350	1.0000	22,237,350	649.68	
Jul-18	34,117	22,079,299	1.0000	22,079,299	647.16	
Aug-18	34,090	24,456,545	1.0000	24,456,545	717.41	
Sep-18	34,126	23,011,407	1.0000	23,011,407	674.31	1.138
Oct-18	34,296	24,030,887	1.0000	24,030,887	700.69	1.087
Nov-18	34,090	22,227,324	1.0000	22,227,324	652.02	0.975
Dec-18	33,488	22,384,923	1.0000	22,384,923	668.45	1.126
Jan-19	32,988	27,238,169	1.0000	27,238,169	825.70	1.280
Feb-19	33,042	21,874,582	1.0000	21,874,582	662.02	0.993
Mar-19	33,099	25,260,302	1.0000	25,260,302	763.17	1.226
Apr-19	32,934	25,593,886	1.0000	25,593,886	777.13	1.145
May-19	32,888	24,131,147	1.0000	24,131,147	733.74	1.129
Jun-19	32,782	21,595,476	1.0000	21,595,476	658.76	1.014
Jul-19	32,707	23,584,353	1.0000	23,584,353	721.08	1.114
Aug-19	32,715	23,412,482	1.0000	23,412,482	715.65	0.998
Sep-19	32,685	25,073,803	1.0000	25,073,803	767.13	1.138
Oct-19	32,771	28,101,335	1.0000	28,101,335	857.51	1.224
Nov-19	32,439	23,725,193	1.0000	23,725,193	731.38	1.122
Dec-19	31,825	23,479,036	1.0000	23,479,036	737.75	1.104
Jan-20	31,584	24,955,259	1.0000	24,955,259	790.12	0.957
Feb-20	31,558	23,593,326	1.0000	23,593,326	747.62	1.129
Mar-20	31,872	22,770,056	1.0000	22,770,056	714.42	0.936
Apr-20	32,916	20,615,828	1.0000	20,615,828	626.32	0.806
May-20	33,617	22,841,948	1.0000	22,841,948	679.48	0.926
Jun-20	34,349	23,317,592	1.0000	23,317,592	678.84	1.030
Jul-20	35,185	25,185,955	1.0000	25,185,955	715.82	0.993
Aug-20	36,297	25,135,074	1.0000	25,135,074	692.48	0.968
Sep-20	37,569	24,136,300	0.9990	24,160,460	643.10	0.838
Oct-20	38,755	25,567,175	0.9910	25,799,369	665.70	0.776
Nov-20	39,812	24,488,062	0.9790	25,013,342	628.28	0.859
Dec-20	40,741	23,047,243	0.9500	24,260,256	595.48	0.807
FY2018	405,021			262,530,348	648.19	
FY2019	399,155			284,344,936	712.37	1.099
FY2020	397,098			288,794,404	727.26	1.021
3/2019-2/2020	389,987			292,505,596	750.04	

FY2022 STAR Health Rating Analysis
Estimated STAR Health Incurred Claims

		Prescription Drug				
Month	Number of Members	Claims Incurred and Paid	Completion Factor	Estimated Incurred Claims	Estimated Incurred pmpm	Trend Factor
Sep-17	33,226	3,333,494	1.0000	3,333,494	100.33	
Oct-17	33,433	3,666,408	1.0000	3,666,408	109.66	
Nov-17	33,713	3,760,690	1.0000	3,760,690	111.55	
Dec-17	33,623	4,076,581	1.0000	4,076,581	121.24	
Jan-18	33,538	4,287,053	1.0000	4,287,053	127.83	
Feb-18	33,670	3,915,528	1.0000	3,915,528	116.29	
Mar-18	33,635	3,918,782	1.0000	3,918,782	116.51	
Apr-18	33,786	3,575,541	1.0000	3,575,541	105.83	
May-18	33,962	3,286,783	1.0000	3,286,783	96.78	
Jun-18	34,228	3,227,304	1.0000	3,227,304	94.29	
Jul-18	34,117	3,249,541	1.0000	3,249,541	95.25	
Aug-18	34,090	3,630,901	1.0000	3,630,901	106.51	
Sep-18	34,126	3,254,537	1.0000	3,254,537	95.37	0.951
Oct-18	34,296	3,779,727	1.0000	3,779,727	110.21	1.005
Nov-18	34,090	3,770,545	1.0000	3,770,545	110.61	0.992
Dec-18	33,488	3,680,301	1.0000	3,680,301	109.90	0.906
Jan-19	32,988	3,857,438	1.0000	3,857,438	116.93	0.915
Feb-19	33,042	3,500,058	1.0000	3,500,058	105.93	0.911
Mar-19	33,099	3,361,880	1.0000	3,361,880	101.57	0.872
Apr-19	32,934	3,248,052	1.0000	3,248,052	98.62	0.932
May-19	32,888	3,191,400	1.0000	3,191,400	97.04	1.003
Jun-19	32,782	3,003,084	1.0000	3,003,084	91.61	0.972
Jul-19	32,707	3,273,120	1.0000	3,273,120	100.07	1.051
Aug-19	32,715	3,140,083	1.0000	3,140,083	95.98	0.901
Sep-19	32,685	3,034,135	1.0000	3,034,135	92.83	0.973
Oct-19	32,771	3,319,191	1.0000	3,319,191	101.28	0.919
Nov-19	32,439	3,166,195	1.0000	3,166,195	97.60	0.882
Dec-19	31,825	3,554,718	1.0000	3,554,718	111.70	1.016
Jan-20	31,584	3,208,976	1.0000	3,208,976	101.60	0.869
Feb-20	31,558	2,985,811	1.0000	2,985,811	94.61	0.893
Mar-20	31,872	3,112,201	1.0000	3,112,201	97.65	0.961
Apr-20	32,916	2,616,227	1.0000	2,616,227	79.48	0.806
May-20	33,617	2,626,355	1.0000	2,626,355	78.13	0.805
Jun-20	34,349	2,840,091	1.0000	2,840,091	82.68	0.903
Jul-20	35,185	2,996,439	1.0000	2,996,439	85.16	0.851
Aug-20	36,297	2,780,892	1.0000	2,780,892	76.61	0.798
Sep-20	37,569	2,685,401	1.0000	2,685,401	71.48	0.770
Oct-20	38,755	2,726,123	1.0000	2,726,123	70.34	0.694
Nov-20	39,812	2,676,794	1.0000	2,676,794	67.24	0.689
Dec-20	40,741	2,927,811	1.0000	2,927,811	71.86	0.643
CY2018	407,026			43,576,542	107.06	
CY2019	392,875			39,649,356	100.92	0.943
CY2020	424,255			34,183,119	80.57	0.798
3/2019-2/2020	389,987			38,486,646	98.69	

Attachment 3

STAR Health Trend Analysis

Medical

The FY2022 rating methodology uses assumed medical trend factors to adjust the base period claims cost to the rating period (FY2022). The cost trend factors used in this analysis are a combination of utilization and inflation components. The projected trend rate assumptions were developed by the actuary based on an analysis of recent experience under the plan. The trend assumption is established on a statewide basis.

The trend analysis included a review of health plan claims experience data through February 28, 2021. Based on this information, estimates of monthly incurred claims were made through December 31, 2020. The claims cost and trend experience was reviewed separately by type of service.

Exhibit A provides a summary of the FY2017, FY2018, FY2019 and FY2020 trends by category of service. The FY2020 trend represents the trend during the period September 2019 through February 2020. All trends have been calculated as the average cost per member per month during the specified time period compared to the same time period during the prior fiscal year. For example, the FY2019 trend is calculated as the average cost per member per month during FY2019 divided by the average cost per member per month during FY2018.

All trends have been adjusted to remove the impact of the various provider reimbursement changes that have impacted the cost of the program. These adjustments are made for all items that have materially impacted historical costs and have distorted the trend from one time period to the next. For example, in September 1, 2019 the standard dollar amounts on which children's and rural hospital reimbursement is determined were revised resulting in a significant reimbursement increase for these facilities. As a result, the FY2020 observed trends are adjusted to remove the impact of the increased cost associated with these services to ensure the average cost during FY2019 and FY2020 are based on comparable services and reimbursement levels and the underlying trend is calculated.

Trends beyond February 2020 have been excluded from the trend analysis due to the significant distortion caused by the COVID-19 pandemic and the corresponding PHE declaration. From March 2020 to December 2020, enrollment increased by nearly 30% while the average cost dropped by 15-20%. These patterns are not expected to continue into FY2022 and therefore the trends for this time period are not assigned any credibility.

The trend assumptions were then developed from an average of the FY2017, FY2018, FY2019 and September 2019 through February 2020 STAR Health trends. The weighting of each time period was based on the number of months within each time period.

Although the medical trends were reviewed by component – professional, outpatient, inpatient, etc., a single trend assumption was selected and applied in aggregate. The MCO is paid a single

capitation rate that does not vary by medical component. Splitting the analysis into separate components (inpatient, physician, etc…) does not add any additional accuracy to the analysis but could increase the probability of distortions in the projection due to reporting differences among fiscal years, small sample sizes in a given category of service, or variations in the trend projections that could emerge for a category. There is significant interaction amongst all categories of service as MCOs may shift cost away from inpatient toward outpatient and looking at an individual category in isolation could lead to overgeneralizations. The aggregate analysis performed takes into consideration all service categories and their interactions with one another without sacrificing accuracy.

Use of the aggregate trend captures all interactions between categories of service, including the ongoing shifts that occur, and is reflective of the expected level of cost trend in future periods.

Prescription Drug

The rating methodology uses assumed pharmacy trend factors to adjust the base period (March 2019 through February 2020) claims cost to the rating period (FY2022). The trend rate assumptions were developed by the actuary based on an analysis of recent pharmacy claims experience for STAR Health clients. The trend rate assumption is the same for all clients and all service areas.

The trend analysis included a review of STAR Health utilization and cost experience data paid through March 31, 2021. Incurred monthly utilization (days supply per member) and cost per service (plan payments per days supply) statistics were developed by drug type (brand, generic and specialty) through February 2021. From this experience, the average annual utilization and cost per service were determined for each of the five 12-month periods ending February 2021.

Due to the impact on healthcare utilization and cost from the COVID-19 pandemic and the PHE, experience after February 2020 was deemed unusable for purposes of developing trend projections. As a result, we have used the four 12-month periods ending February 2020 in our trend analysis in order to exclude pandemic-related experience.

Certain drugs and drug categories are excluded from the pharmacy trend analysis. Direct-acting antivirals (DAA) used for the treatment of the Hepatitis C virus and the drug Orkambi were carved in to the managed care contract effective September 1, 2018 but they were excluded from the trend analysis due to their extraordinary one-time impact on recent trends. Please note that effective March 1, 2021, Hepatitis C DAAs have been carved out of the managed care arrangement due to significant changes to the prior authorization criteria for these medications. In addition to these drugs, experience for the drugs Tamiflu and Makena were removed from our trend analysis. Tamiflu was removed due to the significant variation in the intensity of flu season from year to year. Makena was removed due to its one-time distortion of pharmacy trends for pregnant women. Beginning this rate cycle, hemostatic agents are also excluded from the pharmacy trend analysis. Effective September 1, 2020, hemophilia medications were carved out of the managed care arrangement. Please note that while excluded from the pharmacy trend analysis, the historical managed care claims for all of these drugs were included in the base period experience used in developing the pharmacy component of the rates. Factors were later applied to adjust for the carve-

out of Hepatitis C DAAs and hemostatics.

The STAR Health pharmacy trend assumptions for the remainder of FY2020 and all of FY2021 and FY2022 were developed using the following formula. For each drug type, the utilization and cost per service trend assumptions were set equal to one-sixth of the experience trend rate for the 12-month period ending February 2018 plus two-sixths of the experience trend rate for the 12-month period ending February 2019 plus three-sixths of the experience trend rate for the 12-month period ending February 2020. The final cost trend assumptions were then determined by applying the assumed utilization and cost per service trends by individual drug type to actual experience for the 12-month period ending February 2020 and combining the results into a single trend assumption. Exhibit B of this attachment presents a summary of the historical pharmacy trend analysis.

The preferred drug list (PDL) changes implemented in 2019 had a material impact on pharmacy cost and trends. As a result, recent pharmacy experience trends will tend to understate the expected underlying trend. In order to correct for this understatement, we developed adjustment factors to restate pharmacy experience for the three most recent 12-month periods assuming that the PDL changes had not been implemented. Exhibit C of this attachment presents these adjustment factors and the resulting pharmacy trend assumptions used for the STAR Health program.

Please note that the MCO was provided a detailed trend analysis file which included the historical utilization and cost experience as well as all of the formulas and assumptions used in developing the trend assumptions.

NEMT

The rating methodology uses assumed trend factors to adjust the base period claims cost to the projection period. The NEMT trend factors used in this analysis are a combination of utilization and inflation components. The NEMT trend factor was developed using a combination of i) actual statewide NEMT trend experience for all Medicaid managed care programs and ii) the industry trend from the Consumer Price Index published by the Bureau of Labor Statistics for transportation services.

Statewide NEMT trend experience for all Medicaid managed care programs was used due to small sample size. The NEMT trend analysis only includes demand response services. In addition, MTO Region 1 and MTO Region 10 changed MTO provider effective September 1, 2017 and experience for these regions was excluded from the trend analysis. The statewide NEMT trend assumptions were developed using an average of the three most recent 12-month period trends prior to COVID.

The industry trends include inflation and utilization components. The inflation component of the trend was developed using average trends for the past 10 years from the Consumer Price Index published by the Bureau of Labor Statistics for transportation services. The utilization component of the trend was selected by the actuary.

The selected NEMT trend was developed using an average of the statewide NEMT trend and the industry trend. The annual trend assumption of 3.30% was used in the rating analysis to project

historical experience forward to the rating period. Attachment 3 – Exhibit D presents a summary of the NEMT trend analysis.

FY2022 STAR Health Rating Analysis
Trend Development - Medical

Historical Average Trend (1)	Professional	Outpatient - ER	Outpatient - Non ER	Inpatient	Vision	Other	Total
FY2017	-0.4%	0.7%	-5.1%	-3.3%	-5.2%	-4.8%	-2.8%
FY2018	4.1%	7.3%	9.8%	8.0%	5.6%	3.3%	5.2%
FY2019	5.5%	1.5%	3.9%	9.4%	-0.6%	14.9%	9.3%
9/2019-2/2020	-1.9%	-5.5%	4.7%	-4.3%	-30.8%	5.4%	8.6%

Trend Assumption (2) 4.6%

Footnotes:
(1) Trends have been adjusted to remove the impact of policy and reimbursement changes.
(2) Average trend during FY2017, FY2018, FY2019 and first six months of FY2020.

FY2022 STAR Health Rating Analysis
Trend Development - Pharmacy

	Total
Annual Trend in Number of Scripts per Member per Month	
Brand Drugs	
3/2015-2/2016	-11.7 %
3/2016-2/2017	-12.7 %
3/2017-2/2018	-16.9 %
3/2018-2/2019	-18.9 %
3/2019-2/2020	-7.7 %
Use	-13.0 %
Generic Drugs	
3/2015-2/2016	-0.3 %
3/2016-2/2017	-0.3 %
3/2017-2/2018	5.3 %
3/2018-2/2019	3.4 %
3/2019-2/2020	4.7 %
Use	4.4 %
Specialty Drugs	
3/2015-2/2016	-8.9 %
3/2016-2/2017	-6.7 %
3/2017-2/2018	-3.7 %
3/2018-2/2019	0.0 %
3/2019-2/2020	-5.7 %
Use	-3.5 %
All Drugs	
3/2015-2/2016	-3.2 %
3/2016-2/2017	-3.2 %
3/2017-2/2018	0.8 %
3/2018-2/2019	-0.3 %
3/2019-2/2020	2.8 %
Use	2.4 %
Annual Trend in Days Supply per Member per Month	
Brand Drugs	
3/2015-2/2016	-13.0 %
3/2016-2/2017	-14.3 %
3/2017-2/2018	-18.8 %
3/2018-2/2019	-20.7 %
3/2019-2/2020	-7.0 %
Use	-13.5 %
Generic Drugs	
3/2015-2/2016	1.4 %
3/2016-2/2017	-0.4 %
3/2017-2/2018	6.2 %
3/2018-2/2019	5.2 %
3/2019-2/2020	7.1 %
Use	6.3 %

FY2022 STAR Health Rating Analysis
Trend Development - Pharmacy

	Total
Specialty Drugs	
3/2015-2/2016	-8.8 %
3/2016-2/2017	-5.1 %
3/2017-2/2018	-5.6 %
3/2018-2/2019	0.2 %
3/2019-2/2020	-4.7 %
Use	-3.2 %
All Drugs	
3/2015-2/2016	-2.7 %
3/2016-2/2017	-3.8 %
3/2017-2/2018	0.6 %
3/2018-2/2019	0.6 %
3/2019-2/2020	5.0 %
Use	4.0 %

Annual Trend in Incurred Claims per Days Supply

Brand Drugs	
3/2015-2/2016	16.0 %
3/2016-2/2017	7.5 %
3/2017-2/2018	-10.7 %
3/2018-2/2019	-6.8 %
3/2019-2/2020	-1.0 %
Use	-4.6 %
Generic Drugs	
3/2015-2/2016	-0.6 %
3/2016-2/2017	-11.5 %
3/2017-2/2018	9.8 %
3/2018-2/2019	-0.1 %
3/2019-2/2020	-31.5 %
Use	-14.1 %
Specialty Drugs	
3/2015-2/2016	10.6 %
3/2016-2/2017	27.4 %
3/2017-2/2018	10.1 %
3/2018-2/2019	21.2 %
3/2019-2/2020	22.7 %
Use	20.1 %
All Drugs	
3/2015-2/2016	3.7 %
3/2016-2/2017	-1.7 %
3/2017-2/2018	-15.8 %
3/2018-2/2019	-10.9 %
3/2019-2/2020	-11.8 %
Use	-7.6 %

FY2022 STAR Health Rating Analysis
Trend Development - Pharmacy

	Total
Annual Trend in Incurred Claims per Member per Month	
Brand Drugs	
3/2015-2/2016	0.9 %
3/2016-2/2017	-7.8 %
3/2017-2/2018	-27.5 %
3/2018-2/2019	-26.1 %
3/2019-2/2020	-7.9 %
Use	-17.5 %
Generic Drugs	
3/2015-2/2016	0.8 %
3/2016-2/2017	-11.8 %
3/2017-2/2018	16.6 %
3/2018-2/2019	5.1 %
3/2019-2/2020	-26.7 %
Use	-8.7 %
Specialty Drugs	
3/2015-2/2016	0.8 %
3/2016-2/2017	20.9 %
3/2017-2/2018	3.9 %
3/2018-2/2019	21.4 %
3/2019-2/2020	16.9 %
Use	16.3 %
All Drugs	
3/2015-2/2016	0.9 %
3/2016-2/2017	-5.4 %
3/2017-2/2018	-15.3 %
3/2018-2/2019	-10.3 %
3/2019-2/2020	-7.5 %
Use	**-3.9 %**
Generic Dispensing Rate (Days Supply)	
3/2015-2/2016	74.0 %
3/2016-2/2017	76.6 %
3/2017-2/2018	80.8 %
3/2018-2/2019	84.5 %
3/2019-2/2020	86.2 %
Use	91.0 %

FY2022 STAR Health Rating Analysis
Trend Development - Pharmacy

	All Members
Incurred Claims per Member per Month	
3/2015-2/2016	135.382
3/2016-2/2017	128.055
3/2017-2/2018	108.453
3/2018-2/2019	97.228
3/2019-2/2020	89.967
PDL Adjustment Factors	
3/2017-2/2018	1.1669
3/2018-2/2019	1.3515
3/2019-2/2020	1.4774
Adjusted Incurred Claims per Member per Month	
3/2015-2/2016	135.382
3/2016-2/2017	128.055
3/2017-2/2018	126.553
3/2018-2/2019	131.404
3/2019-2/2020	132.918
Annual Trend in Adjusted Incurred Claims per Member per Month	
3/2016-2/2017	-5.4 %
3/2017-2/2018	-1.2 %
3/2018-2/2019	3.8 %
3/2019-2/2020	1.2 %
Use	1.7 %

Notes:
Trend Adjustment Factors include adjustments for the significant PDL changes that took place in 7/2019 and 7/2021.

Non-Emergency Medical Transportation Carvein Rating FY2022
Trend Analysis

	Trend Assumption
NEMT Experience (1)	
3/2017-2/2018	2.54%
3/2018-2/2019	3.79%
3/2019-2/2020	4.02%
Average	3.50%
Industry (CPI)	
Inflation (2)	1.60%
Utilization (3)	1.50%
Total	3.10%
Selected (4)	**3.30%**

Notes:
(1) Trend analysis only includes demand response services.
Experience for MTO 1, MTO 10 and MTO 4 are excluded from trend analysis.
MTO 1 and MTO 10 switched organizations effective 9/1/2017. MTO 4 is FFS.
(2) Average CPI Transportation (CUSR0000SAT) monthly year-over-year trend for the past 10 years
(3) Selected by the Actuary
(4) Average Experience and Industry trend.

Attachment 4

Provider Reimbursement Adjustments

This attachment presents information regarding rating adjustments for the various provider reimbursement and benefit revisions that became effective (or will become effective) after the base period used in rate setting and before the end of FY2022.

The benefit and provider reimbursement changes recognized in the FY2022 rate setting are listed below. The rating adjustments for these provider reimbursement changes were calculated by applying actual health plan encounter data to the old and new reimbursement bases and the resulting impact determined. The attached exhibit presents a summary of the derivation of the adjustment factors.

Provider Reimbursement Adjustments

- Effective September 1, 2019, HHSC made revisions to the reimbursement rates for therapy services.

- Effective September 1, 2017, FQHC wrap payments were carved out of managed care. HHSC has developed policy language to ensure that FQHCs are reimbursed their full encounter rate; however, the MCO will only be responsible for reimbursing the FQHC an amount no less than the rate paid to non-FQHC providers providing similar services.

- Invalid clinician administered drugs have been removed from the base period. HHSC has provided guidance to the MCOs which specifies the reporting requirements for a CAD to be considered a valid claim.

- Effective September 1, 2019, HHSC increased the reimbursement for private duty nursing (PDN) by 2.5%.

- Effective September 1, 2021, HHSC will make revisions to the reimbursement for outpatient services provided at rural hospitals.

Hospital Reimbursement Adjustments

- As a result of annual evaluations, several hospitals have had their Standard Dollar Amount (SDA) revised between the base period and FY2022. In addition, the SDAs for all rural and children's hospitals were increased effective September 1, 2019. The increases for children's hospitals were limited to FY2020 and were restored to the pre-September 1, 2019 levels on September 1, 2020.

- Beginning May 1, 2013, HHSC implemented revisions to hospital reimbursement to account for Potentially Preventable Readmissions (PPR). The reimbursement reductions amount to 1-2% depending on a hospital's performance during the evaluation period and can change from one fiscal year to the next. A new PPR reduction list will become effective September 1, 2021. As a result, the adjustment factors represent the restoration of those reductions that were in place during the base period net of those reductions that will be in place during FY2022.

- Beginning March 1, 2014, HHSC implemented revisions to hospital reimbursement to account for Potentially Preventable Complications (PPC). The reimbursement reductions amount to 2-2.5% depending on a hospital's performance during the evaluation period and can change from one fiscal year to the next. A new PPC reduction list will become effective September 1, 2021. As a result, the adjustment factors represent the restoration of those reductions that were in place during the base period net of those reductions that will be in place during FY2022.

- Effective September 1, 2019, HHSC began utilizing an adjustment to the base period data that analyzes inefficiencies and potentially preventable expenses that unnecessarily increase managed care costs. This analysis was performed using the 3M™ PPR methodology which is a computerized algorithm to identify readmissions with a plausible clinical relationship to the care rendered during or immediately following a prior hospital admission. An expected reduction of PPR events of 10% has been applied for FY2022. The 10% PPR adjustment is intended to be an introductory step in improving the quality and efficiency of the managed care programs. This assumption will be monitored as actual experience develops and reassessed in future rating periods.

- Retroactive to October 1, 2019, the DRG Grouper utilized for pricing inpatient claims reverted from Version 37 to Version 36. A portion of the base period, October 2019 through February 2020, includes data prior to the retroactive change and therefore is based on Grouper 37 logic.

Pharmacy Adjustments

- HHSC has implemented significant changes to the Preferred Drug List (PDL) over the past several years. These changes include some of the program's highest expenditure drugs and have had a significant impact on managed care pharmacy cost. Effective July 1, 2019 brand name Nexium capsules changed to non-preferred status. Effective July 1, 2020 brand name Stimulants and Related Agent drugs such as Focalin XR, Adderall XR and Concerta ER changed to preferred status. We developed adjustment factors to reflect the anticipated cost impact of these PDL changes.

- Effective September 1, 2020, HHSC carved out all hemostatic drugs from the managed care capitated arrangement. These drugs will continue to be covered services under the program but will be funded through a non-risk arrangement. Hemostatic drugs are rare and extremely high cost. The purpose of this carve-out is to improve the balance of risk between various MCOs. There was no utilization for Hemostatic drugs in the base period for the STAR Health program and therefore no such adjustment is needed for FY2022.

- Effective March 1, 2021, HHSC changed the prior authorization requirements for Hepatitis C Direct Acting Antiviral (DAA) drugs. As a result, HHSC carved out all Hepatitis C DAA drugs from the managed care capitated arrangement. These drugs continue to be covered services under the program but are funded through a non-risk arrangement. There was no utilization for Hepatitis C drugs in the base period for the STAR Health program and therefore no such adjustment is needed for FY2022.

NEMT Adjustments

- Effective January 1, 2021, reimbursement for Individual Transportation Participant (ITP) service decreased to $0.56 per mile. The base period claims cost for ITP service has been adjusted to reflect this change.

- H.B. 1576 allows Transportation Network Companies (TNC) such as Uber and Lyft to participate in the Medicaid program. An adjustment was applied to reflect i) the cost difference between TNC and traditional demand response providers and ii) utilization impact on overall NEMT utilization. We assumed TNC cost per trip would be 15% less than traditional demand response providers for trips under 15 miles. In addition, we assumed 10% of current utilization would shift to TNCs and utilization would increase by 2.5% for demand response service trips under 15 miles.

The attached exhibit presents a summary of the rating adjustment factors. With the exception of the FQHC adjustment factor, all adjustment factors were calculated by repricing the March 2019 through February 2020 base period encounter data with both the old and new reimbursement terms and comparing the relative difference. Although the MCOs are not required to change their reimbursement levels based on changes implemented by HHSC, the Medicaid fee schedule serves as a primary negotiating tool for both MCOs and providers in Texas. Many MCO/provider reimbursement contracts are directly tied to the Medicaid FFS fee schedule through established percentages (e.g. 100%, 102%, 95% etc.). As a result, MCO reimbursement has historically changed in conjunction with Medicaid FFS fee schedule changes, both increases and decreases. Furthermore, it is common for provider reimbursement contracts that are directly tied to the Medicaid fee schedule (i.e. set at a % of Medicaid) to automatically adjust when the Medicaid fee schedule changes with no further need for recontracting. The correlation between managed care reimbursement and FFS fee schedules has been consistently observed throughout the history of the Texas managed care programs and is reiterated through discussions with the MCOs.

The FQHC adjustment was calculated by collecting the total FQHC wrap payments paid during the base period and removing these amounts from the base period.

All adjustments were calculated independently by both HHSC and the actuary to ensure consistent results.

FY2022 STAR Health Rating Analysis
Provider Reimbursement Adjustments
Estimates Based on 3/2019-2/2020 STAR Health Encounter Data

Medical - Provider Reimbursement Adjustment Factor

Therapy Reimbursement Changes	1,212,683
Remove FQHC Wrap Payment	-4,384,741
Removal of Invalid CAD	-9
PDN Reimbursement Increase	761,233
Rural Hospital Outpatient Reimbursement Increase	485,952
Total Provider Reimbursement Changes	-1,924,882
3/2019-2/2020 Total Claims	292,505,596
Provider Reimbursement Adjustment	-0.66 %

Medical - Hospital Reimbursement Adjustment Factor

Standard Dollar Amount Changes	-839,910
PPR Reduction/Restoration	84,599
PPC Reduction/Restoration	-239,709
PPR Efficiency Improvements	-1,379,916
DRG Grouper Revisions	1,239,806
Total Hospital Reimbursement Changes	-1,135,130
3/2019-2/2020 Total Claims	292,505,596
Hospital Reimbursement Adjustment	-0.39 %

Pharmacy Adjustment Factors

3/2019-2/2020 Total Claims	38,486,646
Impact of PDL Changes 7/1/2019 & 7/1/2021	577,300
Adjustment	1.50 %

NEMT Carve-in Adjustment Factors

3/2019-2/2020 Total Claims	480,946
Impact of TNC	239
Adjustment	0.05 %
Impact of Mileage Reimbursement Change	-6,991
Adjustment	-1.45 %

Attachment 5

PHE Related Cost Adjustment

COVID-19 and the resulting Public Health Emergency (PHE) has had a significant impact on the STAR Health program. Beginning March 2020, enrollment has grown by over 30% while the average cost for all services declined at unprecedented levels. The enrollment growth is directly connected to the declaration of the PHE while the cost reductions are due to many factors including but not limited to; mandatory shutdowns, mask mandates, social distancing and other environmental factors.

In order to estimate the continued impact of the PHE on the FY2022 average costs, we have studied the quarterly trends separately for medical, pharmacy and NEMT. Through this analysis it is evident that the largest reductions occurred in the period immediately following the PHE declaration (March 2020-May 2020) but that the reductions have continued into the summer of 2020 and the first half of FY2021. Unlike some of the other Medicaid managed care programs in Texas, the average cost for the STAR Health program does not appear to be returning to normal levels leading us to believe that the PHE will continue to impact program costs into FY2022.

The PHE related cost adjustment was calculated by comparing the actual trends during the first quarter of FY2021 to the assumed historical trend levels. The difference in these two trends was assumed to be the PHE-related cost impact. We then assumed the PHE and the associated cost impact will continue until December 31, 2021. In order to recognize the potential for pent-up demand and changes in environmental factors such as elimination of mask mandates, children returning to school and reduction in social distancing, we have applied a credibility factor of 37.5% to the calculated PHE related cost adjustment. The attached exhibit presents a summary of the observed trends during the first quarter of FY2021, the historical average trend assumptions, the estimated PHE impact and the associated adjustment factors by type of service.

FY2022 STAR Health Rating Analysis
PHE Related Cost Adjustment

	9/2020-11/2020 Trend		Estimated	Adjustment
	Actual (1)	Assumed (2)	PHE Impact (3)	Factor
Medical	-15.17%	7.90%	-21.4%	-2.67%
Pharmacy	-25.32%	0.90%	-26.0%	-3.25%
NEMT	-32.71%	3.42%	-34.9%	-4.37%

Footnotes:
(1) Observed trend through Q1 of FY2021 adjusted for reimbursement differences.
(2) Assumed trend from FY2021 rate development.
(3) Actual trend (1) divided by Assumed trend (2).
(4) Assume PHE continues to 12/31/2021, 37.5% of Estimated PHE Impact for 1/3 of FY2022 (3).

Attachment 6

Community First Choice (CFC)

As a result of CFC, Texas is eligible for an enhanced federal match rate on all CFC eligible services. The calculation of the CFC portion of the rate is based on an estimation of the CFC eligible services included in the STAR Health premium rate.

Certain services such as personal care services are currently provided under the STAR Health program and are currently included in the STAR Health premium rate. These services are now eligible for the enhanced federal match rate and must be identified. This calculation involved the following steps:

a. Determine the percentage of all claim payments which are associated with the personal care services (PCS) for CFC eligible members. This information was compiled by collecting a list of CFC eligible members and collecting all PCS claims for these members during the base period.

b. The CFC eligible services included in the STAR Health premium rate are then determined as the current premium rate multiplied by the percentage of total claims provided for personal care services for CFC eligible members.

Based on this calculation, the projected CFC portion of the total premium rate which is eligible for the enhanced federal match is $2.87 per member per month.

FY2022 STAR Health Rating Analysis
CFC Enhanced Match Calculation

3/2019-2/2020 Personal Care Services (1)	864,993
3/2019-2/2020 Total Claims	292,505,596
PCS % of Total	0.3%
FY2022 Premium Rate	969.55
CFC Portion of Premium Rate (2)	2.87

Footnotes:
(1) Total PCS provided to CFC eligible members.
(2) PCS % of Total Claims multiplied by FY2022 Premium Rate.

Attachment 7

FY2022 STAR Health Rate Certification Index

The index below includes the pages of this report that correspond to the applicable sections of the 2021-2022 Medicaid Managed Care Rate Development Guide, dated June 2021.

Section I. Medicaid Managed Care Rates

1. General Information

A. Rate Development Standards

i. Rate ranges are not being utilized in this rate development.

ii. Rates are for the 12-month period September 1, 2021 through August 31, 2022 (FY2022).

iii. (a) The certification letter is on page 14 of the report.

(b) The final capitation rates are shown on page 13 of the report.

(c) (i) See pages 1 and 4 through 5 of the report.

(ii) See page 1 of the report.

(iii) See page 1 of the report.

(iv) Not applicable. There have been no changes since the prior certification.

(v) Not applicable. There are no special contract provisions related to payment within the STAR Health program.

(vi) Not applicable.

iv. Acknowledged.

v. Acknowledged.

vi. Acknowledged.

vii. Acknowledged.

viii. Not applicable.

ix. Not applicable.

x. Acknowledged.

xi. Acknowledged.

xii. See pages 4, 6, 11 and 44 through 45 for discussion on how COVID-19 and PHE have been accounted for in the FY2022 rate development.

xiii. Acknowledged.

B. Appropriate Documentation

i. The actuary is certifying capitation rates. See page 14 of the report.

ii. Acknowledged.

iii. Acknowledged.

iv. Not applicable.

v. Acknowledged.

vi. Acknowledged. See page 14 of the report.

vii. See pages 46 through 47 of the report.

viii. (a) See pages 16 through 20 of the report.

(b) Not applicable. All rating adjustment factors have been included in the report.

(c) FY2021 rates were not adjusted by a *de minimis* amount using the authority in 42 C.F.R 438.7(c)(3).

ix. Not applicable. There are no known amendments at this time.

x. (a) Texas Medicaid Managed Care data has been studied for all programs, risk groups and service delivery areas through December 2020 to study the impact of COVID and the PHE.

(b) See pages 11 and 44 through 45 of the report.

(c) See pages 11 and 44 through 45 of the report. Unlike the prior rating period we are making a prospective adjustment to the FY2022 capitation rates. In addition, the experience rebate provisions have been tightened to limit the possibility of excessive profits in FY2022.

2. Data

A. Rate Development Standards

i. (a) Acknowledged.

(b) Acknowledged.

(c) Acknowledged.

(d) Not applicable.

B. Appropriate Documentation

i. (a) See pages 1 through 3 of the report.

ii. (a) See pages 1 through 3 of the report.

(b) See pages 2 through 3 of the report.

(c) See pages 2 through 3 of the report.

(d) Not applicable.

iii. (a) Base period data is fully credible.

(b) See page 4 of the report.

(c) No errors found in the data.

(d) See pages 40 through 43 of the report.

(e) Value added services and non-capitated services have been excluded from the analysis.

3. Projected Benefit Costs and Trends

A. Rate Development Standards

i. Acknowledged.

ii. Acknowledged.

iii. Acknowledged.

iv. Not applicable. STAR Health eligibility ends at age 21 and therefore the IMD regulation does not impact this population.

B. Appropriate Documentation

i. See pages 16 through 20 of the report.

ii. (a) See pages 16 through 20 of the report.

(b) There have been no significant changes in the development of the benefit cost since the last certification.

(c) All recoupments and recoveries resulting from overpayments to providers have been netted out of the claim payments used in the rate development. MCOs are required to adjust encounter data to remove all overpayments and correct the submitted information. Any provider recoveries not adjusted for in the submitted encounter data are excluded from the base period as a negative add-on payment.

iii. (a) See 30 through 39 of the report.

(b) See 30 through 39 of the report.

(c) See 30 through 39 of the report.

(d) See 30 through 39 of the report.

(e) Not applicable.

iv. Not applicable.

v. The STAR Health program stipulates the following provisions related to in lieu of services:

- The MCO may provide inpatient services for acute psychiatric conditions in a free-standing psychiatric hospital in lieu of an acute care inpatient hospital setting.

- The MCO may provide substance use disorder treatment services in a chemical dependency treatment facility in lieu of an acute care inpatient hospital setting.

The cost for in lieu of services is not tracked from other services and are included in the rate development and are not treated differently than any other category of service.

vi. (a) Restorative enrollment can occur when an individual is deemed to have been Medicaid eligible during a prior period. If the individual was eligible for and enrolled in Medicaid managed care during the prior six months, then the individual is retrospectively enrolled in the same managed care plan as their prior enrollment segment. The managed care plan is then retrospectively responsible for all Medicaid expenses incurred during this retrospective period and is also paid a retrospective premium for this time period.

(b) All claims paid during retroactive enrollment periods are included in the base period data used to develop the FY2022 premium rate.

(c) All enrollment data during retroactive enrollment periods are included in the base period data used to develop the FY2022 premium rate.

(d) No adjustments are necessary to account for retroactive enrollment periods because the enrollment criteria have not changed from the base period to the rating period. All retroactive enrollment and claims information has been included in the base period data, the trend calculations and all other adjustment factors.

vii. See pages 40 through 43 of the report.

viii. See pages 40 through 43 of the report.

4. Special Contract Provisions Related to Payment

A. Incentive Arrangements

i. Rate Development Standards

Not applicable.

ii. Appropriate Documentation

Not applicable.

B. Withhold Arrangements

i. Rate Development Standards

Not applicable.

ii. Appropriate Documentation

Not applicable.

C. Risk-Sharing Arrangements

i. Rate Development Standards

Acknowledged.

ii. Appropriate Documentation

HHSC includes an experience rebate provision in its uniform managed care contracts which requires the MCOs to return a portion of net income before taxes if greater than the specified percentages. The net income is measured by the financial statistical reports (FSRs) submitted by the MCOs and audited by an external auditor. Net income is aggregated across all programs and service delivery areas. The aggregated net income is shared as follows:

Pre-tax Income as a % of Revenues	MCO Share	HHSC Share
≤ 3%	100%	0%
> 3% and ≤ 5%	80%	20%
> 5% and ≤ 7%	0%	100%
> 7% and ≤ 9%	0%	100%
> 9% and ≤ 12%	0%	100%
> 12%	0%	100%

D. State Directed Payments

i. Rate Development Standards

Not applicable.

ii. Appropriate Documentation

(a) Not applicable. No such arrangements exist in the STAR Health program.

(b) Confirmed.

(c) Confirmed.

E. Pass-Through Payments

i. Rate Development Standards

Not applicable.

ii. Appropriate Documentation

(a) Not applicable. No such arrangements exist in the STAR Health program.

5. Projected Non-Benefit Costs

A. Rate Development Standards

i. Acknowledged.

ii. Acknowledged.

B. Appropriate Documentation

i. See page 12 of the report.

ii. See page 12 of the report.

iii. See page 12 of the report.

6. Risk Adjustment and Acuity Adjustments

A. Rate Development Standards

i. Acknowledged.

ii. Acknowledged.

iii. Acknowledged.

B. Appropriate Documentation

i. Not applicable, risk adjustment is not applied to the STAR Health rate development.

ii. Not applicable, risk adjustment is not applied to the STAR Health rate development.

iii. Not applicable, risk adjustment is not applied to the STAR Health rate development.

iv. Not applicable, risk adjustment is not applied to the STAR Health rate development.