

Part III Actuarial Memorandum and Certification

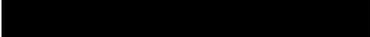
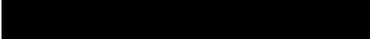
General Information

This filing is for the 1-50 small group market, with an effective date of 1/1/2022.

Company Identifying Information:

Company Legal Name: Humana Health Plan
State: KY
HIOS Issuer ID: 15411
Market: Small Group
Effective Date: 1/1/2022

Company Contact Information:

Primary Contact Name: 
Primary Contact Telephone Number: 
Primary Contact Email Address: 

Scope and Purpose of the Filing

The purpose of the actuarial memorandum is to provide certain information related to the submission, including support for the values entered into the Part I Unified Rate Review Template, which supports compliance with the market rating rules and reasonableness of applicable rate increases. This filing should be used for no other purposes.

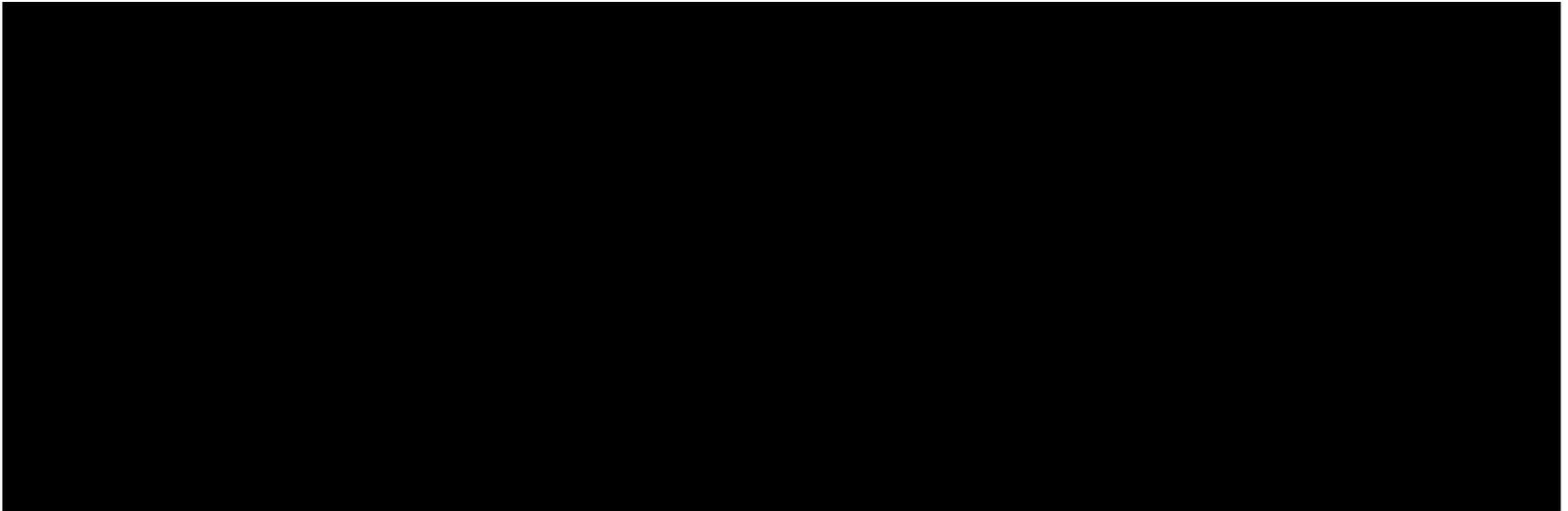
In addition, this actuarial memorandum provides required actuarial certifications related to:

- The methodology used to calculate the AV Metal Value for each plan.
- The Index Rate is developed in accordance with Federal regulations and the development of plan specific premium rates using allowable modifiers to the Index Rate.
- The geographic rating factors, which should reflect differences only in the costs of delivery and not differences in population morbidity by geographic area.

This memorandum was prepared by a qualified actuary, and is intended to be reviewed by a qualified actuary.

Please note that, to the best of our knowledge, this filing complies with the current regulations and guidance. However, to the extent that laws, rules or guidance change after the submission of this filing, amending this filing may be necessary.

Proposed Rate Increase(s)



There were no plan benefit design changes to renewing plans for 2022. The company's product pricing model was updated for 2022, as outlined below, which does result in rate changes that vary by plan. (These rate changes can be found in Worksheet 2, Section 1 of the URRT.)

Experience and Current Period Premium, Claims, and Enrollment

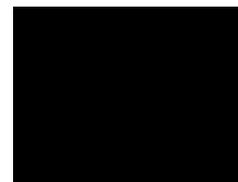
Experience Period: From 1/1/2020 to 12/31/2020

Paid Through Date: 3/31/2021

Current Date: 3/1/2021

Premiums in Experience Period:

Expected Risk Adjustment Receivables or Payables:



Allowed and Incurred Claims Incurred During the Experience Period:

	Allowed Claims	Incurred Claims
Claims that were processed through the issuer's claim system		
Claims that were processed outside the issuer's claim system		
Claims incurred but not paid as of paid through date		
Totals		

Allowed claims come directly from Humana's claims system after eligibility and network discounts are applied. Allowed medical claims, allowed Rx claims, and member capitation payments are combined to populate the experience period data above. Member cost sharing is removed from the allowed claims to report the incurred claims entered above. The experience claims included within the URRT are for the ACA-compliant block only and do not include transitional experience.

To estimate incurred claims, all commercial claims experience is segregated by legal entity, processing platform, product, geography and claim category so that appropriate balance of homogeneity and credible size is maintained. The segmentation logic is reviewed at least annually or when significant changes in the block occur (e.g. acquisitions). The paid-to-incurred claim triangles for each block are used to develop completion factors that are applied to each incurred month to estimate ultimate incurred amounts. Estimated ultimate incurred claims are then adjusted for pending claims if there is a material variance from historical levels.

Claim costs in the most recent months have highly variable development factors that generate unreliable estimates of ultimate claim costs. For these months, the initial incurred estimates are blended with estimates from a projection method, based on per member per month (PMPM) expected claim costs. A prior period's PMPM average is trended to the midpoint of the experience period. These projections are analyzed at the claim category (inpatient, outpatient, physician and prescription drug). Inpatient utilization statistics are also used in setting the PMPM estimates. These statistics include hospital days, authorized admissions, and cost per day. Projections will then be adjusted for known or expected changes in trend, seasonality, large claims, contracted claim rates, benefits, enrollment, customer/product mix, utilization and other factors.

Finally, the completion factors and estimated ultimate incurred claims are reviewed and may be changed to account for known anomalies in the data that may have distorted the calculation. The difference between the estimated ultimate incurred claims and the current paid-to-date amounts is the estimate of the incurred but not paid claims for each incurred month. In the calculation process, completion factors, per typical actuarial practice, are not permitted to be greater than 1.00. That is, no coverage month is permitted to have an incurred claim estimate less than the amount of claims paid to date even though historical experience may indicate that this is likely due to future claim recoveries.

For each incurred month, the incurred but not reported (IBNR) amount equals the incurred claims estimate minus claims paid to date. Follow-up studies, including monthly historical reserve restatement analyses, are regularly performed to test the accuracy of the reserving methodology and suggest possible improvements.

Allowed but not reported estimates are developed utilizing the combination of the incurred but not reported estimate and the incurred to allowed ratio of historical claims. $[\text{Allowed Claims not paid as of paid through date}] = [\text{Allowed Claims}] / [\text{Incurred Claims}] * [\text{Incurred Claims not paid as of paid through date}]$.

Experience Period Index Rate

	Total Allowed Claims
Experience Period Allowed Claims:	
Experience Period Member Months:	
Allowed Claims PMPM:	
Non-EHB covered in projection period:	0.0%
Experience Period Index Rate PMPM	\$613.77

The Index Rate of the experience period is the average allowed claims PMPM for EHBs only.

For reporting purposes, only ACA-compliant experience is included in the Experience Period Index Rate shown. For single risk pool compliant plans, any covered benefits in excess of EHB are included in the allowed claims but excluded from the Index Rate. See the Consumer Adjusted Premium Rate Development section for the scheduled quarterly trend adjustments to the index rate.

Benefit Categories

The Benefit Categories are defined as follows:

Inpatient Hospital: Includes non-capitated facility services for medical, surgical, maternity, mental health and substance abuse disorder, skilled nursing, and other services provided in an inpatient facility setting and billed by the facility.

Outpatient Hospital: Includes non-capitated services for surgery, emergency services, lab, radiology, therapy, observation, and other services provided in an outpatient facility setting and billed by the facility. The Outpatient Hospital benefit category uses a combination of both visits and services to determine the utilization per 1,000. For items such as Outpatient Surgery and Emergency Room, where multiple services are rendered and can be billed together, visits are used for the measurement units. For single items that can be billed separately, such as Outpatient Therapy or MRI, services are used for the measurement units.

Professional: Includes non-capitated primary care, specialist, therapy, laboratory, radiology, and other professional services not billed by the facility. The Professional benefit category uses a combination of both visits and services to determine the utilization per 1,000. For items such as Primary Care or Specialist Office visits, where multiple services are rendered and can be billed together, visits are used for the measurement units. For single items that can be billed separately, such as Therapy or MRI, services are used for the measurement units.

Other Medical: Includes non-capitated ambulance, home health care, DME, prosthetics, supplies, vision exams, dental services, and other services. The Other Medical benefit category uses a combination of both visits and services to determine the utilization per 1,000. For items such as Home Health visits, where multiple services are rendered and can be billed together, visits are used for the measurement units. For single items that can be billed separately, such as DME, services are used for the measurement units.

Capitation: Includes all services provided under one or more capitated arrangements.

Prescription Drug: Includes drugs dispensed by a pharmacy. This is the net amount of rebates received from drug manufacturers. Other was selected for utilization description under the prescription drugs benefit category. In this case, the Other represents Days Supply.

Projection Factors

Morbidity Adjustment

This assumption is intended to capture the change in underlying morbidity for the risk pool in the projected period compared to the experience period risk pool. The experience period data includes experience for groups enrolled on a Community-Rated plan. The development of the underlying morbidity considers expected changes in our Community-Rated risk profiles (for new and existing members). The development of the underlying morbidity considers the bifurcation of the experience period risk pool from healthier risk profile groups moving out of the Community-Rated risk pool and into a Level Funded Premium (Self-Funded) offering and less healthy risk profile groups continuing to enter and remain with the Community-Rated risk pool.

Demographic Shift

Demographic Mix - This is intended to capture the change in age and gender from the experience period to the projected period. This adjustment uses the expected age/gender factors to calculate the average change in expected claims.

Area Distribution Change - This captures the change in area distribution from the experience period to the projected period for the filed legal entity.

Plan Design Changes

Anticipated changes in the average utilization of services due to differences in average cost-sharing requirements during the Experience Period and average cost-sharing requirements in the Projection Period (using the same formula as the risk adjustment program).

Other Adjustments

Pooling Charge - In the Experience Period we experienced a lower than expected number of shock claims. A shock claim is defined as any claims in excess of \$60,000 per member per month. For the Projected Period, we're adjusting the claims [REDACTED] to account for the expected level of shock claims.

Network Change - This adjustment is the impact due to the termination of the PPO network.

Trend Factors (Cost/Utilization):

Cost Trend

The primary cost trend component is Unit Price Index (UPI) and it captures pure unit cost changes, calculated using the same basket of services each period, due to price/contract negotiations and provider distribution changes.

Professional and other medical cost trends are developed based on historical area specific cost trends from Humana's Commercial block of business data. Inpatient hospital and outpatient services are calculated from Humana contracting information historically. Future cost trends are developed based on expected changes in Humana's Commercial contracts.

Pharmacy cost trends are developed based on historical brand, generic, and specialty drug inflation trends from Humana's Commercial data. Future cost trends are developed based on expected changes in these pharmacy contracts.

These contractual impacts will be applicable to all members regardless of risk class.

Other components are added to the unit price index trend to develop the total cost trend provided. These include the following:

- Catastrophic claims – Captures changes in the cost of catastrophic claims. A catastrophic claim is defined as any month where a member's claims are greater than the monthly threshold of \$85,000. These catastrophic claims are then calculated on a PMPM basis and compared year over year to determine the trend. It is assumed in forecasted months that this category regresses to the mean and therefore has little to no impact.
- Influenza – Captures the impact of cost trend due to influenza which is identified by ICD-10 code, and pneumonia which is using DRG codes. This also includes the change in cost for pharmacy treatment and vaccination of influenza.
- Health Technology Pipeline (HTP) – Captures the cost impact of new pipeline drugs, treatment guidelines, medical devices, and other health technologies. Cost impacts are estimated by using a combination of internal analysis by Humana's Actuarial and Clinical Pharmacist teams.
- Trend Benders – Captures savings for Humana initiatives designed to bend trend by managing cost, such as shifting emphasis towards outpatient surgery, and ensuring claims are coded correctly. These initiatives are evaluated by an internal actuarial organization tasked with evaluating the effectiveness of the initiatives. Evaluations are done through a collaborative effort involving clinical and other operational areas. Projected savings are calculated by determining prospective changes to impacted metric values, which are determined by analyzing historical metric values as well as through discussions with clinical and operational areas. Savings are reviewed with leadership to ensure appropriateness of assumptions.

This describes the development of the core cost trend. All impacts from healthcare reform have been removed and are included in the "Population Risk/Morbidity" and "Other" trend sections to prevent double counting of any impacts

Utilization Trend

Using Humana’s Trend Quantification and Projection model, a baseline trend is developed using Humana’s Commercial block of business historical medical claims data. The historical baseline trend is developed by removing all known impacts to allowed trend such as demographics, geography, duration, morbidity, customer changes, benefit changes, influenza, health technology pipeline, trend benders, and changes in workday. This baseline trend is forecasted from the Experience Period to the Projection Period using a weighted average of historical trends. The weighted average incorporates a decay factor method, giving more weight to recent quarters.

Other components are added to the baseline trend to develop the total utilization trend provided. These include the following:

- **Workday** – Captures changes in the calendar, recognizing that health care utilization varies by day of the week and reporting periods contain varying weekday mix and count. This impact is developed through the use of an internal model which is uploaded with Humana’s Commercial claims data.
- **Influenza** – Captures the impact of unit trend due to influenza which is identified by ICD-10 code, and pneumonia which is identified using DRG codes. This also includes the change in utilization for pharmacy treatment and vaccination of influenza.
- **Health Technology Pipeline (HTP)** – Captures the utilization impact of new pipeline drugs, treatment guidelines, medical devices, and other health technologies. Utilization impacts are estimated by using a combination of internal analysis by Humana’s Actuarial and Clinical Pharmacist teams.
- **Trend Benders** – Captures savings for Humana initiatives designed to bend trend by managing utilization, such as case management, disease management, and nurse programs. These initiatives are evaluated by an internal actuarial organization tasked with evaluating the effectiveness of the initiatives. Evaluations are done through a collaborative effort involving clinical and other operational areas. Projected savings are calculated by determining prospective changes to impacted metric values, which are determined by analyzing historical metric values as well as through discussions with clinical and operational areas. Savings are reviewed with leadership to ensure appropriateness of assumptions.

This describes the development of the core utilization trend. All impacts from healthcare reform have been removed and are included in the “Population Risk/Morbidity” and “Other” trend sections to prevent double counting of any impacts.

Year 1 Allowed Trend		
Cost	Utilization	Total
5.3%	0.6%	5.9%

Year 2 Allowed Trend		
Cost	Utilization	Total
5.5%	1.0%	6.6%

Trend from Experience Period to Projected Period:	12.92%
Cost Trend from Experience Period to Projected Period:	11.13%
Utilization Trend from Experience Period to Projected Period:	1.61%

Manual EHB Allowed Claims PMPM Development

Source and Appropriateness of Experience Data Used:

The source data is fully credible and therefore used to develop the manual rate.

Credibility Manual Experience Period Index Rate PMPM:		Fully Credible
Credibility Manual Trend from Experience to Projected Period:	x	Fully Credible
Credibility Manual Trended EHB Allowed Claims PMPM:	=	Fully Credible

Adjustments Made to the Data:

The source data is fully credible and therefore used to develop the manual rate.

Credibility Manual Trended EHB Allowed Claims PMPM:		Fully Credible
Morbidity Adjustment:		Fully Credible
Demographic Shift:		Fully Credible
Plan Design Changes:		Fully Credible
Other:	x	Fully Credible
Credibility Manual Adjusted Trended EHB Allowed Claims PMPM:	=	Fully Credible

Inclusion of Capitation Payments:

No adjustments were made to the data. The source data already includes capitated payments.

Applied Credibility %

Description of the Credibility Methodology Used:

A value of 120,000 member-months of experience is assumed to be fully credible, this value was derived based on analyzing historical experience. The 120,000 member-months threshold for full credibility is based upon a 95% confidence interval with a +/- 5% tolerance level. Our credibility weight methodology utilizes the following equation:

$$= \sqrt{\frac{\textit{Membermonths in experience period}}{120,000}}$$

Resulting Credibility Level Assigned to Base Period Experience when applying the proposed credibility methodology: 100%

Member Months:



Projected Period Index Rate

- The development of the Projected Index Rate is specific to the legal entity being filed.
- The Projected Index Rate reflects group policies with a count of 50 or fewer that the company expects to be enrolled in single risk pool compliant plans during the projected period.
- The Projected Allowed Claims PMPM is developed using the allowed claims from all covered benefits (including non-EHBs); however, the non-EHBs are excluded from the development of the Projected Index Rate.
- There are no state mandated covered benefits that are included in Projected Allowed Claims PMPM but excluded from the Projected Index Rate.

Experience Period Index Rate PMPM:	
Trend from the Experience Period to the Projected Period:	
Trended EHB Allowed Claims PMPM:	
Morbidity Adjustment:	
Demographic Shift:	
Plan Design Changes:	
Other:	
Adjusted Trended EHB Allowed Claims PMPM:	
Credibility Manual Adjusted Trended EHB Allowed Claims PMPM:	Fully Credible
Applied Credibility %:	100.00%
Projected Index Rate:	731.04

The Projected Index Rate is calculated using the following formula: (Adjusted Trended EHB Allowed Claims PMPM x Applied Credibility %) + ((Credibility Manual Adjusted Trended EHB Allowed Claims PMPM x (1-Applied Credibility %))

Development of the Market-Wide Adjusted Index Rate

Risk Adjustment Payment/Charge

Risk adjustment transfers are estimated using an internal model that projects and extrapolates risk adjustment transfers using Wakely Consulting data as a starting point. An overview of the mechanics of the model is as follows:

1. Begin with the Wakely Consulting estimate of Humana’s transfer position vs. carriers in each state. See below for more info on Wakely estimates.
2. We do not receive Wakely estimates for all states. For states without Wakely estimates we use a regression model to predict state average transfer components (across all carriers) to use in place of unavailable Wakely estimates. This regression model is based on Wakely estimates for available states; it predicts state average transfer components using the prior year’s CMS actuals as predictors. In non-Wakely states, we compare our Humana risk score and other transfer components to these regression estimates; the resulting transfer position is used in subsequent steps as if it were a Wakely estimate.

3. The Wakely transfer estimate is applicable only to the experience period and uses membership available at the time of the Wakely estimate. For example, when pricing for a 01/1/2019 or even a 01/1/2020 effective date, data from 2018 would be used (the claims experience period in the filing may not be a calendar year, but risk adjuster transfers must be). To get a final view of what the experience period transfer will be, we project sales and terms into the future, simulating the exchange of membership between Humana and the rest of the market. In so doing, we consider the very important fact that groups with less than a full year of risk adjusted experience will end up receiving only part of the risk score that they would have received with a full year of experience. However, this reduced risk score is further adjusted by enrollment duration that are meant to approximately offset the reduction to risk scores resulting from not having a full year of experience.

4. In order to forecast future risk adjustment years, we first set risk scores for both Humana and the market to their morbidity risk score equivalents. The morbidity risk score removes the effects of partial year considerations and the impact of members who have since termed, and therefore can be used as a starting place for future year forecasts. From here, the projection is extended to account for the exchange of members between Humana, the rest of the market, and other segments.

5. A separate component of the overall risk transfer payment is from the High Cost Risk Pool. We receive estimates from Wakely Consulting with estimated charges as a percent of premium for each year. We assume that we receive a similar payout in future years that we received historically with some conservatism applied. The overall net impact is calculated as payout minus premium charge.

Wakely Consulting is an actuarial consulting firm that has established a robust and sophisticated method of collecting risk adjustment data from participating carriers. Once it has collected the necessary data, it calculates all components of the risk adjustment formula for all carriers, and releases summaries of this to each participating carrier. Note that Wakely does not release results unless there is sufficient carrier participation (approximately 75% of the market). The data given to Wakely represents claims incurred and paid through a defined period only (for example, July 2018), and Wakely has predictive models to estimate what risk scores will be once the data is incurred through December and paid through the following April.

The state of KY does have Wakely estimates to use directly.

The projected period risk adjustment PMPM is \$ 9.05 PMPM for this state and legal entity.

Paid to Allowed Ratio

The 2022 paid to allowed ratios were developed by separately calculating the expected paid and allowed cost of each plan using Humana's internal pricing model. The estimated paid to allowed ratio is provided for reporting purposes only and has no impact on the projected claims cost.

The projected paid to allowed ratio is calculated by averaging the developed paid to allowed ratios for each plan using projected member month weights. The overall expected paid to allowed average factor is 83%.

The Risk Adjustment PMPM applied in the calculation of the Market-Wide adjusted index rate should be grossed up by the average projected paid-to-allowed factor as the Index Rate and the Market-wide adjusted index rate reflect claims on an allowed basis. Therefore, the Risk Adjustment Payment/Charge shown on Worksheet 1 of the URRT can be calculated by dividing the Risk Adjustment PMPM by the average projected paid to allowed ratio.

The Risk Adjustment Payment/Charge shown on Worksheet 1 is 10.9.

Reinsurance

As the temporary reinsurance program was established for benefit years 2014 through 2016, the uniform reinsurance contribution is \$0 PMPY and \$0 PMPM for 2021. No projected reinsurance recoveries are expected for this state and legal entity.

Exchange User Fees

No projected Exchange user fees are applied to the Index Rate at the market level, because this state and legal entity is not filing to be on the Exchange.

Market-Wide Adjusted Index Rate Calculation

Projected Index Rate:	731.04
Reinsurance:	0.00
Risk Adjustment Payment/Charge:	10.9
Exchange User Fees:	0.00%
Market Adjusted Index Rate:	720.14

Market-wide Adjusted Index Rate is calculated using in the following formula: $(\text{Projected Index Rate} - \text{Reinsurance} - \text{Risk Adjustment/Charge}) / (1 - \text{Exchange User Fees})$.

Plan Adjusted Index Rate

AV and Cost Sharing Design of Plan

Our product pricing is developed in a nationwide third party pricing model calibrated to Humana's cost levels. The allowed cost is adjusted for the expected induced utilization due to each plan's specific cost sharing components in accordance with generally accepted actuarial principles. The methodology does not adjust for differences in utilization due to health status in accordance with requirements under the ACA that prohibit such an adjustment. The plan design parameters were applied to the expected allowed claims to calculate paid claims and cost sharing factors. Updates to the pricing model for 2022 include trend updates and Rx modelling methodology updates to incorporate more recent experience.

The 2022 plan factors were priced relative to a base plan from the prior product generation. The resulting premium rates were appropriate given the expected claims cost; however, the average projected plan factor does not align to the average projected paid to allowed ratio. As a result, the plan factors have been scaled to more closely resemble the average projected paid to allowed ratio. The impact to the premium rates of each plan is rate neutral since an offsetting adjustment of -13.7 % is applied to the base rate.

The 2022 plan factors reflect changes due to an updated Humana pricing model. Updates to the Humana pricing model vary by plan but are neutral to the block of business in total. The neutrality adjustments has been included in the plan factors.

The Plan Id level cost sharing adjustments can be found on Worksheet 2 of the URRT (Field # 3.3)

Provider Network Adjustment

The development of the index rate includes the anticipated average unit costs derived from the provider networks that will be available on this legal entity in this state. These average unit costs are the result of charge levels, network discounts, delivery system characteristics and utilization management practices across the entire state, for this legal entity.

The 2022 plan factors have also been normalized for the network factor adjustment applied at the Plan Id level. The projected period average network factor is calculated using the projected period member month weights and the unit cost network factors for each plan.

This adjustment has been applied to all plan factors in order to achieve an average network factor of 1.00. An offsetting amount of - [REDACTED] has been applied to the base rate.

The Plan Id level provider network adjustments can be found on Worksheet 2 of the URRT (Field # 3.4).

Benefits in Addition to EHB

All covered benefits represent EHB, and there is no total premium impact for non-EHB in this filing.

The Plan Id level benefits in addition to EHB can be found on Worksheet 2 of the URRT (Field # 3.5)

Family Structure

Family rates are calculated in accordance with 45 CFR 147.002 where only the 3 oldest dependents under age 21 are included in premium rate calculations.

Administrative Costs

The Administrative Costs are based on our internal forecast for the projected period. These costs are estimated based off of current costs, projected volume changes and estimated changes in department workload. These expenses are simply loaded as a flat percentage of premium at this point in time and do not vary by product or plan (unless otherwise stated).

Administrative Expense Load

- Broker & Sales Commissions: Compensation expenses associated with business issued through an agent or agency
- Clinical & Network Operations: non-quality clinical costs, provider contracting, and network maintenance & development
- IT Expenses: costs associated with maintenance and development of systems
- Customer Service & Account Installation: call center, customer service, and account management
- Corporate Administration: shared functions that are not exclusive to small group medical segment, including corporate finance, legal, human resources, etc.
- Small Group Administration: functional areas & personnel that solely work on small group medical segment
- Quality Expenses: Expenses associated with quality that are allowed adjustments under the Medical Loss Ratio standards

Profit & Risk Load

- Since taxes (including any federal income tax) are captured separately in the Taxes & Fees input, the profit and risk load reflects after-tax amounts. The margin shown does not vary by product or plan.

Taxes and Fees

- State Premium Tax: state premium tax; charged on a percentage of premium
- Federal Insurer Annual Fee: assessment created in 2014 by PPACA. Not income tax deductible.
- Federal Income Tax
- Risk Adjuster Fee: This includes the Risk Adjuster Fee that will be charged at \$3.00 PMPY or \$0.25 PMPM as stated in the 2022 Final Notice of Benefit and Payment Parameters published on Wednesday, May 5, 2021.
- Patient-Centered Outreach Research Institute (PCORI) Filing Fee

The Plan Id level Administrative Expense, Taxes and Fees, Profit & Risk Load can be found on Worksheet 2 of the URRT (Field #s 3.6, 3.7, 3.8).

Plan Adjusted Index Rate Calculation

The formula for developing the Consumer Adjusted Premium Rate is to multiply the Market-Wide Adjusted Index Rate by the product of the allowable plan level modifiers and divide by one minus the sum of Administrative Costs. The calculation for a sample Plan Id has been provided below.

	Plan: 15411KY1340035
Market Adjusted Index Rate:	720.14
AV and Cost Sharing Design of Plan:	0.6866
Provider Network Adjustment:	1.0042
Benefits in Addition to EHB:	<u>x 1.000</u>
Administrative Expense:	÷ (1-(14.24% +
Taxes and Fees:	2.39% +
Profit & Risk Load:	4.03%) =
Plan Adjusted Index Rate:	625.82

Calibration

Age Curve Calibration

The average age factor is calculated as the member weighted age rating factor, using the projected age distribution assumptions in the pricing model. The average age factor is then compared to the standard age rating curve.

The calculation described above uses a factor of zero for the distribution of members expected to pay no premium. This accounts for the lost revenue due to the three under age 21 child dependent cap.

Federal Age Curve Published in 2018

<u>Age Range</u>	<u>Age Factor</u>	<u>Distribution</u>	<u>Age Range</u>	<u>Age Factor</u>	<u>Distribution</u>
Pay No Premium	0.000		39	1.262	
0-14	0.765		40	1.278	
15	0.833		41	1.302	
16	0.859		42	1.325	
17	0.885		43	1.357	
18	0.913		44	1.397	
19	0.941		45	1.444	
20	0.970		46	1.500	
21	1.000		47	1.563	
22	1.000		48	1.635	
23	1.000		49	1.706	
24	1.000		50	1.786	
25	1.004		51	1.865	
26	1.024		52	1.952	
27	1.048		53	2.040	
28	1.087		54	2.135	
29	1.119		55	2.230	
30	1.135		56	2.333	
31	1.159		57	2.437	
32	1.183		58	2.548	
33	1.198		59	2.603	
34	1.214		60	2.714	
35	1.222		61	2.810	
36	1.230		62	2.873	
37	1.238		63	2.952	
38	1.246		64+	3.000	

Current Age Curve Calibration	
Weighted Average Age Factor:	1.4873
Age Calibration Factor	0.6723

Geographic Factor Calibration

The average geographic factor is calculated as the member weighted geographic rating factor, using the projected geographic distribution assumptions in the projection model. Only regions with projected membership are shown.

<u>Rating Area</u>	<u>Geo Factor</u>	<u>Distribution</u>
Rating Area 1		
Rating Area 2		
Rating Area 3		
Rating Area 4		
Rating Area 5		
Rating Area 6		
Rating Area 7		
Rating Area 8		

Weighted Average Geographic Factor:	0.9815
Geographic Calibration Factor:	1.0188

Tobacco Calibration

Humana will not rate for tobacco use during the effective period.

Consumer Adjusted Premium Rate Development

The formula for developing the Consumer Adjusted Premium Rate is to multiply the Plan Adjusted Index Rate by the appropriate age and area factors for the member, and divide by the allowable calibration factors shown in the "Calibration" section. The calculation for a sample Plan Id has been provided below.

2021 quarterly Consumer Adjusted Premium Rates can be calculated by applying quarterly trend. This has been displayed below.

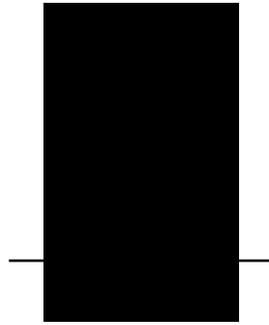
Consumer Adjusted Premium Rate - Using the Weighted Average Age Factor (Reconciles to the Rate Data Template)

	Member 1	Member 2	Member 3	Member 4
Plan	15411KY1340035	15411KY1340035	15411KY1340035	15411KY1340035
Rating Area	Rating Area 1	Rating Area 1	Rating Area 1	Rating Area 1
Age	21	35	48	61
Plan Adjusted Index Rate	\$625.82	\$625.82	\$625.82	\$625.82
x Actual Area factor	[REDACTED]			
x Actual Age factor				
x Calibrated Area factor				
x Calibrated Age Factor				
1Q22 Consumer Adjusted Premium Rate	[REDACTED]			
2Q22 Quarterly Trend				
2Q22 Consumer Adjusted Premium Rate				
3Q22 Quarterly Trend				
3Q22 Consumer Adjusted Premium Rate				
4Q22 Quarterly Trend				
4Q22 Consumer Adjusted Premium Rate				

Projected Loss Ratio

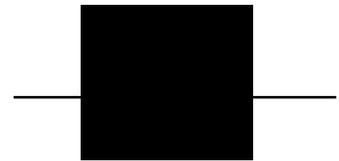
Claims

- + Quality Expenses
- + Payment for Risk Adjuster
- + Payment for Risk Corridor
- Receipt for Risk Adjuster
- Receipt for Risk Corridor



Premiums

- Taxes and Fees



The projected loss ratio using the Federally prescribed MLR methodology is:



If the realized loss ratio is less than 80%, then the company will comply with the Federal MLR requirements outlined in PHSA 2718.

Plan Product Information

AV Metal Values

The AV Metal Values entered in Worksheet 2 of the Part I Unified Rate Review Template were calculated in the 2022 AV Calculator. In accordance with 45 CFR §156.135(b) and actuarial standards of practice, we adjusted the AVC inputs of certain cost share parameters to account for non-standard benefit designs.

The Humana Rx5 plans tier drugs differently than the tiers in the AVC. The Humana tier copays were blended to calculate an effective copay for generic, preferred brand, and non-preferred brand tiers to enter into the AVC. Humana's Specialty Rx tier offers two levels of cost share based on whether the member uses a preferred or non-preferred pharmacy. The cost share for these channels were blended to calculate an effective cost share to enter into the Specialty tier of the AVC.

On Humana's Traditional Copay plans, the member must pay a copay and then coinsurance on the remaining allowed for Emergency Room visits. We calculated an effective copay using the average cost of an Emergency Room visit by metallic tier from the AVC.

On Humana's Traditional Simplicity plans, copays for Outpatient services vary depending on site of service (Ambulatory Surgical Center or Outpatient Facility). We calculated an effective copay using the distribution of utilization based on Humana's experience.

Membership Projections

The membership projections found in Worksheet 2 of the Part I Unified Rate Review Template were determined by renewing groups on similar plans throughout the projected period. The company accomplished this by mapping membership that is currently on ACA compliant plans to the same or like ACA compliant plans upon renewal. The overall membership volume is adjusted for anticipated member sales, in-force persistency, and relative competitiveness via our internal market level projection models. With this in mind, the company cannot accurately project group by group behavior in plan selection or potential selections by new business. This approach, in some instances, will lead to zero mapped member months on a non-terminated Plan Id.

Terminated Plans and Products

See Appendix A for a list of terminated Plan Ids and any Plan Id mappings to Renewing or New plans.

Plan Type

The plan types selected in the drop-down boxes in Worksheet 2, Section I of the Part I Unified Rate Review Template for each of the company's plans do not require further explanation. The company's plan types align with the definitions found on the Healthcare.gov website.

Reliance

I, [REDACTED] relied on information and underlying assumptions provided by internally developed pricing and modeling as well as third party consultant data in the establishment of these rates. I am reasonably satisfied the information I relied upon was determined in accordance with the appropriate ASOPs. I relied on information from others for the following information:

Trend: Humana's Trend Quantification and Projection team

Risk adjustment and morbidity assumptions: Humana's Analytics and Forecasting team and a third party vendor

Administrative expenses, taxes, and fees: Humana's Finance department

Unit cost relativities: Humana's Network Strategy and Analytics team

Metal AV and Pricing AV values: Humana's Product Pricing team and a third party vendor

Actuarial Certification

I, [REDACTED], am an Actuary employed by Humana Health Plan. I am a member of the American Academy of Actuaries and I meet the Qualification Standards of the American Academy of Actuaries to render the Statement of Actuarial Opinion contained herein.

I hereby certify that to the best of my knowledge and judgment and based upon the information presented to me:

1. The projected index rate is:
 - a. in compliance with all applicable State and Federal Statutes and Regulations (45 CFR 156.80 and 147.102) .
 - b. developed in compliance with the applicable Actuarial Standards of Practice, specifically ASOPs 8, 26, and 41.
 - c. reasonable in relation to the benefits provided and the population anticipated to be covered.
 - d. neither excessive nor deficient.
2. That the index rate and only the allowable modifiers as described in 45 CFR 156.80(d)(1) and 45 CFR 156.80(d)(2) were used to generate plan level rates.
3. That the percent of total premium that represents essential health benefits included in Worksheet 2, Sections III and IV were calculated in accordance with actuarial standards of practice.
4. That the AV Metal Values shown in Worksheet 2 of the Part I Unified Rate Review Template were determined using the AV Calculator, in accordance with ASOP 50 and 45 CFR §156.135.
5. That all plans meet the AV Metallic tier requirements for 2022.
6. The geographic rating factors reflect only differences in the costs of delivery and do not include differences for population morbidity by geographic area.

This opinion is qualified, in that the Part I Unified Rate Review Template does not demonstrate the process used by the issuer to develop the rates. Rather, it represents information required by Federal regulation to be provided in support of the review of premium impacts, for certification of qualified health plans for Federally facilitated exchanges and for certification that the index rate is developed in accordance with Federal regulation and used consistently and only adjusted by the allowable modifiers.

Actuary signature: [REDACTED]

Date: 8/10/2021

Appendix A: Terminated Products

If a Plan Id has been Terminated before the effective date of the rate filing and mapped to a Plan Id in the projected period, then a cross-walk between the terminated plan(s) and the new plan(s) has been provided below. This includes Plan Ids that were available for renewal in 2018, 2019, and 2020 plan years.

<u>Terminated Plan Id</u>	<u>Mapped Plan Id</u>	<u>Terminated Plan Id</u>	<u>Mapped Plan Id</u>
15411KY1350012	15411KY1340396	15411KY1350217	15411KY1340394
15411KY1350028	15411KY1340281	15411KY1350218	15411KY1340394
15411KY1350028	15411KY1340035	15411KY1350219	15411KY1340400
15411KY1350035	15411KY1340281	15411KY1350220	15411KY1340344
15411KY1350035	15411KY1340035	15411KY1350224	15411KY1340226
15411KY1350037	15411KY1340281	15411KY1350225	15411KY1340280
15411KY1350037	15411KY1340035	15411KY1350225	15411KY1340113
15411KY1340012	15411KY1340396	15411KY1350226	15411KY1340226
15411KY1340028	15411KY1340035	15411KY1350226	15411KY1340278
15411KY1340037	15411KY1340035	15411KY1340214	15411KY1340391
15411KY1350101	15411KY1340386	15411KY1340216	15411KY1340391
15411KY1350102	15411KY1340387	15411KY1340217	15411KY1340394
15411KY1350113	15411KY1340280	15411KY1340218	15411KY1340394
15411KY1350113	15411KY1340113	15411KY1340219	15411KY1340400
15411KY1340101	15411KY1340386	15411KY1340220	15411KY1340344
15411KY1340102	15411KY1340387	15411KY1340224	15411KY1340226
15411KY1310101	15411KY1340358	15411KY1340225	15411KY1340113
15411KY1310102	15411KY1340359	15411KY1340228	15411KY1340230
15411KY1310107	15411KY1340275	15411KY1340251	15411KY1340358
15411KY1310109	15411KY1340275	15411KY1340252	15411KY1340359
15411KY1350201	15411KY1340388	15411KY1340253	15411KY1340360
15411KY1350202	15411KY1340391	15411KY1340256	15411KY1340363
15411KY1350203	15411KY1340398	15411KY1340258	15411KY1340363
15411KY1350204	15411KY1340398	15411KY1340259	15411KY1340363
15411KY1350206	15411KY1340207	15411KY1340260	15411KY1340366
15411KY1350206	15411KY1340269	15411KY1340261	15411KY1340366
15411KY1350207	15411KY1340207	15411KY1340262	15411KY1340372
15411KY1350207	15411KY1340269	15411KY1340263	15411KY1340368
15411KY1350208	15411KY1340275	15411KY1340264	15411KY1340370
15411KY1350208	15411KY1340208	15411KY1340265	15411KY1340370
15411KY1340201	15411KY1340388	15411KY1340266	15411KY1340329
15411KY1340202	15411KY1340391	15411KY1340268	15411KY1340269
15411KY1340203	15411KY1340398	15411KY1340276	15411KY1340278
15411KY1340204	15411KY1340398	15411KY1340277	15411KY1340280
15411KY1340206	15411KY1340207	15411KY1340279	15411KY1340281
15411KY1310201	15411KY1340360	15411KY1340282	15411KY1340281
15411KY1310206	15411KY1340269	15411KY1340284	15411KY1340286
15411KY1310212	15411KY1340280	15411KY1310218	15411KY1340372
15411KY1310213	15411KY1340281	15411KY1310219	15411KY1340370
15411KY1310214	15411KY1340281	15411KY1310222	15411KY1340278
15411KY1350214	15411KY1340391	15411KY1310223	15411KY1340280
15411KY1350216	15411KY1340391	15411KY1310224	15411KY1340278

<u>Terminated Plan Id</u>	<u>Mapped Plan Id</u>	<u>Terminated Plan Id</u>	<u>Mapped Plan Id</u>
15411KY1310225	15411KY1340281	15411KY1350252	15411KY1340328
15411KY1350237	15411KY1340388	15411KY1350253	15411KY1340391
15411KY1350237	15411KY1340360	15411KY1350253	15411KY1340363
15411KY1350238	15411KY1340343	15411KY1350254	15411KY1340391
15411KY1350238	15411KY1340328	15411KY1350254	15411KY1340363
15411KY1350239	15411KY1340344	15411KY1350255	15411KY1340391
15411KY1350239	15411KY1340329	15411KY1350255	15411KY1340363
15411KY1350240	15411KY1340345	15411KY1350256	15411KY1340394
15411KY1350240	15411KY1340330	15411KY1350256	15411KY1340366
15411KY1350241	15411KY1340208	15411KY1350257	15411KY1340394
15411KY1350242	15411KY1340345	15411KY1350257	15411KY1340366
15411KY1350242	15411KY1340330	15411KY1350258	15411KY1340400
15411KY1350243	15411KY1340348	15411KY1350258	15411KY1340372
15411KY1350243	15411KY1340333	15411KY1350259	15411KY1340396
15411KY1350244	15411KY1340334	15411KY1350259	15411KY1340368
15411KY1350244	15411KY1340349	15411KY1350260	15411KY1340398
15411KY1350245	15411KY1340336	15411KY1350260	15411KY1340370
15411KY1350245	15411KY1340351	15411KY1350261	15411KY1340398
15411KY1350246	15411KY1340336	15411KY1350261	15411KY1340370
15411KY1350246	15411KY1340351	15411KY1350262	15411KY1340275
15411KY1340327	15411KY1340360	15411KY1350262	15411KY1340208
15411KY1340331	15411KY1340275	15411KY1350263	15411KY1340400
15411KY1340332	15411KY1340330	15411KY1350263	15411KY1340372
15411KY1340340	15411KY1340341	15411KY1350276	15411KY1340230
15411KY1340335	15411KY1340336	15411KY1350276	15411KY1340286
15411KY1340342	15411KY1340388	15411KY1350277	15411KY1340338
15411KY1340346	15411KY1340208	15411KY1350277	15411KY1340353
15411KY1340347	15411KY1340345	15411KY1350278	15411KY1340230
15411KY1340355	15411KY1340356	15411KY1350278	15411KY1340286
15411KY1340350	15411KY1340351	15411KY1350279	15411KY1340339
15411KY1310287	15411KY1340360	15411KY1350279	15411KY1340354
15411KY1310288	15411KY1340328	15411KY1350280	15411KY1340341
15411KY1310294	15411KY1340363	15411KY1350280	15411KY1340356
15411KY1310289	15411KY1340329	15411KY1350281	15411KY1340341
15411KY1310293	15411KY1340337	15411KY1350281	15411KY1340356
15411KY1310290	15411KY1340334	15411KY1350264	15411KY1340374
15411KY1310291	15411KY1340336	15411KY1350264	15411KY1340402
15411KY1310292	15411KY1340336	15411KY1350265	15411KY1340374
15411KY1350247	15411KY1340352	15411KY1350265	15411KY1340402
15411KY1350247	15411KY1340337	15411KY1350266	15411KY1340375
15411KY1350248	15411KY1340386	15411KY1350266	15411KY1340403
15411KY1350248	15411KY1340358	15411KY1350267	15411KY1340336
15411KY1350249	15411KY1340386	15411KY1350267	15411KY1340351
15411KY1350249	15411KY1340358	15411KY1350268	15411KY1340377
15411KY1350250	15411KY1340387	15411KY1350268	15411KY1340405
15411KY1350250	15411KY1340359	15411KY1350269	15411KY1340382
15411KY1350251	15411KY1340388	15411KY1350269	15411KY1340410
15411KY1350251	15411KY1340360	15411KY1350270	15411KY1340382
15411KY1350252	15411KY1340343	15411KY1350270	15411KY1340410

<u>Terminated Plan Id</u>	<u>Mapped Plan Id</u>	<u>Terminated Plan Id</u>	<u>Mapped Plan Id</u>
15411KY1350271	15411KY1340382	15411KY1490012	15411KY1340269
15411KY1350271	15411KY1340410	15411KY1490013	15411KY1340275
15411KY1350272	15411KY1340382	15411KY1490014	15411KY1340337
15411KY1350272	15411KY1340410	15411KY1490015	15411KY1340333
15411KY1350273	15411KY1340382	15411KY1490016	15411KY1340275
15411KY1350273	15411KY1340410	15411KY1490017	15411KY1340372
15411KY1350274	15411KY1340382	15411KY1490018	15411KY1340286
15411KY1350274	15411KY1340410	15411KY1490019	15411KY1340338
15411KY1340357	15411KY1340358	15411KY1490020	15411KY1340286
15411KY1340361	15411KY1340328	15411KY1490021	15411KY1340339
15411KY1340362	15411KY1340363	15411KY1490022	15411KY1340341
15411KY1340364	15411KY1340363	15411KY1490023	15411KY1340341
15411KY1340365	15411KY1340366	15411KY1490024	15411KY1340374
15411KY1340367	15411KY1340372	15411KY1490025	15411KY1340374
15411KY1340369	15411KY1340370	15411KY1490026	15411KY1340280
15411KY1340371	15411KY1340275	15411KY1490027	15411KY1340278
15411KY1340373	15411KY1340374	15411KY1490028	15411KY1340281
15411KY1340376	15411KY1340336	15411KY1490029	15411KY1340280
15411KY1340378	15411KY1340382	15411KY1490030	15411KY1340334
15411KY1340379	15411KY1340382	15411KY1490031	15411KY1340375
15411KY1340380	15411KY1340382	15411KY1490032	15411KY1340281
15411KY1340381	15411KY1340382	15411KY1490033	15411KY1340281
15411KY1340383	15411KY1340382	15411KY1490034	15411KY1340336
15411KY1340385	15411KY1340386	15411KY1490035	15411KY1340336
15411KY1340389	15411KY1340343	15411KY1490036	15411KY1340336
15411KY1340390	15411KY1340391	15411KY1490037	15411KY1340377
15411KY1340392	15411KY1340391	15411KY1490038	15411KY1340382
15411KY1340393	15411KY1340394	15411KY1490039	15411KY1340382
15411KY1340395	15411KY1340400	15411KY1490040	15411KY1340382
15411KY1340397	15411KY1340398	15411KY1490041	15411KY1340382
15411KY1340399	15411KY1340208	15411KY1490042	15411KY1340382
15411KY1340401	15411KY1340402	15411KY1490043	15411KY1340382
15411KY1340404	15411KY1340351		
15411KY1340406	15411KY1340410		
15411KY1340407	15411KY1340410		
15411KY1340408	15411KY1340410		
15411KY1340409	15411KY1340410		
15411KY1340411	15411KY1340410		
15411KY1490001	15411KY1340358		
15411KY1490002	15411KY1340358		
15411KY1490003	15411KY1340359		
15411KY1490004	15411KY1340360		
15411KY1490005	15411KY1340360		
15411KY1490006	15411KY1340328		
15411KY1490007	15411KY1340328		
15411KY1490008	15411KY1340363		
15411KY1490009	15411KY1340372		
15411KY1490010	15411KY1340370		
15411KY1490011	15411KY1340329		