

**Humana Insurance Company**  
**Tennessee**  
**HIOS Identification: 82120**

This filing is for the Individual market, with an effective date of 1/1/2016.

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**Purpose:**

The purpose of this actuarial memorandum is to provide supporting justification to the Unified Rate Review template (URRT) with the goal of demonstrating compliance with state law and federal market rating rules, as well as reasonableness of any proposed rates.

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

- the methodology used to calculate the AV Metal Value for each plan;
- the appropriateness of the essential health benefit portion of premium upon which advanced payment of premium tax credits (APTCs) are based;
- the development of the Index Rate in accordance with Federal regulations, and the development of plan specific premium rates using allowable modifiers to the Index Rate; and
- the geographic rating factors, which reflect differences only in the costs of delivery (which can include unit cost and provider practice pattern differences) and not differences in population morbidity by geographic area.

This filing should be used for no other purposes.

Please note that, to the best of our knowledge, this filing complies with 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.

Specifically, please note that the rates presented in this filing were developed under the assumption that federal subsidies will not be significantly impacted by the decision of the King v. Burwell case. To the extent that this assumption does not prove to be correct, a revision to our rates may be required to ensure adequacy.

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

The memorandum has three primary sections:

- I. URRT Projection Factor Explanation
- II. Reasons for Rate Changes
- III. Further Explanation of Compliance with Single Risk Pool Requirements

The URRT Projection Factor Explanation walks through the key factors used in developing the projected base 2016 allowed claims, credibility manual and applicable credibility weighting, paid to allowed ratio to determine the paid PMPM claim basis, risk adjustment and reinsurance assumptions to adjust paid claims, and the administrative expenses, risk and profit, and taxes and fees used in developing the single risk pool premium.

The Reasons for Rate Changes section explains the rate change drivers between 1/1/2015 and 1/1/2016.

This actuarial memorandum accommodates rates developed for products new to the market in 2014 or later.

The overall annual average rate change from 1/1/2015 to 1/1/2016 associated with this filing is 15.8%.

Finally the memorandum concludes with a section describing the Company's compliance with single risk pool requirements. This includes discussion on the single risk pool, index rate (also market adjusted and plan adjusted index rates), calibration, consumer adjusted premium rates, actuarial values, membership projections, and a few other items that are prescribed by the memorandum instructions.

## **I. URRT Projection Factor Explanation**

### **Experience Period Premium and Claims**

The experience period used as a starting point is calendar year 2014 for premium, membership and claims. Additional details about the data used follows below.

|                                   |                   |                |         |
|-----------------------------------|-------------------|----------------|---------|
| Paid Through Date:                | February 28, 2015 | Member Months: | 245,506 |
| Premiums net of MLR rebate:       | \$ 54,151,864     |                |         |
| MLR Rebates:                      | \$ 750,514        |                |         |
| Estimated Rebates to be included: | \$ -              |                |         |

Methodology for estimated Rebates: Rebates are the year-end accrual for 2014. The estimate was based on actual claims through the end of 2014. The 2014 rebates are based on three years' worth of data, where appropriate. Expense adjustments allowed under the rebate rules are estimated based on expense experience.

|  | Allowed Claims | Incurred Claims |
|--|----------------|-----------------|
| Claims that were processed through the issuer's claim system | \$ 75,836,399  | \$ 49,740,012   |
| Claims that were processed outside the issuer's claim system | \$ 11,200,813  | \$ 6,508,822    |
| Claims incurred but not paid as of paid through date         | \$ 3,549,450   | \$ 2,515,751    |

The processed claims are claims incurred in 2014 and paid through February 28, 2015. The allowed amount comes directly from the claims system after eligibility and network discounts are applied.

To estimate incurred claims, reserve cells are categorized at the product and type of service detail level by process month and development methods with various averaging techniques are utilized. The most commonly utilized averaging technique relies on a six-month average of historical completion factors excluding the high and low factors in a given process month. Smoothing techniques are employed, including workday and seasonality adjustments. Changes in claim volume are included in these estimates by adjusting for pending claims.

For each month of incurral, the incurred but not reported 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 to suggest possible improvements.

In the bottom row of the above table, allowed but not paid claim estimates are developed using a similar approach.

### **Benefit Categories**

The Benefit Categories are defined as follows:

- Inpatient Hospital: Includes non-capitated services for medical, surgical, maternity, mental health and substance abuse, skilled nursing, and other services provided in an inpatient facility setting and billed by the facility. The Inpatient Hospital benefit category uses days to determine the utilization per 1,000.
- Outpatient Hospital: Includes non-capitated services for surgery, emergency room, 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. Costs are net of rebates received from drug manufacturers, as required.

**Projection Factors**

This actuarial memorandum accommodates rates developed for products new to the market in 2014 or later. The table below lists a summary of components of the change in index rate and development of the 2016 single risk pool premium. Following a summary of the projection components, we will walk through each item, how it impacts 2016 index rates, and the quantification.

**2014 to 2016 Projection Factor URRT Components, Supporting Math, and Corresponding Cell Locations**

| Item:  | Value:             | Worksheet 1<br>Cell Location: |
|--|--------------------|-------------------------------|
| Starting Point: 2014 Experience Allowed Claims PMPM by Benefit Category  | \$368.98           | H24:H29                       |
| Allowed Claim Adjustments  |                    |                               |
| x (1 + Morbidity Adjustment) [A].....                                    | 1.213              | J24:J29                       |
| x (1 + Other Adjustment)   |                    | K24:K29                       |
| Changes in Benefits [B].....   | 1.035              |                               |
| Changes in Demographics [C].....   | 1.095              |                               |
| Network Impacts [D].....   | 0.938              |                               |
| Enrollment Seasonality [E].....  | 1.063              |                               |
| Total Other Adjustment.....  | 1.131              |                               |
| x (1 + Change in Trend) [F].....   | 1.123 <sup>1</sup> | L24:M29                       |
| Total Adjustments from 2014 to 2016 Base Experience Allowed Claims.....  | 1.539              |                               |
| 2016 Projected Issuer Allowed Claims                                     | \$568.71           | Q30                           |
| Credibility Manual 2016 Projected Allowed Claims [G]                     | \$481.32           | T30                           |
| Credibility Weight [H]   | 0.0%               | Q32                           |
| Weighted Average 2016 Allowed Claims                                     | \$481.32           | V32                           |
| Paid to Allowed Adjustment to convert to Paid Claims [I].....            | 77.1%              | V33                           |
| 2016 Projected Paid Claims   | \$371.10           |                               |
| Adjustments to Paid Claims to Derive Appropriate Premium                 |                    |                               |
| x (1 + Reinsurance Program) [J].....                                     | 0.943              |                               |
| x (1 + Risk Adjustment) [K].....   | 0.847              |                               |
| ÷ (1 - Administrative Expense, Profit and Risk, Taxes and Fees) [L]..... | 0.727              | T40:T42                       |
| Result: 2016 Single Risk Pool Premium                                    | \$407.83           | V43                           |

<sup>1</sup>Two years of trend, 6.0% annually

21.3%

### **Changes in the Morbidity of the Population Insured [A]**

This adjustment is intended to capture the expected difference between the underlying morbidity of 2014 experience period and the 2016 risk pool. To calculate the morbidity adjustment, internal pricing analysis and experience were utilized.

Our approach to estimating and projecting morbidity differences for the ACA individual market first considers the relative risk of new market entrants, which we define to include the previously uninsured, migrants from the employer group segment, and others from outside the individual market. Current small group experience was used as a basis for measuring the morbidity of the ultimate level of ACA experience in the individual market. We then consider how the morbidity of the overall ACA risk pool changes over time, as the relative proportions of the new entrant block and pre-reform individual block (e.g., transitional policies) changes from year to year.

In the explanation that follows, unless otherwise stated, all values provided are relative to a pre-reform individual level of morbidity of 0.0%.

#### 2016 Morbidity Estimate for Post-2014 New Entrants

To estimate the expected morbidity in 2016, we began by measuring Humana's 2014 Small Group risk scores against those from Humana's 2014 non-ACA transitional experience. All data was normalized for demographic and metal tier differences so that the measurement captures as pure a morbidity difference as possible and not confounding factors. Explicit adjustments are made for these factors elsewhere in the pricing development, so this normalization is essential to avoid any double counting.

The result of this analysis produced an estimated small group morbidity level of 51.7%. This is adjusted as described in the following paragraphs and summarized in the table that follows.

It is expected that individual market morbidity levels will ultimately be slightly higher than the small group market over the long term due to greater long term adverse selection in the individual market. Small group market coverage is obtained as a by-product of being employed, whereas the decision to obtain coverage in the individual market is more commonly driven by need. Furthermore, a certain health level is necessary to retain employment. This biases the small group population to be slightly healthier than the post-2014 individual population. In the remaining sections, "post-2014" is used to refer to business issued in 2014 and later. To account for this dynamic, an adjustment of 5.0% was applied to the expected morbidity of post-2014 new entrants. This is consistent with consultant estimates of this impact.

Humana has been an active participant in the risk adjustment simulations performed by Wakely Consulting Group. These simulations provide an estimate of the relative risk difference between Humana Small Group and the small group market as a whole. If Wakely did not perform a simulation in a state due to lack of participation or if Humana small business did not have sufficient membership to generate credible results, Humana generated estimated risk adjuster transfers for small business based on a multiple regression model with the known Wakely states as the basis of the regression model. To the extent that a difference exists, it is necessary to adjust the Small Group morbidity estimate stated above to remove any bias present in the Humana Small Group experience.

Based on the results of the simulation, Humana has determined that its small group membership is less healthy than the overall state small group membership; therefore, the morbidity differential has been adjusted by -1.0%. This is denoted as "Humana Small Group Adj. to Market Level" in the table below.

The above paragraphs describe adjustments to measure ACA individual market morbidity for factors that will be present over the long term. Average new entrant morbidity in the short term, however, will vary from this level, primarily due to the expected pattern of entries into the market: initial entrants will be driven by greater medical need and be less healthy than those who enter in subsequent years in response to the increasing tax penalty. As a result, carriers that were more competitive and enrolled relatively more business in 2014 will have higher morbidity exposure than carriers who become more competitive and enroll relatively more business in later years. We expect this 'short term selection and mix' impact to go away in the long term once the market stabilizes and carrier risk profiles become more similar.

For 2016, however, we estimate it to be worth 1.3% for this legal entity.

Each of the adjustments described up to this point apply only to the post-2014 new entrants and don't account for how carrier-specific plan tier competitiveness and availability may affect carrier-specific metal tier selection. It is reasonable to assume less healthy individuals will more often select richer plans like Gold and Platinum and healthier individuals will more often select leaner plans like Bronze and Catastrophic. This produces an associated morbidity impact, which gets applied not only to new entrants sold a new policy, but also to lapsed pre-reform individual business ("Prev UW") that has purchased a new policy.

In the case of Humana Insurance Company in Tennessee, we expect a richer mix of plans in our post-2014 issued business than the overall market and, therefore, estimate an impact of 3.9% to morbidity.

This captures the impact on morbidity of plan mix differences from the overall market expected in the projection period and is denoted in the table below as '2016 Plan Mix.'

#### Dilution with Pre-2014 Issues

The above estimates produce an expected morbidity impact in 2016 for any business issued a new ACA policy in 2014 or later ("Post-2014 Issues"). To determine the net morbidity across the entire risk pool, however, we must further dilute this impact based on the amount of pre-reform, renewing transitional business expected to be in the risk pool in 2016 ("Pre-2014 Issues"). This is business that was last issued a policy prior to reform, subject to full underwriting, and has since transitioned into the ACA risk pool. Our methodology assigns this cohort a morbidity impact of 0.0%. A key driver of the expected pre-2014 exposure in 2016 is the impact of the transitional policy on the purchase of, or movement onto, ACA compliant plans.

Based on Tennessee's transitional policy approach and our projected pattern of membership movement to ACA compliant plans we project Pre-2014 membership to be 0.0% of our block of business in 2016.

#### Adjust for Morbidity Exposure in the Experience

The 2014 experience used in the pricing process already has an underlying morbidity differential relative to a fully underwritten block since it contains experience subject to guaranteed issue requirements.

Using the methodology described above measured on our own 2014 experience, we estimated the average morbidity of the total 2014 experience base in Humana Insurance Company in Tennessee, to be 31.9% and divided that amount out of the morbidity estimate for 2016, outlined above, to arrive at a final morbidity adjustment of 22.3% that gets applied to 2014 allowed claims.

#### Duration and Plan Mix

Two final adjustments are included in the 'Changes in the Morbidity of the Population Insured' projection factor. Although small, a portion of the 2014 experience base was recently underwritten prior to 2014 and will deteriorate as the effect of underwriting wears off with durational aging. This impact is calculated by comparing the loss ratio expected for this portion of business in the experience period based on its average duration, relative to the expected lifetime loss ratio.

In this case, the impact due to durational aging is estimated to be -1.3%.

The second adjustment accounts for any adverse or positive selection in the 2014 experience base, relative to the market as a whole. Healthier members tend to select plans with leaner benefits (positive selection) and less healthy members tend to select plans with richer benefits (adverse selection). Therefore it is necessary to account for the amount of selection embedded in the experience base and to adjust to the level of a standard market wide population.

We estimate that Humana Insurance Company in Tennessee had a slightly leaner mix of plans than the overall market in 2014, so the claims are adjusted by 0.5%. In contrast to the '2016 Plan Mix' described above, this captures the impact on morbidity of plan mix differences from the overall market observed in the experience period and is denoted in the table below as '2014 Plan Mix'.

The exhibit below demonstrates how the above adjustments result in the morbidity projection factor shown in the 2016 URRT.

|   | Post-2014 Issues <sup>1</sup> |         | Pre-2014            | Total |
|---|-------------------------------|---------|---------------------|-------|
|   | New Entrants                  | Prev UW | Issues <sup>2</sup> |       |
| Humana Individual vs. Small Group                       | 51.7%                         |         |                     |       |
| Long Term Adverse Selection                             | 5.0%                          |         |                     |       |
| Humana Small Group Adj. to Market Level                 | -1.0%                         |         |                     |       |
| Short Term Adverse Selection                            | 1.3%                          |         |                     |       |
| 2016 Plan Mix   | 3.9%                          | 3.9%    |                     |       |
| Multiplicative Subtotal                                 | 65.9%                         | 3.9%    | 0.0%                |       |
| Claim Weights   | 92.7%                         | 7.3%    | 0.0%                |       |
| (i) Raw Weighted Average                                |                               |         |                     | 61.4% |
| (ii) 2014 Experience Morbidity                          |                               |         |                     | 31.9% |
| (iii) Net Weighted Average $[1 + (i)] / [1 + (ii)] - 1$ |                               |         |                     | 22.3% |
|   | Duration                      |         |                     | -1.3% |
|   | 2014 Plan Mix                 |         |                     | 0.5%  |
|   | Multiplicative Grand Total    |         |                     | 21.3% |

<sup>1</sup>Represents all 2016 exposures attributable to business issued in 2014, 2015, or 2016

<sup>2</sup>Represents all 2016 exposures attributable to business issued prior to 2014 (e.g., transitional policies)

3.5%

**Changes in Benefits [B]**

This reflects the changes in benefits available to membership during the projection period, relative to the experience period.

The benefit impacts are applied separately to the ACA data in the experience period and the non-ACA data in the experience period, with the latter set of adjustments being larger.

Adjustments to the non-ACA data include adding maternity benefits, modification for behavioral health services cost-sharing, and state mandated benefits as function of the benchmark plan.

The data used to derive the estimated impact of adding maternity coverage is based on 2014 maternity data for the individual ACA block of business. Maternity claims were estimated as a percent of total claims to determine the pricing impact.

The data used to derive the estimated impact of changes in member cost-sharing levels for behavioral health services was also based on ACA data for the individual market in 2014. This exercise started with an analysis of behavioral health claims compared to total, adjusting for the marginal benefit ratio of the new and current plans that will result due to the Federal Mental Health Parity requirements. State specific mandated benefits based on the benchmark plans were determined separately using similar methodologies based on available data.

For the base experience that is ACA, benefits added in the projection period include items such as newly required preventive services and impacts of contract language changes.

In this context, induced utilization refers to the impact on utilization due to member behavioral changes related to the richness of plan benefits. This metric does not include the impact of health status.

The induced utilization assumption of 1.9% was developed by comparing the expected plan mix in 2016 against the 2014 experience and applying a set of induced utilization factors by plan (derived from HHS' set in the Notice of Benefit & Payment Parameters) to those mixes.

This approach captures the marginal difference in induced utilization between the two periods.

The impact for each benefit component is as follows:

|  |      |
|--|------|
| Maternity Benefits                                 | 0.4% |
| Behavioral Health Services                         | 0.2% |
| Other Essential Health and State Mandated Benefits | 1.0% |
| Induced Utilization                                | 1.9% |
| <hr/>  |      |
| Total Changes in Benefits                          | 3.5% |

9.5%

### Changes in Demographics [C]

- **Age & Gender:** This factor accounts for the impact to allowed claims with respect to the changes in demographics between the base 2014 experience period and the expected demographic mix in 2016. The change was determined by using a nationwide allowed claim PMPM by age and gender. These PMPM amounts were weighted by the issuer specific 2014 distribution of membership and the expected 2016 distribution by age and gender. The 2016 expected age/gender distribution has been adjusted to the levels observed in the 2015 enrollment data.

The impact of age and gender changes between 2014 and 2016 is 9.0%.

- **Area:** The geographical distribution of membership is expected to change from the distribution in the 2014 experience period. Unit costs by area were weighted by issuer specific 2014 membership distributions and the projected 2016 distribution by area. The difference between these weighted unit cost amounts produce the area impact. Note that age and gender were held constant in this process.

The impact of area distribution changes between 2014 and 2016 is -0.1%.

- **Tobacco:** This factor accounts for the impact to allowed claims with respect to the expected change in distribution of tobacco users from 2014 to 2016. Tobacco users have an assumed 10% increase in claim costs. To determine the claim impact of the change in tobacco users, the following formula was utilized:

$$\frac{((1.0 * \% 2016 \text{ Non-tobacco User}) + (1.10 * \% 2016 \text{ Tobacco User}))}{((1.0 * \% 2014 \text{ Non-tobacco User}) + (1.10 * \% 2014 \text{ Tobacco User}))}$$

Age and gender were held constant in this process. 2016 tobacco user percentages were based on CDC's Behavioral Risk Factor Surveillance Branch data on the distribution of tobacco users by state. 2014 tobacco user percentages were based on Humana tobacco user exposure for this issuer.

The impact of tobacco distribution changes between 2014 and 2016 is 0.5%.

The combined impact of these demographic changes is:

$$(1 + 9.0\%) * (1 + -0.1\%) * (1 + 0.5\%) - 1 = 9.5\%$$

-6.2%

### Network Impact [D]

This percent change represents the impact to the allowed claims because of the presence of high-value networks on products in many markets. These networks were first introduced in 2014. This 2014 experience shows a different rate of out-of-network utilization than what was originally assumed. This percent change represents expected changes in network utilization behavior that will improve in 2016.

6.3%

### Enrollment Seasonality [E]

The 2014 enrollment pattern by effective month varies from that expected during the 2016 enrollment period. The open enrollment period ended much later in 2014 than anticipated for 2016. Additionally, the slow start to the exchange enrollment due to technical difficulties skews the membership toward a later effective date. Because the average length of time a policy is expected to be in force in 2016 is more than what is underlying the 2014 experience, we expect people to have more opportunity to schedule appointments and surgeries and therefore incur more claims per person per month than is reflected in the underlying experience.

12.3%

**Trend Factors: Cost & Utilization [F]**

11.4%

**Cost Trend:**

The primary cost trend component is Provider Price Index (PPI) 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 Individual 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 contracts.

Pharmacy cost trends are developed based on historical brand, generic, and specialty drug trends from Humana’s 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 provider price index trend to develop the total cost trend provided. These include the following:

- **Influenza:** Captures the impact of cost trend due to influenza which is identified by ICD-9 codes, and pneumonia which is identified using DRG codes. This also includes the change in cost for pharmacy treatment and vaccination of influenza.
- **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, starting at \$25,000 in January 2006 and trended at 6% annually. 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.
- **Health Technology Pipeline (HTP):** Captures the cost impact of new health technologies and procedures. An external consulting firm researches new technologies and develops per member per month impacts. These impacts are customized to Humana’s business based on membership and coverage policy.
- **Management Initiatives (MI):** Captures savings for Humana initiatives designed to reduce 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. 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.

| Health Cost Category | Catastrophic |                |              |          |        | Annualized Cost Trend Totals* |
|----------------------|--------------|----------------|--------------|----------|--------|-------------------------------|
|                      | PPI (i)      | Influenza (ii) | Claims (iii) | HTP (iv) | MI (v) |                               |
| Inpatient            | 4.2%         | 0.0%           | -0.4%        | 0.2%     | -0.1%  | 4.0%                          |
| Outpatient           | 4.3%         | 0.0%           | 0.0%         | 0.2%     | -0.1%  | 4.4%                          |
| Physician            | 1.3%         | 0.0%           | 0.1%         | 0.2%     | -0.1%  | 1.6%                          |
| Other Services       | 1.2%         | 0.0%           | 0.0%         | 0.2%     | -0.1%  | 1.3%                          |
| Pharmacy             | 10.3%        | 0.0%           | 0.0%         | 10.3%    | -0.3%  | 21.3%                         |

\*Annualized Cost Trend Totals = (1 + i)\*(1 + ii)\*(1 + iii)\*(1 + iv)\*(1 + v) -1

0.8%

**Utilization Trend:**

Using Humana’s Trend Quantification and Projection model, a baseline trend is developed using Humana’s Individual block of business historical medical claims data from 2008 – 2014. The historical baseline trend is developed by removing all known impacts to allowed trend such as demographics, geography, duration, customer changes, benefit changes, influenza, new health technologies, management initiatives, and changes in pertinent days. An economic regression model, based on consumer sentiment, housing prices, employment, personal disposable income, hospital construction, and high-tech medical equipment spend, is then fit to this historical baseline data to project the future block of business baseline trend for 2015 and 2016.

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

- **Influenza:** Captures the impact of unit trend due to influenza which is identified by ICD-9 codes, 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 health technologies and procedures. An external consulting firm researches new technologies and develops per member per month impacts. These impacts are customized to Humana’s business based on membership and coverage policy.
- **Management Initiatives (MI):** Captures savings for Humana initiatives designed to reduce 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. 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.
- **Pertinent Days:** 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 claims data.

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.

| Health Cost Category | Baseline (x) | Influenza (xi) | HTP (xii) | MI (xiii) | Pertinent Days (xiv) | Annualized Utilization Trend Totals* |
|----------------------|--------------|----------------|-----------|-----------|----------------------|--------------------------------------|
| Inpatient            | 0.6%         | 0.0%           | 0.2%      | -0.2%     | 0.0%                 | 0.7%                                 |
| Outpatient           | 2.4%         | 0.0%           | 0.2%      | -0.2%     | 0.0%                 | 2.4%                                 |
| Physician            | 0.4%         | 0.0%           | 0.2%      | -0.1%     | 0.0%                 | 0.5%                                 |
| Other Services       | -1.8%        | 0.0%           | 0.2%      | -0.2%     | 0.1%                 | -1.6%                                |
| Pharmacy             | -4.2%        | 0.0%           | 0.3%      | -0.3%     | 0.0%                 | -4.2%                                |

\*Annualized Utilization Trend Totals = (1 + x)\*(1 + xi)\*(1 + xii)\*(1 + xiii)\*(1 + xiv) -1

**Total Trend:**

The cost trend used to project 2016 allowed claims for Humana Insurance Company in Tennessee is 5.5% annually, or 11.4% for two years.

The utilization trend used to project 2016 allowed claims for Humana Insurance Company in Tennessee is 0.4% annually, or 0.8% for two years.

The combined cost and utilization trend therefore is 6.0% annually, or 12.3% for two years.

Items [G], [H], [I], [J], [K], [L] are delineated in their own sections on the pages to follow per memorandum instructions.

- [G] Credibility Manual commentary is in the 'Credibility Manual Rate Development' section.
- [H] Credibility weight is discussed in the 'Credibility of Experience' section.
- [I] Paid to Allowed Ratio commentary is in the 'Paid to Allowed Ratio' section.
- [J] Reinsurance commentary is in the 'Projected Reinsurance Recoveries Net of Reinsurance Premium' section.
- [K] Risk adjustment commentary is in the 'Projected Risk Adjustment PMPM' section.
- [L] Administrative expenses, risk and profit, and taxes and fees are in the 'Non-Benefit Expenses and Profit & Risk' section.

### **Credibility Manual Rate Development [G]**

#### **Source and Appropriateness of Experience Data Used, Adjustments Made to the Data, Inclusion of Capitation Payments**

The credibility manual rate begins with Humana's Individual Major Medical 2014 nationwide ACA-compliant allowed claims (including capitation payments) per member per month, excluding the experience for Humana Insurance Company in Tennessee (TN-HIC).

This nationwide allowed PMPM is adjusted in a similar process as the Projection Factors section outlined on the previous pages, utilizing slightly modified morbidity and other adjustments to account for the nationwide claims starting point. Cost and utilization trends are identical for both the experience projection and the credibility manual.

The adjustments made to the credibility manual are intended to bring the starting nationwide allowed claims PMPM to a cost basis consistent with that of TN-HIC.

Similar to the description provided previously, the credibility manual morbidity assumption accounts for the guaranteed issue impact, durational aging and 2014 plan mix distribution.

These factors are similar to the base experience period development, with the exception that the durational aging adjustment is based on the relativity between the nationwide and issuer impacts and an additional 2014 plan mix adjustment is required to account for the difference between the nationwide Humana 2014 plan mix and the 2014 plan mix in the TN-HIC experience.

This additional factor is developed by comparing the nationwide plan mix to the TN-HIC 2014 plan mix. An illustration of the credibility manual morbidity factor development is included in "Exhibit 1 - Credibility Manual Derivation" in the Morbidity Adjustment Details table.

To adjust the nationwide allowed PMPM for the other adjustment, a similar process was followed.

The credibility manual other adjustment includes adjustments for the network impact, changes in benefits, and changes in demographics (age/gender, area, tobacco) factors. In addition, there are additional age/gender, area and tobacco adjustments to account for the difference in distribution of business between nationwide and this issuer's distribution of business. Each of these are developed by comparing the nationwide factor for the given demographic (age/gender, area, tobacco) to the issuer factor. This adjustment ensures that the claims are representative of what we expect to see for this issuer. A depiction of the credibility manual other factor development is included in "Exhibit 1 - Credibility Manual Derivation" in the Other Adjustment Details table.

The cost and utilization trend values used in the credibility rate development are identical to those depicted in the 'Trend Factors: Cost & Utilization' subsection of the Projection Factors section.

The 2016 credibility manual rate development is then the product of this nationwide 2014 allowed claims PMPM, credibility morbidity factor, credibility other factor, cost trend and utilization trend. The calculation is illustrated in Row 1 of Exhibit 1.

### **Credibility of Experience [H]**

Humana determines full credibility based on analyzing historical experience and utilizing a 95% confidence interval that required actual results will be within 5% of expected.

Though the 2014 experience for Humana Insurance Company in Tennessee would be partially credible under this standard, the experience has been assigned 0% credibility and the credibility manual, as described above, will be used as 100% credible. Using Tennessee specific data and applying the appropriate credibility weighting method would result in a single risk pool premium that is significantly higher and would require a rate increase much larger than we are requesting. Given the significant rate increase that was taken for 1/1/2015, we do not wish to disrupt the market further and have therefore deemed the experience not credible. Using nationwide less TN-HIC data still results in a fairly significant rate increase but it is one that is much less than applying credibility and one that will cause less disruption to our policyholders.

### **Paid to Allowed Ratio [I]**

The anticipated paid to allowed ratio over the projection period was developed by separately considering the anticipated paid to allowed ratios by plan tier.

Once calculated, projected **claim** weights for each plan tier (consistent with those provided in Worksheet 2) were applied to these paid to allowed ratios to produce an overall anticipated paid to allowed ratio of 74.3%.

The individual plan tier paid to allowed ratios were developed based on an internal pricing model with underlying utilization and costs reflective of a standard population equivalent to the anticipated 2016 risk pool. These estimates are then adjusted for the morbidity of the population enrolling in each of these plan tiers. High morbidity individuals tend to select rich benefit plans and low morbidity individuals tend to select lean benefit plans. The variance in morbidity increases the paid to allowed ratio observed on rich plans like Gold and Platinum, while reducing the paid to allowed ratio on lean plans like Catastrophic and Bronze.

An additional adjustment is made to account for the fixed fee leveraging component of claims trend. This is pursuant to the directions set forth by the 2016 URRT Instructions. Fixed fee leveraging (sometimes called deductible leveraging) captures the additional net trend created because allowed claims trend at a different rate than member cost sharing. This effect is calculated by measuring the impact of changes in allowed costs, holding member cost share constant.

Fixed fee leveraging has an impact of 3.8%, which produces a total paid to allowed ratio of 77.1%.

### **Risk Adjustment and Reinsurance**

#### **Projected Reinsurance Recoveries Net of Reinsurance Premium [J]**

Reinsurance recoveries for 2016 were estimated by producing incurred claims probability distributions (CPD) by applying major cost sharing features by metal tier to the 2014 Milliman Commercial CPD. The CPD was adjusted to match the total allowed claims PMPM by metal tier. The 2016 parameters assumed are a \$90,000 attachment point, \$250,000 cap, and a 50% coinsurance rate.

The average PMPM projected reinsurance recovery for the single risk pool on this state and legal entity is applied as a flat percentage of premiums, as required by the URRT instructions and demonstrated in Exhibit 2. This results in a -5.7% adjustment.

The reinsurance recoveries shown in Worksheet 1 and Exhibit 2 of this memorandum are net of the \$2.25 PMPM assessment.

#### **Projected Risk Adjustment PMPM [K]**

The 2016 Risk Adjustment Transfer Payments are determined via a model that projects all large issuers in the state. This is necessary to estimate the state average premium and other normalization factors required by the HHS transfer formula. The model uses the formulas and factors prescribed by HHS to determine the transfer payments including: state average premium, GCF (Geographic Cost Factor), IDF (Induced Demand Factor), ARF (Age Rating Factor), and AV (Actuarial Value). Furthermore, the model maintains separate risk adjustment pools for Catastrophic and Metal Plans as described in the regulations. Assumptions for other carriers were set based on data provided by CMS and other publicly available sources. In the absence of concrete information, assumptions were set universally across all issuers.

Membership by plan, as shown in column A of Exhibit 2, was determined by incorporating actual enrollment data for 2014 and projecting enrollments and membership for 2015 and 2016.

Enrollees from prior years are projected to either renew with their current insurer in 2016 or lapse and purchase new coverage in 2016. The projections are based on actual enrollment to date and projected enrollment for 2015 and 2016. Where actual enrollment data is unavailable, membership is assumed to make choices by metal tier based on a simulation.

The simulation is based on Humana Small Group membership, because this population should reasonably approximate the risk profile of enrollees in the ACA individual market. Within the simulation, a member's utility for each plan is estimated based on the post subsidy premium and the member cost sharing (after subsidies) given their health status. The member selects the plan with highest utility (subject to Catastrophic plan eligibility rules). This approach captures the impact of adverse selection by plan. In addition, the simulation produces a Plan Liability Risk Score (column B) for each member based on the HHS Commercial Risk Adjustment Model. This risk score is used in the calculation of risk transfer payments.

Members issued prior to 2014 are projected to enter the risk adjustment pool based on the transitional policy approach adopted by carriers within the state. Both internal and public information regarding transitional extension policies have been used to project the risk adjustment pool membership where possible. The pre-2014 membership is modeled by measuring risk scores on the pre-reform Humana Individual population. We assume the members will choose an ACA compliant plan that is similar to their current plan. All issuers are assumed to have the same plan mix for their pre-2014 membership.

A primary driver of issuer specific risk scores is the projected mix of post-2014 issued membership and pre-2014 renewing transitional membership. Pre-2014 membership is generally healthier, having previously gone through underwriting, and has lower associated risk scores. Post-2014 issued membership will be less healthy and will have higher associated risk scores, but according to an assumed general pattern by issue year: those issued earlier on will have higher average risk scores than those issued later. This is due to the expectation that those seeking coverage initially are primarily driven by health need, whereas increased familiarity with the ACA market and higher tax penalties in subsequent years will eventually push healthier members into the market. This is consistent with the development of the morbidity assumption previously described.

Post-2014 enrollments by issuer are projected for each year using a sales and membership projection model. New enrollees are attributed to each issuer based on actual enrollment where possible and projected enrollment where actual data is not readily available. Known competitive rate data for 2014 and 2015 is reflected to the extent available. Price competitiveness for 2016 is based on 2015 rate data combined with anticipated 2016 rate changes for each issuer. This creates a unique competitive landscape for each year, which can cause an issuer to have a different relative mix, and therefore different relative risk, of post-2014 issues than the overall market.

In accordance with HHS regulations, state average premium is calculated as a membership-weighted average of issuer premiums. Premium (column G) for Humana is calculated to be the projected Total Liability PMPM (column F) divided by an 80% target loss ratio on a Federal MLR basis. Premium for other issuers is calculated by starting with the issuer’s 2015 premium rate and applying an assumed 2016 rate change. Total Liability is the sum of paid claims including induced utilization (column C), projected risk adjustment transfers (column E) and projected reinsurance recoveries net of contributions (column D). It is necessary to include reinsurance recoveries in the calculation because this will result in lower premiums in the individual market. The approach described above is similar to the method used in the September 2011 CCIIO whitepaper on risk adjustment.

Based on the above assumptions, Risk Adjustment Transfer Payments are calculated using the HHS transfer formula. As a result, Humana Insurance Company in Tennessee expects a \$53.57 PMPM average Risk Adjustment Transfer Payment from HHS. This produces a -15.3% adjustment to account for the anticipated Risk Adjustment Transfer.

In compliance with rating rules, projected total risk adjustment revenue is allocated across all plans as a constant percentage of premium, as demonstrated in column column I of Exhibit 2.

The risk adjustment PMPMs shown in Worksheet 1 and Exhibit 2 of this memorandum are net of the \$0.15 PMPM (\$1.80 PMPY) assessment.

**Non-Benefit Expenses and Profit & Risk [L]**

Expenses are based on an internal forecast for 2016. Expenses were estimated by Humana’s Finance team and are deemed appropriate for the plans proposed in the filing.

|                            |        |
|----------------------------|--------|
| Administrative Expenses    | 16.10% |
| Profit Margin              | 3.07%  |
| Taxes and Fees             | 8.16%  |
| Total Non-Benefit Expenses | 27.33% |

Non-Benefit administrative expenses include a 0.8% load for quality expenses allowed under the Federal MLR rules. Expenses are loaded as a flat percentage of premium and only vary by product or plan based on the presence of the Wellness and Rewards program.

Humana’s target profit margin is estimated as the post-tax income and does not include investment income.

The load for taxes and fees assumed in this filing are as follows:

| Taxes & Fees Component    | % of Premium |
|---------------------------|--------------|
| State Premium Tax         | 1.75%        |
| Health Insurer Annual Fee | 1.73%        |
| Exchange Fee              | 1.63%        |
| Other Miscellaneous Taxes | 0.35%        |
| Federal Income Tax        | 2.70%        |
| Total                     | 8.16%        |

The Federal Income Tax is estimated as 36% times the sum of the pretax profit margin and the non-deductible Health Insurer Annual Fee.

The Other Miscellaneous Taxes line accounts for the cost of state licensing and filing compliance costs and the Patient-Centered Outcomes Research Institute (PCORI) Fee.

As instructed in the Part III Actuarial Memorandum instructions, the reinsurance assessment is included in the recoveries line on Worksheet 1. Similarly, the cost of the risk adjustment program is included in the estimated payable/receivable under that program.

**Projected Loss Ratio**

The projected loss ratio using the Federally prescribed MLR methodology is at least 80%.

In the demonstration below, PMPM estimates are shown, other than the calculated MLR.

| Item                                     |   | Source                | Estimate  |
|--|---|-----------------------|-----------|
| Incurred Claims                          | A | Worksheet 1, V34      | \$371.10  |
| Risk Adjustment <sup>1</sup>             | B | - (Worksheet 1, V35 ) | (\$53.68) |
| Reinsurance Recoveries <sup>1</sup>      | C | - (Worksheet 1, V37 ) | (\$22.80) |
| Quality                                  | D | 0.8% * F              | \$3.26    |
| Total Numerator                          | E | Sum of A:D            | \$297.89  |
| Earned Premium                           | F | Worksheet 1           | \$407.83  |
| Taxes & Fees                             | G | 8.2% * F              | \$33.28   |
| Reinsurance & Risk Adjustment Assessment | H | \$2.25 + \$0.15       | \$2.40    |
| Total Denominator                        | I | F - G - H             | \$372.15  |
| Federal MLR                              | J | E / I                 | 80.0%     |

<sup>1</sup>These values have been adjusted from what appears on Worksheet 1 to remove the impact of the assessment.

## **II. Reasons for Rate Changes**

### **Proposed Rate Changes**

This actuarial memorandum accommodates rates developed for products new to the market in 2014 or later. The overall annual average rate change from 1/1/2015 to 1/1/2016 associated with this filing is 15.8%.

Significant factors driving the proposed rate change for all plans include:

- Changes in market-wide morbidity of the covered population in the projection period, including the impact of risk adjustment payments/receivables
- Changes in medical cost and utilization trends
- Changes to plan design, mainly as a result of changes in the Actuarial Value Calculator and 2016 Final Notice of Benefit and Payment Parameters and covered benefits
- Changes due to re-evaluation of high value network costs and utilization
- Changes in taxes, fees, and other non-benefit expenses
- Changes in assessments to and receivables from the Federal Transitional Reinsurance Program

The rates proposed in this filing for all plans are based on the same single risk pool of experience, however, there are variances by plan and product. Factors that contribute to the variation include:

- Changes in the adjustment factor for catastrophic eligibility
- Changes in plan cost sharing and covered benefits
- Changes in the estimated impact of induced utilization
- Changes to the value of provider contracts in specific markets

For an illustration of the variation in plan level rate changes due to these impacts, please see Worksheet 2 of the Unified Rate Review template.

### III. Further Explanation of Compliance with Single Risk Pool Requirements

#### **Single Risk Pool**

The Individual Single Risk Pool for Humana Insurance Company in Tennessee has been established according to the requirements in 45 CFR part 156, 156.80(d).

The Single Risk Pool reflects all covered lives for every non-grandfathered product/plan combinations, including transitional products/plans for purposes of base rate experience.

#### **Index Rate**

The index rate for the experience period is simply the allowed claims PMPM in 2014 for all non-grandfathered plans, including the experience under any transitional products/plans that may exist. An adjustment is made to remove the impact of non-EHB state mandated benefits (enacted on or after January 1, 2012) and other benefits in addition to EHB from the experience period allowed claims (see below for details); it is implicitly assumed that all other allowed claims for 2014 were for essential health benefits.

The index rate for the projection period is the credibility manual blended allowed claims PMPM multiplied by the assumed proportion of allowed claims associated with essential health benefits, thereby excluding state mandated covered benefits (enacted on or after January 1, 2012) and other covered benefits in excess of essential health benefits.

There are no state mandated covered benefits (for mandates enacted on or after January 1, 2012) that are included in allowed claims but excluded from the index rate.

There are no covered benefits in excess of essential health benefits and state mandates (for mandates enacted on or after January 1, 2012) that are included in allowed claims but excluded from the index rate.

For the purposes of populating Section III of Worksheet 2, the current best estimate of the portion of premium and claims that are attributed to EHB, state mandated benefits Non-EHB, and Other EHB was used.

#### **Market Adjusted Index Rate**

The following market-wide adjustments are applied to the projected index rate to produce the Market Adjusted Index Rate:

- Adjustments for the net impacts of both risk adjustment and reinsurance. See earlier "Risk Adjustment and Reinsurance" section for more details of this market-wide adjustment.
- An adjustment for the anticipated cost of exchange user fees. The user fee cost of 3.5% of premiums has been applied to the estimated percentage of 2016 premiums from membership enrolled on the exchange.

#### **Plan Adjusted Index Rate**

The following plan-specific adjustments are applied to the Market Adjusted Index Rate to produce the Plan Adjusted Index Rates:

- **AV and Cost Sharing Adjustment:** The individual plan tier pricing actuarial values (AVs) were developed based on an internal pricing model with underlying utilization and costs reflective of a standard population equal to that of the anticipated membership in the single risk pool. The data used to produce the pricing AVs was based on a dataset comprised of standard population of commercially insured membership purchased from a third party vendor. In order to provide the level of detail necessary for the analysis, internal data was used to subdivide the claims experience but the overall utilization level was calibrated to a standard population derived from a multitude of commercial insurers across a broad geographic area. Using this data, a seriatim (member-by-member) model was developed with the standard population data and projected 2016 annual claims by benefit category. Then, the 2016 plan design parameters were applied to those allowed claims to produce paid claims and pricing AV's.

Induced utilization is also a component of the pricing actuarial value. Induced utilization is described in detail in the "Induced Utilization" section of this memorandum. Here, the marginal difference in induced utilization (relative to the overall average level of induced utilization reflected in the Market Adjusted Index rate) is captured as a difference between plans.

- **Provider Network, Delivery System and Utilization Management 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 issuer. As permitted, an adjustment is made to each plan rate to account for the specific cost differences from each provider network compared to the overall average across all plans.
- **Benefits in addition to EHBs:** An adjustment for the addition of non-EHB benefits is included (additional discretionary benefits provided, as well as any state mandated benefits not reflected in the benchmark plan – typically individual market only mandates enacted on or after January 1, 2012). The valuation of these extra benefits is performed using appropriate broad populations (for example, small group membership) and the resulting impacts are applied uniformly across all plans with the additional benefits.
- **Catastrophic Plan Adjustment:**  
 An adjustment is made to catastrophic plans to reflect the differences in anticipated demographics and morbidity of the catastrophic population as compared to the nationwide single risk pool population.  
 The standard age curve is taken as representative of the morbidity differences between ages. The average age factor is determined for the single risk pool in all states in our footprint.  
 The average age factor is also determined for the catastrophic population on a nationwide basis; sales data indicates that the average age for catastrophic members is approximately 31 years old, so the average age factor for that age is used (this reflects the hardship exemption for those over the usual age eligibility limit of 30).  
 The catastrophic plan adjustment is then calculated as  $(\text{Catastrophic average age factor}) / (\text{Single Risk Pool average age factor})$ .
- **Distribution & Admin Costs:** Expense estimates (excluding exchange user fees) were based on the internal forecast for 2016. They were estimated based on current costs, modified to accommodate projected volume changes and changes in department workloads.
- **Tobacco Adjustment:** A final adjustment is required to ensure that the Plan Adjusted Index Rates are expressed as non-tobacco user rates. The average tobacco-user load is determined as the average expected additional premium load as a percentage of total expected non-tobacco user premiums. This average load is used to reduce the average Plan Adjusted Index Rates to non-tobacco user rates.

## Calibration

The Plan Adjusted Index Rates need to be calibrated in order to calculate Consumer Adjusted Premium Rates. A single calibration factor for age rating is required. A single calibration factor for geographic rating is also required.

The weighted average age associated with the projected single risk pool, rounded to a whole number, is 48.

This 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 age factor closest to the calculated weighted age rating factor is used to select the whole number calibration age.

The geographic rating factors applicable to the Plan Adjusted Index Rates are listed in "Exhibit 3 - Rate Development and Calibration Demonstration" in the appendix of the memorandum.

Please see "Exhibit 4 - Development of Geographic Factors" for the development of the geographic rating factors, as well as the calibration adjustment.

"Exhibit 3 - Rate Development and Calibration Demonstration" also illustrates how the Plan Adjusted Index Rates are used with the Calibration Factors to produce Consumer Adjusted Premium Rates. It is important to note that rates developed through this process are only approximate rates; they differ from the true rates due to the calibration requirement of selecting a whole number calibration age.

### **Consumer Adjusted Premium Rate Development**

As previously noted, please see "Exhibit 3 - Rate Development and Calibration Demonstration" for a demonstration of how the Plan Adjusted Index Rates can be used with the calibration factors and allowable rating factors to produce Consumer Adjusted Premium Rates.

To determine rates for tobacco users, a rating factor of 1.10 must be applied. This adjustment for tobacco usage is supported by the findings of a recent Milliman Research Report, which found that tobacco users cost about 9% more than non-tobacco users, when normalizing for age and gender ("Impact of height, weight, and smoking on medical claim costs," Milliman Inc., April 2009).

### **AV Metal Values**

For plans without copays, the AV Metal Values indicated in Worksheet 2 of the Part 1 Unified Rate Review Template were determined using the AV Calculator. For plans with copays, an acceptable alternative methodology was used to generate the AV Metal Value. An actuarial certification has been provided and indicates that values were developed in accordance with generally accepted actuarial principles and methodologies. An alternative methodology had to be used because the AV Calculator cannot accommodate a copay in addition to coinsurance.

Further explanation for the alternative methodology can be found in the attached actuarial certification.

### **AV Pricing Values**

The AV Pricing Values are calculated as the ratio of each Plan Adjusted Index Rate and the Market Adjusted Index Rate. These values reflect differences between plans due to differences in provider network, cost sharing designs, induced utilization, catastrophic plan eligibility variation, and administrative costs (less exchange fees). In addition, an adjustment is made to the Plan Adjusted Index Rate to remove the portion of the cost that is expected to be earned through the tobacco surcharge.

One of the main components of the AV Pricing Value is the difference in cost sharing designs between plans. This is determined using a seriatim (member-by-member) model on a standard population. In this model, claims are listed by benefit category, and the impact of the benefit attributes of each plan is valued for that cohort of experience. This is done by looking at the ratio of resulting paid claims for that plan design to allowed claims, thereby creating a starting point to value each plan.

Induced utilization is also a component of the AV Pricing Value. Induced utilization is described in detail in the Induced Utilization section of this memorandum. Here, the marginal difference in induced utilization (relative to the overall average level of induced utilization reflected in the Market Adjusted Index rate) is captured as a difference between plans.

Additional modifiers are applied to derive the Plan Adjusted Index Rate, as explained in the above Index Rate sections. The progression from the Market Adjusted Index Rate to the Plan Adjusted Index Rates is shown in the "Exhibit 3 - Rate Development and Calibration Demonstration" document. Each of these modifiers is itemized in that demonstration. The AV Pricing Value shown in that demonstration and in Worksheet 2 of the Unified Rate Review Template represents the ratio of each Plan Adjusted Index Rate to the Market Adjusted Index Rate.

### **Membership Projections**

Projected 2016 membership and exposure values are developed using an internal model that considers all major carriers in the state. These carriers are selected and modeled, alongside Humana, based on their anticipated influence on the 2016 risk pool, either due to a large pre-2014 block of underwritten business or a significant competitive presence observed during the 2014 and/or 2015 open enrollment period (OEP).

## **Part I: 2014 Period**

The model begins with 2014 membership. Sources for this information include year-to-date Humana enrollment (on-exchange sales, off-exchange sales, renewals, and terminations), as well as monthly exchange enrollment reports made publicly available by CMS. Estimates are made where no actual information is available.

## **Part II: 2015 & 2016 Projection**

The model projects the ACA risk pool business through the end of 2015, and then through the end of 2016, using a combination of persistency, competitive, and pre-2014 business renewal assumptions. During each OEP, we assume that some market disruption will take place, as some members lapse to seek new coverage and others leave the market to seek alternatives to individual coverage (e.g., Medicaid, employer-based, no coverage). The portion of business that doesn't lapse coverage is assumed to renew on 1/1 of the calendar year.

We assume further market growth to occur during the 2015 and 2016 OEP. This is a reasonable expectation, given consumers' lack of familiarity with the process during the first year, and the increasing individual mandate penalty.

While we have assumed a market growth in this state of 129% during 2014, relative to ending 2013 market size levels, we are assuming additional market growth by the end of 2016, resulting in total growth of 319% relative to the same ending 2013 levels. These market growth assumptions were initially developed through a combination of internal and consultant analysis. They have since been recalibrated using the monthly enrollment reports published by CMS, the idea being that relatively higher state exchange enrollment corresponds with relatively higher state market growth.

All members projected to purchase new coverage during the 2015 and 2016 OEPs – both those lapsing prior coverage as well as those entering the market for the first time – are assigned to a carrier based on the expected price competitiveness of all available options within each metal tier. Price competitiveness in the 2015 market is based on known 2015 rate information. Price competitiveness in the 2016 market is derived by combining known 2015 rate information with assumed rate changes for each modeled carrier. It is important that the projection is done at this level of detail so that expected carrier-specific biases in geographic and metal tier mix (particularly for Humana) are appropriately reflected in the various claim and risk adjustment calculations discussed elsewhere in the memorandum.

In total, we are projecting 10,540 members enrolled in Humana Insurance Company in Tennessee in 2016.

Most of these members are assumed to persist month-to-month throughout 2016, with a small portion lapsing coverage each month.

This results in 106,421 total 2016 member months.

The table below breaks down these metrics by issue cohort, and by metal tier. The model maintains the distinction among these cohorts so that the expected composition of the 2016 risk pool is appropriately accounted for in the development of 2016 pricing.

The table below also includes a summary of projected membership within each CSR silver variant plan. These estimates were developed by considering ACA enrollment data during the 2014 experience period under this legal entity and using the observed mix to inform our assumption for the 2016 projection period.

Humana Insurance Company in Tennessee: Projected 2016 Exposure Summary

| Cohort             | Sub-Category                          | 2016 ACA Members | Percent of Total | Member Months | Percent of Total |
|--------------------|---------------------------------------|------------------|------------------|---------------|------------------|
| Issue Cohort       | 2016 Issues                           | 3,312            | 31.4%            | 30,667        | 28.8%            |
|                    | 2015 Issues                           | 2,794            | 26.5%            | 29,283        | 27.5%            |
|                    | 2014 Issues                           | 4,434            | 42.1%            | 46,471        | 43.7%            |
|                    | Transitional/Renewing Pre-2014 Issues |                  | 0.0%             |               | 0.0%             |
|                    | Total                                 | 10,540           | 100.0%           | 106,421       | 100.0%           |
| Metal Tier         | Catastrophic                          | 1,389            | 13.2%            | 13,761        | 12.9%            |
|                    | Bronze                                | 548              | 5.2%             | 5,456         | 5.1%             |
|                    | Silver                                | 4,597            | 43.6%            | 46,361        | 43.6%            |
|                    | Gold                                  | 3,296            | 31.3%            | 33,561        | 31.5%            |
|                    | Platinum                              | 711              | 6.7%             | 7,282         | 6.8%             |
|                    | Total                                 | 10,540           | 100.0%           | 106,421       | 100.0%           |
| CSR Silver Variant | 70% CSR Variant ( $\geq$ 250% FPL)    | 1,547            | 14.7%            | 15,601        | 14.7%            |
|                    | 73% CSR Variant (200-250% FPL)        | 402              | 3.8%             | 4,051         | 3.8%             |
|                    | 87% CSR Variant (150-200% FPL)        | 1,035            | 9.8%             | 10,434        | 9.8%             |
|                    | 94% CSR Variant (< 150% FPL)          | 1,614            | 15.3%            | 16,275        | 15.3%            |
|                    | Total                                 | 4,597            | 43.6%            | 46,361        | 43.6%            |

Please note that the projected 2016 member months summarized above are consistent with those used in populating Worksheets 1 and 2 of the Unified Rate Review Template (URRT). For instances where multiple plan options exist within a single metal tier for a particular product suite, projected member months are simply divided uniformly among the multiple options available within that metal tier/product suite combination. This represents a reasonable approximation.

**Experience Period Risk Adjustment & Reinsurance Adjustments**

The 2014 risk adjustment transfer estimate was determined via a model that projects all large issuers in the state. This is necessary to estimate the state average premium and other normalization factors required by the HHS transfer formula. The model uses the formulas and factors prescribed by HHS to determine the transfer payments including: state average premium, GCF (Geographic Cost Factor), IDF (Induced Demand Factor), ARF (Age Rating Factor), and AV (Actuarial Value). Furthermore, the model maintains separate risk adjustment pools for Catastrophic and Metal Plans as described in the regulations. Assumptions for other carriers were set based on data provided by CMS and other publicly available sources. Additionally, Humana participates in the Wakely simulations, where available, which helps to inform the risk adjustment transfer estimates.

Reinsurance recoveries in the experience period were estimated by applying the 2014 reinsurance parameters to the paid claims. Claims that fell within the reinsurance program parameters were provided by Humana's Finance area. Recoveries were completed using completion factors developed by analyzing experience on our small group & individual market, as well as taking into account the level of the incurred but not reported claims outstanding.

These amounts are included in the "Allowed Claims Which are not the Issuer's Obligation" field of Section III, within Worksheet 2.

## Terminated Plans and Products

Included in the terminated products column on Worksheet 2 are: Non-ACA compliant HumanaOne PHP Evolutionary and HumanaOne PHP Refresh plans. Below is a list of terminated ACA-Compliant plans.

| <b>Termed Plan ID</b> | <b>Termed Plan Name</b>                                | <b>Mapped to New Plan?</b> | <b>New Plan ID</b> |
|-----------------------|--|----------------------------|--------------------|
| 82120TN0610001        | Humana Basic 6850/ChoicePOS + Children's Dental        | Yes                        | 82120TN0610002     |
| 82120TN0610003        | Humana Bronze 4850/ChoicePOS + Children's Dental       | Yes                        | 82120TN0610002     |
| 82120TN0610004        | Humana Silver 4250/ChoicePOS + Children's Dental       | Yes                        | 82120TN0610002     |
| 82120TN0610005        | Humana Silver 4125/ChoicePOS + Children's Dental       | Yes                        | 82120TN0610002     |
| 82120TN0610006        | Humana Gold 2250/ChoicePOS + Children's Dental         | Yes                        | 82120TN0610002     |
| 82120TN0610007        | Humana Platinum 500/ChoicePOS + Children's Dental      | Yes                        | 82120TN0610002     |
| 82120TN0620001        | Humana Basic 6850/ChoiceCare PPO + Children's Dental   | Yes                        | 82120TN0620002     |
| 82120TN0620003        | Humana Bronze 4850/ChoiceCare PPO + Children's Dental  | Yes                        | 82120TN0620002     |
| 82120TN0620004        | Humana Silver 4250/ChoiceCare PPO + Children's Dental  | Yes                        | 82120TN0620002     |
| 82120TN0620005        | Humana Silver 4125/ChoiceCare PPO + Children's Dental  | Yes                        | 82120TN0620002     |
| 82120TN0620006        | Humana Gold 2250/ChoiceCare PPO + Children's Dental    | Yes                        | 82120TN0620002     |
| 82120TN0620007        | Humana Platinum 500/ChoiceCare PPO + Children's Dental | Yes                        | 82120TN0620002     |
| 82120TN0600015        | Humana Platinum 500/Knoxville PPOx                     | Yes                        | 82120TN0600014     |
| 82120TN0600020        | Humana Platinum 500/Knoxville PPOx + Children's Dental | Yes                        | 82120TN0600019     |
| 82120TN0600025        | Humana Platinum 500/Memphis PPOx                       | Yes                        | 82120TN0600024     |
| 82120TN0600030        | Humana Platinum 500/Memphis PPOx + Children's Dental   | Yes                        | 82120TN0600029     |
| 82120TN0600035        | Humana Platinum 500/Nashville PPOx                     | Yes                        | 82120TN0600034     |
| 82120TN0610008        | Humana Basic 6850/ChoicePOS + Children's Dental        | Yes                        | 82120TN0610009     |
| 82120TN0610010        | Humana Bronze 4850/ChoicePOS + Children's Dental       | Yes                        | 82120TN0610009     |
| 82120TN0610011        | Humana Silver 4250/ChoicePOS + Children's Dental       | Yes                        | 82120TN0610009     |
| 82120TN0610012        | Humana Silver 4125/ChoicePOS + Children's Dental       | Yes                        | 82120TN0610009     |
| 82120TN0610013        | Humana Gold 2250/ChoicePOS + Children's Dental         | Yes                        | 82120TN0610009     |
| 82120TN0610014        | Humana Platinum 500/ChoicePOS + Children's Dental      | Yes                        | 82120TN0610009     |

## Plan Type

There are no perceived differences between the issuer's plan and the plan type selected.

## Warning Alerts

### Validation Warning

A warning has been generated when the template is validated, stating that the cells in Wksh 2 - Plan Product Info, row 65 should be 0 for exchange plans in the experience period. We believe this to be an erroneous alert since the experience period of 2014 did have a portion of the allowed claims payable by HHS's funds on behalf of the member (cost sharing subsidies).

### Worksheet 2, Row 54 and Row 56:

The plan adjusted index rates for the experience period were created to the best of our ability based on what is available from 2014 rate filing information. These values did not exist during 2014 filings. The Experience Period Plan Adjusted Index Rates average out to an approximate premium PMPM that was expected back when our 2014 filings were submitted. However, the actual Premium PMPM experienced during 2014 from Worksheet 1 differs now that actual experience is available. For example, the actual 2014 experience is older than we priced for in 2014. This results in the 2014 premium PMPM on Worksheet 1 being higher than the average Plan Adjusted Index Rate on Worksheet 2.

In addition, \$0 was entered for the Plan Adjusted Index Rate under the Terminated Products column on Worksheet 2. When this gets weighted in, the average is brought down to be incomparable with Worksheet 1.

Lastly, the premium on Worksheet 1 is shown net of rebates, whereas the plan adjusted index rates have no adjustment for MLR rebates, which causes additional variation.

### Worksheet 2, Row 67 and 72:

The 2016 Unified Rate Review Instructions define Incurred Claims in the Experience Period at the bottom of page 13 to be allowed claims less member cost-sharing and cost-sharing paid by HHS on behalf of low-income members for Worksheet 1. There is no indication to adjust for federal risk transfer charges or payments or federal reinsurance recoveries. However, these amounts are clearly excluded from the Total Incurred Claims, payable with issuer funds field on Worksheet 2, as explained on pages 40-41 of the Instructions. We have populated the fields consistent with the Instructions, though this causes a difference between Worksheets 1 and 2 and therefore generates a warning alert.

### Worksheet 2, Rows 80-82, 86, 93, 95

After recent state agreement, the company has decided to discontinue specific plans as described in the Terminated Plans and Products section. As a result, several fields in Worksheet 2 have been zeroed out, including Rate Change % (over prior filing) and projected member months. This causes the projected member months total to be less than that in Worksheet 1, along with premium and claims, etc. We believe this to be the best representation within Worksheet 2 to reflect these plan discontinuances while minimizing the impact to other filing materials.

### Effective Rate Review Information

Humana reviews capital and surplus annually at the legal entity level and uses those targets to determine dividends to or infusions of capital from the Humana parent company. Capital and surplus are considered in setting pricing profit targets.

### Reliance

I, Lindsay Wendlandt, 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 have also relied on Jennifer Jacobsen, FSA, MAAA to provide the actuarial certification for the Unique Plan Design Supporting Documentation and Justification for plans included in this filing.

## Actuarial Certification

I, Lindsay Wendlandt, am an Actuary for Humana. 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 actuarial opinion contained herein.

I certify that this rate filing has been prepared in accordance with the following Actuarial Standards of Practice:

- ASOP No. 5, Incurred Health and Disability Claims
- ASOP No. 8, Regulatory Filings for Rates and Financial Projections for Health Plans
- ASOP No. 12, Risk Classification
- ASOP No. 23, Data Quality
- ASOP No. 25, Credibility Procedures Applicable to Accident and Health, Group Term Life, and Property/Casualty Coverages
- ASOP No. 26, Compliance with Statutory and Regulatory Requirements for the Actuarial Certification of Small Employer Health Benefit Plans
- ASOP No. 41, Actuarial Communications

I hereby certify 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(d)(1)),
- b. developed in compliance with the applicable Actuarial Standards of Practice,
- c. reasonable in relation to the benefits provided and the population anticipated to be covered,
- d. and 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.

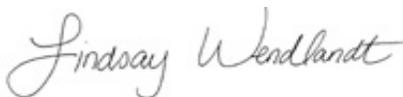
4. That the 2016 AV Calculator was used to determine the AV Metal Values shown in Worksheet 2 of the Part I Unified Rate Review Template for all plans unless specified in the certification, that the plan information was accurately entered into the AV Calculator, and that metal levels were assigned based on the results of the AV Calculator, in conjunction with the alternate methodology as described in the attached actuarial certification. This determination was made in accordance with the ASOPs established by the ASB and with applicable laws and regulations.

For plans where an alternate methodology was used to calculate the AV Metal Value, a copy of the actuarial certification required by 45 CFR Part 156, §156.135 has been included. That certification was signed by a member of the American Academy of Actuaries, where he or she indicated that the values were developed in accordance with generally accepted actuarial principles and methodologies. That certification also includes a reason for and a description of the alternate methodology that was used for each applicable plan. All plans offered by this issuer in the individual market meet the metal levels required by applicable laws and regulation for the 2016 plan year.

5. That information contained in the Actuarial Memorandum complies with the law applicable to that section.

6. That the geographic rating factors reflect only differences in the costs of delivery, including applicable unit cost and provider practice pattern differences, and do not include differences for population morbidity by geographic area.

Actuary signature:



Actuary Printed Name: Lindsay Wendlandt, FSA, MAAA

Date: August 10, 2015

v.16

**Tennessee  
Humana Insurance Company  
Exhibit 1 - Credibility Manual Derivation**

|                               | A                        | B                    | C                | D                  | E                         | F <sup>1,2</sup>                    |
|-------------------------------|--------------------------|----------------------|------------------|--------------------|---------------------------|-------------------------------------|
|                               | 2014 Allowed Claims PMPM | Morbidity Adjustment | Other Adjustment | Cost Trend '14-'16 | Utilization Trend '14-'16 | 2016 Allowed Claims PMPM Projection |
| <b>Nationwide less TN-HIC</b> | \$478.58                 | -9.7%                | -0.8%            | 11.4%              | 0.8%                      | \$481.32                            |

<sup>1</sup>  $F = A * (1+B) * (1+C) * (1+D) * (1+E)$

<sup>2</sup> Includes slight rounding adjustment as the credibility manual developed in pricing was created based on the aggregate 2014 allowed claims level, rather than delineated by claim type category.

| Morbidity Adjustment Details (B)                               |              |
|--|--------------|
| Weighted Average (a)<br>Morbidity Estimate                     | -7.2%        |
| Durational Aging (b)   | 0.0%         |
| Plan Mix   |              |
| Nationwide 2014 vs. TN-HIC 2014 (c)                            | -3.2%        |
| TN-HIC 2014 vs. Anticipated TN-HIC 2016 (d)                    | 0.5%         |
| <b>Credibility Manual Morbidity Adjustment (B)<sup>3</sup></b> | <b>-9.7%</b> |

<sup>3</sup>  $B = (1+a) * (1+b) * (1+c) * (1+d) - 1$

| Other Adjustment Details (C)  |              |
|---|--------------|
| Network Impact (e)  | -6.2%        |
| Change in Benefits including Induced Utilization (f)<br>Enrollment Seasonality Adjustment (g) | 2.7%         |
| Change in Demographics  | 3.5%         |
| Age/Gender Mix  |              |
| Nationwide 2014 vs. TN-HIC 2014 (h)   | -4.8%        |
| TN-HIC 2014 vs. Anticipated TN-HIC 2016   | 9.0%         |
| Area Mix  |              |
| Nationwide 2014 vs. TN-HIC 2014 (j)   | -4.5%        |
| TN-HIC 2014 vs. Anticipated TN-HIC 2016   | -0.1%        |
| Tobacco Mix   |              |
| Nationwide 2014 vs. TN-HIC 2014 (l)   | -0.1%        |
| TN-HIC 2014 vs. Anticipated TN-HIC 2016   | 0.5%         |
| <b>Credibility Manual Other</b>   | <b>-0.8%</b> |

<sup>4</sup>  $C = (1+e) * (1+f) * (1+g) * (1+h) * (1+i) * (1+j) * (1+k) * (1+l) * (1+m) - 1$

**Tennessee Humana Insurance Company**  
**Exhibit 2 - Pricing Impacts of Risk Adjustment and Reinsurance**

Values are estimated based on projected 2016 mix of membership exposure<sup>1</sup>

|                      | A            | B                         | C                | D                    | E                                     | F<br>= C - D - E     | G                         | H<br>= - D / G                            | I<br>= - E / G                            |
|----------------------|--------------|---------------------------|------------------|----------------------|---------------------------------------|----------------------|---------------------------|---|---|
|                      | % of Members | Plan Liability Risk Score | Paid Claims PMPM | Net Reinsurance PMPM | Risk Adjustment Transfer Payment PMPM | Total Liability PMPM | Premium PMPM <sup>2</sup> | Net Reinsurance % of Premium <sup>3</sup> | Risk Adjustment % of Premium <sup>4</sup> |
| <b>Catastrophic</b>  | 13%          | 0.295                     | \$69.84          | \$9.24               | \$23.39                               | \$37.22              | \$178.04                  | -5.2%                                     | -13.1%                                    |
| <b>Bronze</b>        | 5%           | 0.756                     | \$234.13         | \$24.14              | \$61.11                               | \$148.89             | \$465.17                  | -5.2%                                     | -13.1%                                    |
| <b>Silver</b>        | 44%          | 0.953                     | \$318.44         | \$22.16              | \$56.10                               | \$240.19             | \$427.03                  | -5.2%                                     | -13.1%                                    |
| <b>Gold</b>          | 32%          | 1.345                     | \$528.62         | \$22.54              | \$57.07                               | \$449.01             | \$434.42                  | -5.2%                                     | -13.1%                                    |
| <b>Platinum</b>      | 7%           | 1.537                     | \$652.36         | \$28.76              | \$72.82                               | \$550.78             | \$554.33                  | -5.2%                                     | -13.1%                                    |
| <b>HIC Total</b>     | 3%           | 1.021                     | \$371.10         | \$21.16              | \$53.57                               | \$296.37             | \$407.83                  | -5.2%                                     | -13.1%                                    |
| <b>Other Issuers</b> | 97%          | 0.849                     |                  |                      | -\$1.67                               |                      | \$294.26                  |   |   |
| <b>TN Total</b>      | 100%         | 0.854                     |                  |                      | \$0.00                                |                      | \$301.65                  |   |   |

<sup>1</sup>Different mixes in age/gender and geography are expected by plan in 2016 (e.g., lower average age on leaner plans). This results in values above that don't follow the relationship implied by pure benefit differences.

<sup>2</sup>The overall single risk pool premium for this issuer is priced to a target loss ratio, defined as: 1 – Admin Load – Profit/Risk Load – Taxes/Fee Load. Loads are provided in Worksheet 1.

<sup>3</sup>This represents the portion of premium PMPM comprised by the allocated net reinsurance recovery in column D. This is not the same as the percent impact discussed in the Projection Factors section of the memorandum, as that impact represents the percentage of paid claims.

<sup>4</sup>This represents the portion of premium PMPM comprised by the allocated risk adjustment in column E. This is not the same as the percent impact discussed in the Projection Factors section of the memorandum, as that impact represents the percentage of paid claims (adjusted for reinsurance).

**Humana Insurance Company in Tennessee**  
**Exhibit 3 - Rate Development and Calibration Demonstration**

(a) **Index Rate** \$481.32

Allowable Market-wide modifiers  
 (b) Risk Adjustment \$ 69.49  
 (c) Reinsurance \$ 27.45  
 (d) Exchange User Fees \$ 8.64

(e) = (a) - (b) - (c) + (d) **Market Adjusted Index Rate** \$393.03

|                    |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |
|--------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| (f) Member Weights | 1.6%           | 0.6%           | 0.6%           | 2.8%           | 2.8%           | 4.0%           | 0.9%           | 1.6%           | 0.6%           | 0.6%           | 2.8%           | 2.8%           | 4.0%           | 0.9%           | 1.4%           | 0.6%           | 0.6%           |
| Metal Tier         | Catastrophic   | Bronze         | Bronze         | Silver         | Silver         | Gold           | Platinum       | Catastrophic   | Bronze         | Bronze         | Silver         | Silver         | Gold           | Platinum       | Catastrophic   | Bronze         | Bronze         |
| Plan ID            | 821207N0610001 | 821207N0610002 | 821207N0610003 | 821207N0610004 | 821207N0610005 | 821207N0610006 | 821207N0610007 | 821207N0610008 | 821207N0610009 | 821207N0610010 | 821207N0610011 | 821207N0610012 | 821207N0610013 | 821207N0610014 | 821207N0620001 | 821207N0620002 | 821207N0620003 |

Adjustments to Market Adjusted Index Rate

|                                      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
|--------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| (g) AV and Cost Sharing              | 0.6288           | 0.6372           | 0.6913           | 0.7640           | 0.7193           | 0.8700           | 1.1816           | 0.6288           | 0.6372           | 0.6913           | 0.7640           | 0.7193           | 0.8700           | 1.1816           | 0.6288           | 0.6372           | 0.6913           |
| (h) = (e) * (g)                      | \$ 247.16        | \$ 250.44        | \$ 271.70        | \$ 300.27        | \$ 282.69        | \$ 341.93        | \$ 464.42        | \$ 247.16        | \$ 250.44        | \$ 271.70        | \$ 300.27        | \$ 282.69        | \$ 341.93        | \$ 464.42        | \$ 247.16        | \$ 250.44        | \$ 271.70        |
| (i) Add'l Non-EHB Benefits           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 1.0000           |
| (j) = (h) * (i)                      | \$ 247.16        | \$ 250.44        | \$ 271.70        | \$ 300.27        | \$ 282.69        | \$ 341.93        | \$ 464.42        | \$ 247.16        | \$ 250.44        | \$ 271.70        | \$ 300.27        | \$ 282.69        | \$ 341.93        | \$ 464.42        | \$ 247.16        | \$ 250.44        | \$ 271.70        |
| (k) Network Adjustment               | 0.9803           | 0.9803           | 0.9803           | 0.9803           | 0.9803           | 0.9803           | 0.9803           | 1.0531           | 1.0531           | 1.0531           | 1.0531           | 1.0531           | 1.0531           | 1.0531           | 1.0355           | 1.0355           | 1.0355           |
| (l) = (j) * (k)                      | \$ 242.30        | \$ 245.52        | \$ 266.35        | \$ 294.37        | \$ 277.13        | \$ 335.20        | \$ 455.29        | \$ 260.29        | \$ 263.75        | \$ 286.13        | \$ 316.23        | \$ 297.71        | \$ 360.09        | \$ 489.10        | \$ 255.94        | \$ 259.34        | \$ 281.35        |
| (m) Catastrophic Plan Adj            | 0.7231           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 0.7231           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 0.7231           | 1.0000           | 1.0000           |
| (n) = (l) * (m)                      | \$ 175.21        | \$ 245.52        | \$ 266.35        | \$ 294.37        | \$ 277.13        | \$ 335.20        | \$ 455.29        | \$ 188.22        | \$ 263.75        | \$ 286.13        | \$ 316.23        | \$ 297.71        | \$ 360.09        | \$ 489.10        | \$ 185.08        | \$ 259.34        | \$ 281.35        |
| (o) = [ 1 / (1 - admin costs) ]      | 1.3490           | 1.3490           | 1.3490           | 1.3490           | 1.3490           | 1.3490           | 1.3490           | 1.3490           | 1.3490           | 1.3490           | 1.3490           | 1.3490           | 1.3490           | 1.3490           | 1.3490           | 1.3490           | 1.3490           |
| (p) = (n) * (o)                      | \$ 236.35        | \$ 331.20        | \$ 359.30        | \$ 397.09        | \$ 373.84        | \$ 452.18        | \$ 614.17        | \$ 253.90        | \$ 355.79        | \$ 385.98        | \$ 426.58        | \$ 401.60        | \$ 485.75        | \$ 659.77        | \$ 249.66        | \$ 349.84        | \$ 379.53        |
| (q) = 1 / Avg Tobacco Load           | 0.9868           | 0.9868           | 0.9868           | 0.9868           | 0.9868           | 0.9868           | 0.9868           | 0.9868           | 0.9868           | 0.9868           | 0.9868           | 0.9868           | 0.9868           | 0.9868           | 0.9868           | 0.9868           | 0.9868           |
| (r) = (p) * (q)                      | \$ 233.23        | \$ 326.82        | \$ 354.56        | \$ 391.85        | \$ 368.91        | \$ 446.21        | \$ 606.06        | \$ 250.55        | \$ 351.09        | \$ 380.89        | \$ 420.95        | \$ 396.30        | \$ 479.34        | \$ 651.06        | \$ 246.36        | \$ 345.22        | \$ 374.52        |
| (r) <b>Plan Adjusted Index Rates</b> | <b>\$ 233.23</b> | <b>\$ 326.82</b> | <b>\$ 354.56</b> | <b>\$ 391.85</b> | <b>\$ 368.91</b> | <b>\$ 446.21</b> | <b>\$ 606.06</b> | <b>\$ 250.55</b> | <b>\$ 351.09</b> | <b>\$ 380.89</b> | <b>\$ 420.95</b> | <b>\$ 396.30</b> | <b>\$ 479.34</b> | <b>\$ 651.06</b> | <b>\$ 246.36</b> | <b>\$ 345.22</b> | <b>\$ 374.52</b> |
| (r) / (e) <b>AV Pricing Value</b>    | 0.5934           | 0.8315           | 0.9021           | 0.9970           | 0.9386           | 1.1353           | 1.5420           | 0.6375           | 0.8933           | 0.9691           | 1.0710           | 1.0083           | 1.2196           | 1.6565           | 0.6268           | 0.8784           | 0.9529           |
| (s) Avg Age Factor                   | 1.656            | 1.656            | 1.656            | 1.656            | 1.656            | 1.656            | 1.656            | 1.656            | 1.656            | 1.656            | 1.656            | 1.656            | 1.656            | 1.656            | 1.656            | 1.656            | 1.656            |

| Age   | Age Factor |
|-------|------------|
| 48    | 1.635      |
| 49    | 1.706      |
| 48.30 | 1.656      |
| 48.0  | Rounded    |

Calibration Factors

(t) = rounded avg age factor      Age      48.0      1.635  
 (u) = geographic area factor      Area                1.040

Metal Tier  
Plan ID

Catastrophic Bronze Bronze Silver Silver Gold Platinum Catastrophic Bronze Bronze Silver Silver Gold Platinum Catastrophic Bronze Bronze

Consumer Adjusted Premium Rates

Non-Tobacco Rates Demonstration

| Area        | Factor      | Age         | Age Factor  | Non-Tobacco Rates Demonstration |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |        |
|-------------|-------------|-------------|-------------|---------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------|
|             |             |             |             | Factor                          | Factor      | Factor      | Factor      | Factor      | Factor      | Factor      | Factor      | Factor      | Factor      | Factor      | Factor      | Factor      | Factor      | Factor      |             |        |
|             |             |             |             | 0.9871                          | 0.9871      | 0.9871      | 0.9871      | 0.9871      | 0.9871      | 0.9871      | 0.9871      | 1.1522      | 1.1522      | 1.1522      | 1.1522      | 1.1522      | 1.1522      | 1.1522      | 1.0473      | 1.0473 |
| Rating Area                     | Rating Area | Rating Area | Rating Area | Rating Area | Rating Area | Rating Area | Rating Area | Rating Area | Rating Area | Rating Area | Rating Area | Rating Area | Rating Area | Rating Area | Rating Area |        |
| 2           | 2           | 2           | 2           | 2                               | 2           | 2           | 2           | 2           | 2           | 4           | 4           | 4           | 4           | 4           | 4           | 4           | 1           | 1           | 1           |        |
| 0-20        | 0.635       | \$ 85.97    | \$ 120.47   | \$ 130.69                       | \$ 144.44   | \$ 135.98   | \$ 164.47   | \$ 223.39   | \$ 107.80   | \$ 151.06   | \$ 163.87   | \$ 181.11   | \$ 170.51   | \$ 206.23   | \$ 280.12   | \$ 96.35    | \$ 135.01   | \$ 146.46   |             |        |
| 21          | 1.000       | \$ 135.39   | \$ 189.71   | \$ 205.81                       | \$ 227.46   | \$ 214.14   | \$ 259.01   | \$ 351.80   | \$ 169.76   | \$ 237.88   | \$ 258.07   | \$ 285.21   | \$ 268.51   | \$ 324.78   | \$ 441.13   | \$ 151.72   | \$ 212.61   | \$ 230.65   |             |        |
| 22          | 1.000       | \$ 135.39   | \$ 189.71   | \$ 205.81                       | \$ 227.46   | \$ 214.14   | \$ 259.01   | \$ 351.80   | \$ 169.76   | \$ 237.88   | \$ 258.07   | \$ 285.21   | \$ 268.51   | \$ 324.78   | \$ 441.13   | \$ 151.72   | \$ 212.61   | \$ 230.65   |             |        |
| 23          | 1.000       | \$ 135.39   | \$ 189.71   | \$ 205.81                       | \$ 227.46   | \$ 214.14   | \$ 259.01   | \$ 351.80   | \$ 169.76   | \$ 237.88   | \$ 258.07   | \$ 285.21   | \$ 268.51   | \$ 324.78   | \$ 441.13   | \$ 151.72   | \$ 212.61   | \$ 230.65   |             |        |
| 24          | 1.000       | \$ 135.39   | \$ 189.71   | \$ 205.81                       | \$ 227.46   | \$ 214.14   | \$ 259.01   | \$ 351.80   | \$ 169.76   | \$ 237.88   | \$ 258.07   | \$ 285.21   | \$ 268.51   | \$ 324.78   | \$ 441.13   | \$ 151.72   | \$ 212.61   | \$ 230.65   |             |        |
| 25          | 1.004       | \$ 135.93   | \$ 190.47   | \$ 206.64                       | \$ 228.37   | \$ 215.00   | \$ 260.05   | \$ 353.21   | \$ 170.44   | \$ 238.83   | \$ 259.10   | \$ 286.35   | \$ 269.59   | \$ 326.08   | \$ 442.89   | \$ 152.33   | \$ 213.46   | \$ 231.57   |             |        |
| 26          | 1.024       | \$ 138.64   | \$ 194.27   | \$ 210.75                       | \$ 232.92   | \$ 219.28   | \$ 265.23   | \$ 360.25   | \$ 173.84   | \$ 243.59   | \$ 264.26   | \$ 292.06   | \$ 274.96   | \$ 332.57   | \$ 451.71   | \$ 155.37   | \$ 217.71   | \$ 236.18   |             |        |
| 27          | 1.048       | \$ 141.88   | \$ 198.82   | \$ 215.69                       | \$ 238.38   | \$ 224.42   | \$ 271.44   | \$ 368.69   | \$ 177.91   | \$ 249.30   | \$ 270.46   | \$ 298.90   | \$ 281.40   | \$ 340.37   | \$ 462.30   | \$ 159.01   | \$ 222.81   | \$ 241.72   |             |        |
| 28          | 1.087       | \$ 147.17   | \$ 206.22   | \$ 223.72                       | \$ 247.25   | \$ 232.77   | \$ 281.55   | \$ 382.41   | \$ 184.53   | \$ 258.58   | \$ 280.52   | \$ 310.03   | \$ 291.87   | \$ 353.03   | \$ 479.50   | \$ 164.92   | \$ 231.10   | \$ 250.72   |             |        |
| 29          | 1.119       | \$ 151.50   | \$ 212.29   | \$ 230.30                       | \$ 254.53   | \$ 239.62   | \$ 289.83   | \$ 393.67   | \$ 189.96   | \$ 266.19   | \$ 288.78   | \$ 319.15   | \$ 300.47   | \$ 363.43   | \$ 493.62   | \$ 169.78   | \$ 237.91   | \$ 258.10   |             |        |
| 30          | 1.135       | \$ 153.66   | \$ 215.32   | \$ 233.60                       | \$ 258.17   | \$ 243.05   | \$ 293.98   | \$ 399.30   | \$ 192.68   | \$ 270.00   | \$ 292.91   | \$ 323.72   | \$ 304.76   | \$ 368.62   | \$ 500.68   | \$ 172.21   | \$ 241.31   | \$ 261.79   |             |        |
| 31          | 1.159       | \$ 156.91   | \$ 219.88   | \$ 238.54                       | \$ 263.63   | \$ 248.19   | \$ 300.20   | \$ 407.74   | \$ 196.75   | \$ 275.71   | \$ 299.10   | \$ 330.56   | \$ 311.21   | \$ 376.42   | \$ 511.27   | \$ 175.85   | \$ 246.41   | \$ 267.32   |             |        |
| 32          | 1.183       | \$ 160.16   | \$ 224.43   | \$ 243.48                       | \$ 269.09   | \$ 253.33   | \$ 306.41   | \$ 416.18   | \$ 200.83   | \$ 281.41   | \$ 305.30   | \$ 337.41   | \$ 317.65   | \$ 384.21   | \$ 521.85   | \$ 179.49   | \$ 251.51   | \$ 272.86   |             |        |
| 33          | 1.198       | \$ 162.19   | \$ 227.28   | \$ 246.56                       | \$ 272.50   | \$ 256.54   | \$ 310.30   | \$ 421.46   | \$ 203.37   | \$ 284.98   | \$ 309.17   | \$ 341.69   | \$ 321.68   | \$ 389.08   | \$ 528.47   | \$ 181.77   | \$ 254.70   | \$ 276.32   |             |        |
| 34          | 1.214       | \$ 164.36   | \$ 230.31   | \$ 249.86                       | \$ 276.14   | \$ 259.97   | \$ 314.44   | \$ 427.09   | \$ 206.09   | \$ 288.79   | \$ 313.30   | \$ 346.25   | \$ 325.97   | \$ 394.28   | \$ 535.53   | \$ 184.19   | \$ 258.11   | \$ 280.01   |             |        |
| 35          | 1.222       | \$ 165.44   | \$ 231.83   | \$ 251.50                       | \$ 277.96   | \$ 261.68   | \$ 316.51   | \$ 429.90   | \$ 207.45   | \$ 290.69   | \$ 315.36   | \$ 348.53   | \$ 328.12   | \$ 396.88   | \$ 539.06   | \$ 185.41   | \$ 259.81   | \$ 281.85   |             |        |
| 36          | 1.230       | \$ 166.53   | \$ 233.35   | \$ 253.15                       | \$ 279.78   | \$ 263.39   | \$ 318.58   | \$ 432.72   | \$ 208.81   | \$ 292.60   | \$ 317.42   | \$ 350.81   | \$ 330.27   | \$ 399.48   | \$ 542.59   | \$ 186.62   | \$ 261.51   | \$ 283.70   |             |        |
| 37          | 1.238       | \$ 167.61   | \$ 234.87   | \$ 254.80                       | \$ 281.60   | \$ 265.11   | \$ 320.66   | \$ 435.53   | \$ 210.17   | \$ 294.50   | \$ 319.49   | \$ 353.09   | \$ 332.42   | \$ 402.07   | \$ 546.12   | \$ 187.83   | \$ 263.21   | \$ 285.54   |             |        |
| 38          | 1.246       | \$ 168.69   | \$ 236.38   | \$ 256.44                       | \$ 283.42   | \$ 266.82   | \$ 322.73   | \$ 438.35   | \$ 211.52   | \$ 296.40   | \$ 321.55   | \$ 355.38   | \$ 334.57   | \$ 404.67   | \$ 549.64   | \$ 189.05   | \$ 264.91   | \$ 287.39   |             |        |
| 39          | 1.262       | \$ 170.86   | \$ 239.42   | \$ 259.73                       | \$ 287.05   | \$ 270.25   | \$ 326.87   | \$ 443.97   | \$ 214.24   | \$ 300.21   | \$ 325.68   | \$ 359.94   | \$ 338.86   | \$ 409.87   | \$ 556.70   | \$ 191.48   | \$ 268.31   | \$ 291.08   |             |        |
| 40          | 1.278       | \$ 173.02   | \$ 242.45   | \$ 263.03                       | \$ 290.69   | \$ 273.67   | \$ 331.02   | \$ 449.60   | \$ 216.96   | \$ 304.01   | \$ 326.81   | \$ 364.50   | \$ 343.16   | \$ 415.06   | \$ 563.76   | \$ 193.90   | \$ 271.71   | \$ 294.77   |             |        |
| 41          | 1.302       | \$ 176.27   | \$ 247.01   | \$ 267.97                       | \$ 296.15   | \$ 278.81   | \$ 337.23   | \$ 458.05   | \$ 221.03   | \$ 309.72   | \$ 336.01   | \$ 371.35   | \$ 349.60   | \$ 422.86   | \$ 574.35   | \$ 197.55   | \$ 276.81   | \$ 300.30   |             |        |
| 42          | 1.325       | \$ 179.39   | \$ 251.37   | \$ 272.70                       | \$ 301.38   | \$ 283.74   | \$ 343.19   | \$ 466.14   | \$ 224.93   | \$ 315.19   | \$ 341.94   | \$ 377.91   | \$ 355.78   | \$ 430.33   | \$ 584.49   | \$ 201.04   | \$ 281.70   | \$ 305.61   |             |        |
| 43          | 1.357       | \$ 183.72   | \$ 257.44   | \$ 279.29                       | \$ 308.66   | \$ 290.59   | \$ 351.48   | \$ 477.40   | \$ 230.37   | \$ 322.81   | \$ 350.20   | \$ 387.03   | \$ 364.37   | \$ 440.72   | \$ 598.61   | \$ 205.89   | \$ 288.51   | \$ 312.99   |             |        |
| 44          | 1.397       | \$ 189.13   | \$ 265.03   | \$ 287.52                       | \$ 317.76   | \$ 299.16   | \$ 361.84   | \$ 491.47   | \$ 237.16   | \$ 332.32   | \$ 360.52   | \$ 398.44   | \$ 375.11   | \$ 453.71   | \$ 616.25   | \$ 211.96   | \$ 297.01   | \$ 322.22   |             |        |
| 45          | 1.444       | \$ 195.50   | \$ 273.95   | \$ 297.19                       | \$ 328.45   | \$ 309.22   | \$ 374.01   | \$ 508.00   | \$ 245.14   | \$ 343.50   | \$ 372.65   | \$ 411.85   | \$ 387.73   | \$ 468.98   | \$ 636.99   | \$ 219.09   | \$ 307.01   | \$ 333.06   |             |        |
| 46          | 1.500       | \$ 203.08   | \$ 284.57   | \$ 308.72                       | \$ 341.19   | \$ 321.21   | \$ 388.52   | \$ 527.70   | \$ 254.64   | \$ 356.82   | \$ 387.10   | \$ 427.82   | \$ 402.77   | \$ 487.17   | \$ 661.69   | \$ 227.59   | \$ 318.91   | \$ 345.97   |             |        |
| 47          | 1.563       | \$ 211.61   | \$ 296.52   | \$ 321.68                       | \$ 355.52   | \$ 334.70   | \$ 404.84   | \$ 549.87   | \$ 265.34   | \$ 371.81   | \$ 403.36   | \$ 445.79   | \$ 419.69   | \$ 507.63   | \$ 689.48   | \$ 237.15   | \$ 332.31   | \$ 360.50   |             |        |
| 48          | 1.635       | \$ 221.36   | \$ 310.18   | \$ 336.50                       | \$ 371.90   | \$ 350.12   | \$ 423.48   | \$ 575.20   | \$ 277.56   | \$ 388.94   | \$ 421.94   | \$ 466.32   | \$ 439.02   | \$ 531.01   | \$ 721.24   | \$ 248.07   | \$ 347.61   | \$ 377.11   |             |        |
| 49          | 1.706       | \$ 230.97   | \$ 323.65   | \$ 351.12                       | \$ 388.05   | \$ 365.32   | \$ 441.87   | \$ 600.17   | \$ 289.61   | \$ 405.83   | \$ 440.27   | \$ 486.57   | \$ 458.08   | \$ 554.07   | \$ 752.56   | \$ 258.84   | \$ 362.71   | \$ 393.49   |             |        |
| 50          | 1.786       | \$ 241.80   | \$ 338.83   | \$ 367.58                       | \$ 406.24   | \$ 382.46   | \$ 462.60   | \$ 628.32   | \$ 303.19   | \$ 424.86   | \$ 460.91   | \$ 509.39   | \$ 479.56   | \$ 580.05   | \$ 787.85   | \$ 270.98   | \$ 379.72   | \$ 411.94   |             |        |
| 51          | 1.865       | \$ 252.50   | \$ 353.82   | \$ 383.84                       | \$ 424.21   | \$ 399.37   | \$ 483.06   | \$ 656.11   | \$ 316.61   | \$ 443.65   | \$ 481.30   | \$ 531.92   | \$ 500.78   | \$ 605.71   | \$ 822.70   | \$ 282.97   | \$ 396.51   | \$ 430.16   |             |        |
| 52          | 1.952       | \$ 264.27   | \$ 370.32   | \$ 401.75                       | \$ 444.00   | \$ 418.00   | \$ 505.59   | \$ 686.72   | \$ 331.38   | \$ 464.35   | \$ 503.75   | \$ 556.74   | \$ 524.14   | \$ 633.96   | \$ 861.08   | \$ 296.17   | \$ 415.01   | \$ 450.23   |             |        |
| 53          | 2.040       | \$ 276.19   | \$ 387.02   | \$ 419.86                       | \$ 464.02   | \$ 436.85   | \$ 528.38   | \$ 717.68   | \$ 346.31   | \$ 485.28   | \$ 526.46   | \$ 581.84   | \$ 547.77   | \$ 662.54   | \$ 899.90   | \$ 309.52   | \$ 433.72   | \$ 470.52   |             |        |
| 54          | 2.135       | \$ 289.05   | \$ 405.04   | \$ 439.41                       | \$ 485.63   | \$ 457.19   | \$ 552.99   | \$ 751.10   | \$ 362.44   | \$ 507.88   | \$ 550.98   | \$ 608.93   | \$ 573.27   | \$ 693.40   | \$ 941.81   | \$ 323.93   | \$ 453.92   | \$ 492.44   |             |        |
| 55          | 2.230       | \$ 301.91   | \$ 423.06   | \$ 458.96                       | \$ 507.24   | \$ 477.53   | \$ 577.60   | \$ 784.52   | \$ 378.57   | \$ 530.48   | \$ 575.49   | \$ 636.03   | \$ 598.78   | \$ 724.25   | \$ 983.71   | \$ 338.35   | \$ 474.11   | \$ 514.35   |             |        |
| 56          | 2.333       | \$ 315.86   | \$ 442.60   | \$ 480.16                       | \$ 530.66   | \$ 499.59   | \$ 604.28   | \$ 820.75   | \$ 396.05   | \$ 554.98   | \$ 602.07   | \$ 665.40   | \$ 626.44   | \$ 757.70   | \$ 1,029.15 | \$ 353.97   | \$ 496.01   | \$ 538.10   |             |        |
| 57          | 2.437       | \$ 329.94   | \$ 462.33   | \$ 501.56                       | \$ 554.32   | \$ 521.86   | \$ 631.21   | \$ 857.34   | \$ 413.71   | \$ 579.72   | \$ 628.91   | \$ 695.06   | \$ 654.37   | \$ 791.48   | \$ 1,075.03 | \$ 369.75   | \$ 518.12   | \$ 562.09   |             |        |
| 58          | 2.548       | \$ 344.96   | \$ 483.39   | \$ 524.41                       | \$ 579.57   | \$ 545.63   | \$ 659.96   | \$ 896.39   | \$ 432.55   | \$ 606.12   | \$ 657.56   | \$ 726.72   | \$ 684.17   | \$ 827.53   | \$ 1,123.99 | \$ 386.59   | \$ 541.72   | \$ 587.69   |             |        |
| 59          | 2.603       | \$ 352.41   | \$ 493.82   | \$ 535.73                       | \$ 592.08   | \$ 557.41   | \$ 674.21   | \$ 915.74   | \$ 441.89   | \$ 619.21   | \$ 671.75   | \$ 742.41   | \$ 698.94   | \$ 845.39   | \$ 1,148.25 | \$ 394.94   | \$ 553.42   | \$ 600.38   |             |        |
| 60          | 2.714       | \$ 367.44   | \$ 514.88   | \$ 558.57                       | \$ 617.33   | \$ 581.18   | \$ 702.96   | \$ 954.79   | \$ 460.73   | \$ 645.61   | \$ 700.40   | \$ 774.07   | \$ 728.74   | \$ 881.44   | \$ 1,197.22 | \$ 411.78   | \$ 577.02   | \$ 625.98   |             |        |
| 61          | 2.810       | \$ 380.44   | \$ 533.09   | \$ 578.33                       | \$ 639.16   | \$ 601.74   | \$ 727.82   | \$ 988.56   | \$ 477.03   | \$ 668.45   | \$ 725.17   | \$ 801.45   | \$ 754.52   | \$ 912.62   | \$ 1,239.57 | \$ 426.35   | \$ 597.43   | \$ 648.12   |             |        |
| 62          | 2.873       | \$ 388.97   | \$ 545.05   | \$ 591.30                       | \$ 653.49   | \$ 615.23   | \$ 744.14   | \$ 1,010.73 | \$ 487.73   | \$ 683.44   | \$ 741.43   | \$ 819.42   | \$ 771.44   | \$ 933.08   | \$ 1,267.36 | \$ 435.90   | \$ 610.82   | \$ 662.65   |             |        |
| 63          | 2.952       | \$ 399.66   | \$ 560.03   | \$ 607.56                       | \$ 671.46   | \$ 632.14   | \$ 764.60   | \$ 1,038.52 | \$ 501.14   | \$ 702.23   | \$ 761.82   | \$ 841.95   | \$ 792.65   | \$ 958.74   | \$ 1,302.21 | \$ 447.89   | \$ 627.62   | \$ 680.88   |             |        |
| 64          | 3.000       | \$ 406.16   | \$ 569.14   | \$ 617.44                       | \$ 682.38   | \$ 642.42   | \$ 777.04   | \$ 1,       |             |             |             |             |             |             |             |             |             |             |             |        |

**Humana Insurance Company in Tennessee**  
**Exhibit 3 - Rate Development and Calibration Demonstration**

(a) **Index Rate** \$481.32

Allowable Market-wide modifiers  
 (b) Risk Adjustment \$ 69.49  
 (c) Reinsurance \$ 27.45  
 (d) Exchange User Fees \$ 8.64

(e) = (a) - (b) - (c) + (d) **Market Adjusted Index Rate** \$393.03

|                    |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |
|--------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| (f) Member Weights | 3.8%           | 3.8%           | 3.2%           | 0.7%           | 2.0%           | 0.3%           | 11.7%          | 6.5%           | 1.4%           | 0.9%           | 0.4%           | 2.5%           | 3.1%           | 0.5%           | 2.1%           | 0.2%           | 7.2%           |
| Metal Tier         | Silver         | Silver         | Gold           | Platinum       | Catastrophic   | Bronze         | Silver         | Gold           | Platinum       | Catastrophic   | Bronze         | Silver         | Gold           | Platinum       | Catastrophic   | Bronze         | Silver         |
| Plan ID            | 82120TN0620004 | 82120TN0620005 | 82120TN0620006 | 82120TN0620007 | 82120TN0600011 | 82120TN0600012 | 82120TN0600013 | 82120TN0600014 | 82120TN0600015 | 82120TN0600016 | 82120TN0600017 | 82120TN0600018 | 82120TN0600019 | 82120TN0600020 | 82120TN0600021 | 82120TN0600022 | 82120TN0600023 |

Adjustments to Market Adjusted Index Rate

|                                      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
|--------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| (g) AV and Cost Sharing              | 0.7640           | 0.7193           | 0.8700           | 1.1816           | 0.6311           | 0.6438           | 0.7592           | 0.8513           | 1.1652           | 0.6336           | 0.6463           | 0.7622           | 0.8547           | 1.1699           | 0.6311           | 0.6438           | 0.7592           |
| (h) = (e) * (g)                      | \$ 300.27        | \$ 282.69        | \$ 341.93        | \$ 464.42        | \$ 248.05        | \$ 253.02        | \$ 298.39        | \$ 334.57        | \$ 457.98        | \$ 249.04        | \$ 254.03        | \$ 299.58        | \$ 335.91        | \$ 459.81        | \$ 248.05        | \$ 253.02        | \$ 298.39        |
| (i) Add'l Non-EHB Benefits           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 1.0000           |
| (j) = (h) * (i)                      | \$ 300.27        | \$ 282.69        | \$ 341.93        | \$ 464.42        | \$ 248.05        | \$ 253.02        | \$ 298.39        | \$ 334.57        | \$ 457.98        | \$ 249.04        | \$ 254.03        | \$ 299.58        | \$ 335.91        | \$ 459.81        | \$ 248.05        | \$ 253.02        | \$ 298.39        |
| (k) Network Adjustment               | 1.0355           | 1.0355           | 1.0355           | 1.0355           | 1.0055           | 1.0055           | 1.0055           | 1.0055           | 1.0055           | 1.0055           | 1.0055           | 1.0055           | 1.0055           | 1.0055           | 1.0055           | 0.9469           | 0.9469           |
| (l) = (j) * (k)                      | \$ 310.94        | \$ 292.74        | \$ 354.08        | \$ 480.92        | \$ 249.42        | \$ 254.41        | \$ 300.04        | \$ 336.42        | \$ 460.50        | \$ 250.41        | \$ 255.43        | \$ 301.24        | \$ 337.76        | \$ 462.34        | \$ 234.89        | \$ 239.60        | \$ 282.56        |
| (m) Catastrophic Plan Adj            | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 0.7231           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 0.7231           | 1.0000           | 1.0000           | 1.0000           | 1.0000           | 0.7231           | 1.0000           | 1.0000           |
| (n) = (l) * (m)                      | \$ 310.94        | \$ 292.74        | \$ 354.08        | \$ 480.92        | \$ 180.36        | \$ 254.41        | \$ 300.04        | \$ 336.42        | \$ 460.50        | \$ 181.08        | \$ 255.43        | \$ 301.24        | \$ 337.76        | \$ 462.34        | \$ 169.85        | \$ 239.60        | \$ 282.56        |
| (o) = [ 1 / (1 - admin costs) ]      | 1.3490           | 1.3490           | 1.3490           | 1.3490           | 1.3431           | 1.3431           | 1.3431           | 1.3431           | 1.3431           | 1.3431           | 1.3431           | 1.3431           | 1.3431           | 1.3431           | 1.3431           | 1.3431           | 1.3431           |
| (p) = (n) * (o)                      | \$ 419.45        | \$ 394.89        | \$ 477.63        | \$ 648.74        | \$ 242.25        | \$ 341.71        | \$ 402.99        | \$ 451.85        | \$ 618.52        | \$ 243.22        | \$ 343.08        | \$ 404.60        | \$ 453.66        | \$ 620.99        | \$ 228.14        | \$ 321.81        | \$ 379.52        |
| (q) = 1 / Avg Tobacco Load           | 0.9868           | 0.9868           | 0.9868           | 0.9868           | 0.9868           | 0.9868           | 0.9868           | 0.9868           | 0.9868           | 0.9868           | 0.9868           | 0.9868           | 0.9868           | 0.9868           | 0.9868           | 0.9868           | 0.9868           |
| (r) = (p) * (q)                      | \$ 413.91        | \$ 389.68        | \$ 471.33        | \$ 640.18        | \$ 239.05        | \$ 337.20        | \$ 397.67        | \$ 445.89        | \$ 610.35        | \$ 240.01        | \$ 338.55        | \$ 399.26        | \$ 447.67        | \$ 612.80        | \$ 225.13        | \$ 317.56        | \$ 374.51        |
| (r) <b>Plan Adjusted Index Rates</b> | <b>\$ 413.91</b> | <b>\$ 389.68</b> | <b>\$ 471.33</b> | <b>\$ 640.18</b> | <b>\$ 239.05</b> | <b>\$ 337.20</b> | <b>\$ 397.67</b> | <b>\$ 445.89</b> | <b>\$ 610.35</b> | <b>\$ 240.01</b> | <b>\$ 338.55</b> | <b>\$ 399.26</b> | <b>\$ 447.67</b> | <b>\$ 612.80</b> | <b>\$ 225.13</b> | <b>\$ 317.56</b> | <b>\$ 374.51</b> |
| (r) / (e) <b>AV Pricing Value</b>    | 1.0531           | 0.9915           | 1.1992           | 1.6288           | 0.6082           | 0.8580           | 1.0118           | 1.1345           | 1.5529           | 0.6107           | 0.8614           | 1.0158           | 1.1390           | 1.5591           | 0.5728           | 0.8080           | 0.9529           |
| (s) Avg Age Factor                   | 1.656            | 1.656            | 1.656            | 1.656            | 1.656            | 1.656            | 1.656            | 1.656            | 1.656            | 1.656            | 1.656            | 1.656            | 1.656            | 1.656            | 1.656            | 1.656            | 1.656            |

| Age   | Age Factor |
|-------|------------|
| 48    | 1.635      |
| 49    | 1.706      |
| 48.30 | 1.656      |
| 48.0  | Rounded    |

Calibration Factors

(t) = rounded avg age factor      Age      48.0      1.635  
 (u) = geographic area factor      Area                1.040



**Humana Insurance Company in Tennessee**  
**Exhibit 3 - Rate Development and Calibration Demonstration**

|                        |  |          |
|------------------------|--|----------|
| (a) Index Rate         |  | \$481.32 |
|                        | <u>Allowable Market-wide modifiers</u> |          |
| (b) Risk Adjustment    | \$                                     | 69.49    |
| (c) Reinsurance        | \$                                     | 27.45    |
| (d) Exchange User Fees | \$                                     | 8.64     |

(e) = (a) - (b) - (c) + (d) **Market Adjusted Index Rate** \$393.03

|                    |                |                |                |                |                |                |                |                |                |                |                |                |
|--------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| (f) Member Weights | 6.7%           | 1.6%           | 0.6%           | 0.4%           | 2.1%           | 2.4%           | 0.5%           | 2.7%           | 0.1%           | 1.6%           | 1.5%           | 0.4%           |
| Metal Tier         | Gold           | Platinum       | Catastrophic   | Bronze         | Silver         | Gold           | Platinum       | Catastrophic   | Bronze         | Silver         | Gold           | Platinum       |
| Plan ID            | 82120TN0600024 | 82120TN0600025 | 82120TN0600026 | 82120TN0600027 | 82120TN0600028 | 82120TN0600029 | 82120TN0600030 | 82120TN0600031 | 82120TN0600032 | 82120TN0600033 | 82120TN0600034 | 82120TN0600035 |

Adjustments to Market Adjusted Index Rate

|                                 |    |           |           |           |           |           |           |           |           |           |           |           |           | Average   |
|---------------------------------|----|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| (g) AV and Cost Sharing         |    | 0.8513    | 1.1652    | 0.6336    | 0.6463    | 0.7622    | 0.8547    | 1.1699    | 0.6311    | 0.6438    | 0.7592    | 0.8513    | 1.1652    |           |
| (h) = (e) * (g)                 | \$ | 334.57    | \$ 457.98 | \$ 249.04 | \$ 254.03 | \$ 299.58 | \$ 335.91 | \$ 459.81 | \$ 248.05 | \$ 253.02 | \$ 298.39 | \$ 334.57 | \$ 457.98 | \$ 312.02 |
| (i) Add'l Non-EHB Benefits      |    | 1.0000    | 1.0000    | 1.0000    | 1.0000    | 1.0000    | 1.0000    | 1.0000    | 1.0000    | 1.0000    | 1.0000    | 1.0000    | 1.0000    |           |
| (j) = (h) * (i)                 | \$ | 334.57    | \$ 457.98 | \$ 249.04 | \$ 254.03 | \$ 299.58 | \$ 335.91 | \$ 459.81 | \$ 248.05 | \$ 253.02 | \$ 298.39 | \$ 334.57 | \$ 457.98 | \$ 312.02 |
| (k) Network Adjustment          |    | 0.9469    | 0.9469    | 0.9469    | 0.9469    | 0.9469    | 0.9469    | 0.9469    | 1.0322    | 1.0322    | 1.0322    | 1.0322    | 1.0322    |           |
| (l) = (j) * (k)                 | \$ | 316.82    | \$ 433.68 | \$ 235.83 | \$ 240.55 | \$ 283.69 | \$ 318.09 | \$ 435.41 | \$ 256.03 | \$ 261.16 | \$ 308.00 | \$ 345.34 | \$ 472.72 | \$ 312.02 |
| (m) Catastrophic Plan Adj       |    | 1.0000    | 1.0000    | 0.7231    | 1.0000    | 1.0000    | 1.0000    | 1.0000    | 0.7231    | 1.0000    | 1.0000    | 1.0000    | 1.0000    |           |
| (n) = (l) * (m)                 | \$ | 316.82    | \$ 433.68 | \$ 170.53 | \$ 240.55 | \$ 283.69 | \$ 318.09 | \$ 435.41 | \$ 185.14 | \$ 261.16 | \$ 308.00 | \$ 345.34 | \$ 472.72 | \$ 303.10 |
| (o) = [ 1 / (1 - admin costs) ] |    | 1.3431    | 1.3431    | 1.3431    | 1.3431    | 1.3431    | 1.3431    | 1.3431    | 1.3431    | 1.3431    | 1.3431    | 1.3431    | 1.3431    |           |
| (p) = (n) * (o)                 | \$ | 425.53    | \$ 582.49 | \$ 229.05 | \$ 323.10 | \$ 381.03 | \$ 427.24 | \$ 584.82 | \$ 248.68 | \$ 350.78 | \$ 413.68 | \$ 463.84 | \$ 634.93 | \$ 407.83 |
| (q) = 1 / Avg Tobacco Load      |    | 0.9868    | 0.9868    | 0.9868    | 0.9868    | 0.9868    | 0.9868    | 0.9868    | 0.9868    | 0.9868    | 0.9868    | 0.9868    | 0.9868    |           |
| (r) = (p) * (q)                 | \$ | 419.92    | \$ 574.80 | \$ 226.03 | \$ 318.83 | \$ 376.00 | \$ 421.60 | \$ 577.10 | \$ 245.39 | \$ 346.15 | \$ 408.22 | \$ 457.72 | \$ 626.55 | \$ 402.45 |
| (r) Plan Adjusted Index Rates   |    | \$ 419.92 | \$ 574.80 | \$ 226.03 | \$ 318.83 | \$ 376.00 | \$ 421.60 | \$ 577.10 | \$ 245.39 | \$ 346.15 | \$ 408.22 | \$ 457.72 | \$ 626.55 | \$ 402.45 |
| (r) / (e) AV Pricing Value      |    | 1.0684    | 1.4625    | 0.5751    | 0.8112    | 0.9567    | 1.0727    | 1.4683    | 0.6244    | 0.8807    | 1.0386    | 1.1646    | 1.5941    |           |
| (s) Avg Age Factor              |    | 1.656     | 1.656     | 1.656     | 1.656     | 1.656     | 1.656     | 1.656     | 1.656     | 1.656     | 1.656     | 1.656     | 1.656     | 1.656     |

| Age   | Age Factor |
|-------|------------|
| 48    | 1.635      |
| 49    | 1.706      |
| 48.30 | 1.656      |
| 48.0  | Rounded    |

Calibration Factors

|                              |      |      |       |
|------------------------------|------|------|-------|
| (t) = rounded avg age factor | Age  | 48.0 | 1.635 |
| (u) = geographic area factor | Area |      | 1.040 |

Metal Tier  
Plan ID

Gold Platinum Catastrophic Bronze Silver Gold Platinum Catastrophic Bronze Silver Gold Platinum  
82120TN0600024 82120TN0600025 82120TN0600026 82120TN0600027 82120TN0600028 82120TN0600029 82120TN0600030 82120TN0600031 82120TN0600032 82120TN0600033 82120TN0600034 82120TN0600035

Consumer Adjusted Premium Rates Non-Tobacco

Factor 1.0320 Rating Area 6  
Factor 1.1522 Rating Area 4  
Factor 1.1522 Rating Area 4

| Area          | Age  | Age Factor | Factor 1.0320 Rating Area 6 | Factor 1.1522 Rating Area 4 |
|---------------|------|------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Rating Area   | 0-20 | 0.635      | \$ 161.81                   | \$ 221.50                   | \$ 87.10                    | \$ 122.86                   | \$ 144.89                   | \$ 162.46                   | \$ 222.38                   | \$ 105.58                   | \$ 148.93                   | \$ 175.63                   | \$ 269.57                   |
| Rating Area 1 | 21   | 1.000      | \$ 254.83                   | \$ 348.82                   | \$ 137.16                   | \$ 193.48                   | \$ 228.18                   | \$ 255.84                   | \$ 350.21                   | \$ 166.27                   | \$ 234.53                   | \$ 276.59                   | \$ 310.13                   |
| Rating Area 2 | 22   | 1.000      | \$ 254.83                   | \$ 348.82                   | \$ 137.16                   | \$ 193.48                   | \$ 228.18                   | \$ 255.84                   | \$ 350.21                   | \$ 166.27                   | \$ 234.53                   | \$ 276.59                   | \$ 310.13                   |
| Rating Area 3 | 23   | 1.000      | \$ 254.83                   | \$ 348.82                   | \$ 137.16                   | \$ 193.48                   | \$ 228.18                   | \$ 255.84                   | \$ 350.21                   | \$ 166.27                   | \$ 234.53                   | \$ 276.59                   | \$ 310.13                   |
| Rating Area 4 | 24   | 1.000      | \$ 254.83                   | \$ 348.82                   | \$ 137.16                   | \$ 193.48                   | \$ 228.18                   | \$ 255.84                   | \$ 350.21                   | \$ 166.27                   | \$ 234.53                   | \$ 276.59                   | \$ 310.13                   |
| Rating Area 5 | 25   | 1.004      | \$ 255.84                   | \$ 350.21                   | \$ 137.71                   | \$ 194.26                   | \$ 229.09                   | \$ 256.87                   | \$ 351.61                   | \$ 166.93                   | \$ 235.47                   | \$ 277.70                   | \$ 311.37                   |
| Rating Area 6 | 26   | 1.024      | \$ 260.94                   | \$ 357.19                   | \$ 140.46                   | \$ 198.13                   | \$ 233.65                   | \$ 261.98                   | \$ 358.62                   | \$ 170.26                   | \$ 240.16                   | \$ 283.23                   | \$ 317.57                   |
| Rating Area 7 | 27   | 1.048      | \$ 267.06                   | \$ 365.56                   | \$ 143.75                   | \$ 202.77                   | \$ 239.13                   | \$ 268.13                   | \$ 367.02                   | \$ 174.25                   | \$ 245.79                   | \$ 289.87                   | \$ 325.01                   |
| Rating Area 8 | 28   | 1.087      | \$ 277.00                   | \$ 379.16                   | \$ 149.10                   | \$ 210.32                   | \$ 248.03                   | \$ 278.10                   | \$ 380.68                   | \$ 180.73                   | \$ 254.94                   | \$ 300.65                   | \$ 337.11                   |
|               | 29   | 1.119      | \$ 285.15                   | \$ 390.33                   | \$ 153.49                   | \$ 216.51                   | \$ 255.33                   | \$ 286.29                   | \$ 391.89                   | \$ 186.05                   | \$ 262.44                   | \$ 309.50                   | \$ 347.03                   |
|               | 30   | 1.135      | \$ 289.23                   | \$ 395.91                   | \$ 155.68                   | \$ 219.60                   | \$ 258.98                   | \$ 290.38                   | \$ 397.49                   | \$ 188.71                   | \$ 266.20                   | \$ 313.93                   | \$ 351.99                   |
|               | 31   | 1.159      | \$ 295.34                   | \$ 404.28                   | \$ 158.97                   | \$ 224.25                   | \$ 264.46                   | \$ 296.52                   | \$ 405.90                   | \$ 192.70                   | \$ 271.82                   | \$ 320.57                   | \$ 359.44                   |
|               | 32   | 1.183      | \$ 301.46                   | \$ 412.65                   | \$ 162.27                   | \$ 228.89                   | \$ 269.93                   | \$ 302.66                   | \$ 414.30                   | \$ 196.69                   | \$ 277.45                   | \$ 327.21                   | \$ 366.88                   |
|               | 33   | 1.198      | \$ 305.28                   | \$ 417.88                   | \$ 164.32                   | \$ 231.79                   | \$ 273.36                   | \$ 306.50                   | \$ 419.55                   | \$ 199.19                   | \$ 280.97                   | \$ 331.35                   | \$ 371.53                   |
|               | 34   | 1.214      | \$ 309.36                   | \$ 423.46                   | \$ 166.52                   | \$ 234.89                   | \$ 277.01                   | \$ 310.60                   | \$ 425.16                   | \$ 201.85                   | \$ 284.72                   | \$ 335.78                   | \$ 376.49                   |
|               | 35   | 1.222      | \$ 311.40                   | \$ 426.25                   | \$ 167.61                   | \$ 236.44                   | \$ 278.83                   | \$ 312.64                   | \$ 427.96                   | \$ 203.18                   | \$ 286.60                   | \$ 337.99                   | \$ 378.97                   |
|               | 36   | 1.230      | \$ 313.44                   | \$ 429.05                   | \$ 168.71                   | \$ 237.98                   | \$ 280.66                   | \$ 314.69                   | \$ 430.76                   | \$ 204.51                   | \$ 288.48                   | \$ 340.21                   | \$ 381.46                   |
|               | 37   | 1.238      | \$ 315.47                   | \$ 431.84                   | \$ 169.81                   | \$ 239.53                   | \$ 282.48                   | \$ 316.74                   | \$ 433.56                   | \$ 205.84                   | \$ 290.35                   | \$ 342.42                   | \$ 383.94                   |
|               | 38   | 1.246      | \$ 317.51                   | \$ 434.63                   | \$ 170.91                   | \$ 241.08                   | \$ 284.31                   | \$ 318.78                   | \$ 436.36                   | \$ 207.17                   | \$ 292.23                   | \$ 344.63                   | \$ 386.42                   |
|               | 39   | 1.262      | \$ 321.59                   | \$ 440.21                   | \$ 173.10                   | \$ 244.18                   | \$ 287.96                   | \$ 322.88                   | \$ 441.97                   | \$ 209.83                   | \$ 295.98                   | \$ 349.06                   | \$ 391.38                   |
|               | 40   | 1.278      | \$ 325.67                   | \$ 445.79                   | \$ 175.30                   | \$ 247.27                   | \$ 291.61                   | \$ 326.97                   | \$ 447.57                   | \$ 212.49                   | \$ 299.73                   | \$ 353.48                   | \$ 396.34                   |
|               | 41   | 1.302      | \$ 331.78                   | \$ 454.16                   | \$ 178.59                   | \$ 251.91                   | \$ 297.09                   | \$ 333.11                   | \$ 455.98                   | \$ 216.48                   | \$ 305.36                   | \$ 360.12                   | \$ 403.79                   |
|               | 42   | 1.325      | \$ 337.64                   | \$ 462.18                   | \$ 181.74                   | \$ 256.36                   | \$ 302.34                   | \$ 338.99                   | \$ 464.03                   | \$ 220.30                   | \$ 310.76                   | \$ 366.48                   | \$ 410.92                   |
|               | 43   | 1.357      | \$ 345.80                   | \$ 473.34                   | \$ 186.13                   | \$ 262.56                   | \$ 309.64                   | \$ 347.18                   | \$ 475.24                   | \$ 225.62                   | \$ 318.26                   | \$ 375.33                   | \$ 420.84                   |
|               | 44   | 1.397      | \$ 355.99                   | \$ 487.30                   | \$ 191.62                   | \$ 270.30                   | \$ 318.76                   | \$ 357.41                   | \$ 489.25                   | \$ 232.27                   | \$ 327.64                   | \$ 386.40                   | \$ 433.25                   |
|               | 45   | 1.444      | \$ 367.97                   | \$ 503.69                   | \$ 198.06                   | \$ 279.39                   | \$ 329.49                   | \$ 369.44                   | \$ 505.71                   | \$ 240.09                   | \$ 338.67                   | \$ 399.40                   | \$ 447.82                   |
|               | 46   | 1.500      | \$ 382.24                   | \$ 523.23                   | \$ 205.75                   | \$ 290.22                   | \$ 342.27                   | \$ 383.77                   | \$ 525.32                   | \$ 249.40                   | \$ 351.80                   | \$ 414.88                   | \$ 465.19                   |
|               | 47   | 1.563      | \$ 398.29                   | \$ 545.20                   | \$ 214.39                   | \$ 302.41                   | \$ 356.64                   | \$ 399.89                   | \$ 547.38                   | \$ 259.87                   | \$ 366.58                   | \$ 432.31                   | \$ 484.73                   |
|               | 48   | 1.635      | \$ 416.64                   | \$ 570.32                   | \$ 224.26                   | \$ 316.34                   | \$ 373.07                   | \$ 418.31                   | \$ 572.60                   | \$ 271.84                   | \$ 383.46                   | \$ 452.22                   | \$ 507.06                   |
|               | 49   | 1.706      | \$ 434.73                   | \$ 595.08                   | \$ 234.00                   | \$ 330.08                   | \$ 389.27                   | \$ 436.47                   | \$ 597.46                   | \$ 283.65                   | \$ 400.11                   | \$ 471.86                   | \$ 529.08                   |
|               | 50   | 1.786      | \$ 455.12                   | \$ 622.99                   | \$ 244.98                   | \$ 345.56                   | \$ 407.53                   | \$ 456.94                   | \$ 625.48                   | \$ 296.95                   | \$ 418.88                   | \$ 493.99                   | \$ 553.89                   |
|               | 51   | 1.865      | \$ 475.25                   | \$ 650.54                   | \$ 255.81                   | \$ 360.85                   | \$ 425.55                   | \$ 477.15                   | \$ 653.15                   | \$ 310.09                   | \$ 437.41                   | \$ 515.84                   | \$ 578.39                   |
|               | 52   | 1.952      | \$ 497.42                   | \$ 680.89                   | \$ 267.74                   | \$ 377.68                   | \$ 445.40                   | \$ 499.41                   | \$ 683.61                   | \$ 324.55                   | \$ 457.81                   | \$ 539.90                   | \$ 605.37                   |
|               | 53   | 2.040      | \$ 519.84                   | \$ 711.59                   | \$ 279.81                   | \$ 394.70                   | \$ 465.48                   | \$ 521.92                   | \$ 714.43                   | \$ 339.18                   | \$ 478.45                   | \$ 564.24                   | \$ 632.66                   |
|               | 54   | 2.135      | \$ 544.05                   | \$ 744.72                   | \$ 292.85                   | \$ 413.09                   | \$ 487.16                   | \$ 546.23                   | \$ 747.70                   | \$ 354.98                   | \$ 500.73                   | \$ 590.52                   | \$ 662.12                   |
|               | 55   | 2.230      | \$ 568.26                   | \$ 777.86                   | \$ 305.88                   | \$ 431.47                   | \$ 508.84                   | \$ 570.53                   | \$ 780.97                   | \$ 370.77                   | \$ 523.01                   | \$ 616.79                   | \$ 691.58                   |
|               | 56   | 2.333      | \$ 594.51                   | \$ 813.79                   | \$ 320.00                   | \$ 451.40                   | \$ 532.34                   | \$ 596.89                   | \$ 817.05                   | \$ 387.90                   | \$ 547.17                   | \$ 645.28                   | \$ 723.53                   |
|               | 57   | 2.437      | \$ 621.01                   | \$ 850.07                   | \$ 334.27                   | \$ 471.52                   | \$ 556.07                   | \$ 623.49                   | \$ 853.47                   | \$ 405.19                   | \$ 571.56                   | \$ 674.05                   | \$ 755.78                   |
|               | 58   | 2.548      | \$ 649.30                   | \$ 888.79                   | \$ 349.49                   | \$ 492.99                   | \$ 581.40                   | \$ 651.89                   | \$ 892.34                   | \$ 423.65                   | \$ 597.59                   | \$ 704.75                   | \$ 790.20                   |
|               | 59   | 2.603      | \$ 663.31                   | \$ 907.97                   | \$ 357.04                   | \$ 503.64                   | \$ 593.95                   | \$ 665.96                   | \$ 911.60                   | \$ 432.79                   | \$ 610.49                   | \$ 719.96                   | \$ 807.26                   |
|               | 60   | 2.714      | \$ 691.60                   | \$ 946.69                   | \$ 372.26                   | \$ 525.11                   | \$ 619.27                   | \$ 694.36                   | \$ 950.48                   | \$ 451.25                   | \$ 636.52                   | \$ 750.66                   | \$ 841.68                   |
|               | 61   | 2.810      | \$ 716.06                   | \$ 980.18                   | \$ 385.43                   | \$ 543.69                   | \$ 641.18                   | \$ 718.92                   | \$ 984.10                   | \$ 467.21                   | \$ 659.04                   | \$ 777.22                   | \$ 871.46                   |
|               | 62   | 2.873      | \$ 732.11                   | \$ 1,002.15                 | \$ 394.07                   | \$ 555.88                   | \$ 655.55                   | \$ 735.04                   | \$ 1,006.16                 | \$ 477.68                   | \$ 673.82                   | \$ 794.64                   | \$ 890.99                   |
|               | 63   | 2.952      | \$ 752.24                   | \$ 1,029.71                 | \$ 404.91                   | \$ 571.16                   | \$ 673.58                   | \$ 755.25                   | \$ 1,033.83                 | \$ 490.82                   | \$ 692.34                   | \$ 816.49                   | \$ 915.49                   |
|               | 64   | 3.000      | \$ 764.48                   | \$ 1,046.45                 | \$ 411.49                   | \$ 580.45                   | \$ 684.53                   | \$ 767.53                   | \$ 1,050.64                 | \$ 498.80                   | \$ 703.60                   | \$ 829.77                   | \$ 930.38                   |

**Tennessee  
Humana Insurance Company  
Exhibit 4 - Development of Geographic Factors**

In order to comply with Federal market rating rules, our area rating reflects only differences in underlying unit cost and any anticipated network savings. A review of unit cost and provider practice patterns was completed for the allowed rating regions. Differences in unit cost are intended to reflect underlying geographic charge level variation. The component related to network reflects any differences in expected network savings and efficiency.

The final proposed geographic network factors, the development of which is illustrated below, will apply to non-grandfathered, ACA-compliant business on this legal entity in 2016. The applicability of these factors conforms to the standardized rating area definitions.

| Rating Area | Reference Market Name | A                                      | B               |       |       | C                       |      |       | D                          |        |        | E                        |
|-------------|-----------------------|--|-----------------|-------|-------|-------------------------|------|-------|----------------------------|--------|--------|--------------------------|
|             |                       | Base Network Unit Cost Area Relativity | Network Savings |       |       | Membership Distribution |      |       | Geographic Network Factors |        |        | Final Geographic Factors |
|             |                       |  | PPO             | CPOS  | PPOx  | PPO                     | CPOS | PPOx  | PPO                        | CPOS   | PPOx   |                          |
| 1           | Kingsport-Bristol     | 1.0069                                 | 0.0%            |       |       | 5.8%                    |      |       | 1.0473                     |        |        | 1.0473                   |
| 2           | Knoxville             | 0.9491                                 | 0.0%            | -5.3% | -2.9% | 0.0%                    | 9.2% | 29.3% | 0.9871                     | 0.9345 | 0.9585 | 0.9871                   |
| 3           | Chattanooga           | 1.0523                                 | 0.0%            | -5.3% |       | 0.0%                    | 2.6% |       | 1.0945                     | 1.0362 |        | 1.0945                   |
| 4           | Nashville Inner       | 1.1078                                 | 0.0%            | 1.7%  | -0.3% | 0.0%                    | 5.3% | 6.3%  | 1.1522                     | 1.1718 | 1.1485 | 1.1522                   |
| 5           | Jackson               | 1.1256                                 | 0.0%            |       |       | 2.2%                    |      |       | 1.1708                     |        |        | 1.1708                   |
| 6           | Memphis               | 0.9922                                 | 0.0%            | -5.3% | -8.6% | 0.0%                    | 9.5% | 23.6% | 1.0320                     | 0.9770 | 0.9437 | 1.0320                   |
| 7           | Other TN              | 1.0831                                 | 0.0%            |       |       | 2.1%                    |      |       | 1.1265                     |        |        | 1.1265                   |
| 8           | Nashville Outer       | 1.0870                                 | 0.0%            |       |       | 3.9%                    |      |       | 1.1305                     |        |        | 1.1305                   |
|             | <b>Overall</b>        |  |                 |       |       | <b>100.0%</b>           |      |       | <b>1.000</b>               |        |        | <b>1.0401</b>            |

The final geographic area factors are produced by taking unit cost differences between rating areas for a base network in an area (section A), adjusting for anticipated relative network savings (section B), and normalizing to an average overall factor of 1.0 across all networks on the legal entity (section D). Lastly, the factors for the base network(s) are used as the final geographic factors (section E). The applicability of these factors conforms to the standardized rating area definitions.

In accordance with the Actuarial Memorandum instructions, issuers with multiple networks within a given rating area who desire to develop premiums specific for each network must have a separate plan for each network. The final geographic factors in section E represent one base network, and the rating relativity due to network savings reflected in the plan level variation as instructed. Therefore, while section D averages out to 1.0 across all networks, section E does not. This creates the need for Calibration based on this average factor in section E, which can be seen in the Rate Development and Calibration Demonstration.