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## Part III Actuarial Memorandum

### Kentucky Health Cooperative, Inc. Individual Rate Filing Effective January 1, 2016

Prepared for:  
**Kentucky Health Cooperative, Inc.**

Prepared by:  
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## EXHIBIT 1. GENERAL INFORMATION

### Document Overview

This document contains the Part III Actuarial Memorandum for Kentucky Health Cooperative, Inc.'s (KYHC) individual block of business, effective January 1, 2016. This actuarial memorandum is submitted in conjunction with the Part I Unified Rate Review Template (URRT).

The purpose of the actuarial memorandum is to provide certain information related to the submission, including support for the values entered into the URRT, which supports compliance with the market rating rules and reasonableness of applicable rate increases. This information may not be appropriate for other purposes.

This information is intended for use by the Commonwealth of Kentucky Department of Insurance, the Center for Consumer Information and Insurance Oversight (CCIIO), and their subcontractors to assist in the review of KYHC's individual rate filing. However, we recognize that this certification may become a public document. Milliman makes no representations or warranties regarding the contents of this letter to other users. Likewise, other users of this letter should not place reliance upon this actuarial memorandum that would result in the creation of any duty or liability for Milliman under any theory of law.

### Company Identifying Information

Company Legal Name: Kentucky Health Cooperative, Inc.  
State: The Commonwealth of Kentucky has regulatory authority over these policies.  
HIOS Issuer ID: 77894  
Market: Individual  
Effective Date: January 1, 2016

### Company Contact Information

Primary Contact Name: Janie Miller  
Primary Contact Telephone Number: (502) 287-1285 x1002  
Primary Contact Email Address: jmiller@mykyhc.org

## EXHIBIT 2. PROPOSED RATE INCREASE(S)

Table 2.1 summarizes the average proposed rate increase for all products effective January 1, 2016. The following are significant factors driving the proposed rate increases discussed below.

<b>Table 2.1</b> <b>Kentucky Health Cooperative, Inc.</b> <b>Attribution Analysis of Proposed Rate Increases</b>	
<b>Factor</b>	<b>Value</b>
<b>2015 Rate</b>	<b>\$310.60</b>
Morbidity / Population Change Factor	
Trend Factor	
Benefit Change Factor	
Administrative Expense Change Factor	
Transitional Federal Program Factor	
Taxes & Fees Change Factor	
Profit Change Factor	
<b>2016 Rate</b>	<b>\$388.75</b>

### Medical and Prescription Drug Inflation & Utilization Trend

Claims costs were increased for anticipated changes due to medical/prescription drug inflation and increased medical/prescription drug utilization. Below are the percentage increases for these changes. These are reported in Worksheet 1, Section II of the URRT.

<b>Table 2.2</b> <b>Kentucky Health Cooperative, Inc.</b> <b>Unit Cost and Utilization Trend Assumptions</b>			
<b>Service Type</b>	<b>Inflation</b>	<b>Utilization</b>	<b>Total</b>
Inpatient			
Outpatient			
Professional			
Other			
Capitation			
Prescription Drug			

### New Taxes, Fees and Administrative Expenses

Changes to the overall premium level are needed because of required changes in federal/state taxes and fees. In addition, there are anticipated changes in the administrative expenses and commission arrangements. The following is a list of any anticipated changes and comments regarding the adjustment:

<b>Table 2.3</b> <b>Kentucky Health Cooperative, Inc.</b> <b>Anticipated Non-Benefit Expenses Changes</b>			
<b>Item</b>	<b>Prior Year Value</b>	<b>Effective Year Value</b>	<b>Reason for Adjustment</b>
Insurer Fee			The fee as a percent of premium has changed due to changes in total market wide net premiums written and KYHC's change in net premiums written.
Commission			KYHC will have lower commission costs this year due to a change in the way commissions are allocated as well as information from emerging experience.
Administrative Expenses			KYHC will have higher general administrative costs this year due to emerging information regarding operating costs. Net Commercial Reinsurance is included in this component.
Transitional Reinsurance			See below
Risk Adjustment			See below
Profit / Risk			KYHC is filing a 0.0% profit and risk charge in 2015.

## EXHIBIT 2. PROPOSED RATE INCREASE(S)

### Prospective Benefit Changes

Effective January 1, 2016 benefits have changed based on state requirements, business decisions and new Actuarial Value Calculator testing. The following are a list of the benefit changes:

- KY Health Cooperative Gold - Out of Network deductible increased from \$3,500 to \$4,500
- KY Health Cooperative Gold - Out of Network MOOP increased from \$8,500 to \$9,000
- KY Health Cooperative Gold - Primary Care Physician (PCP), Mental Health / Substance Abuse (MHSA), and Physical / Occupational / Speech Therapy (PT/OT/ST) copays increased from \$20 to \$25
- KY Health Cooperative Gold - Emergency Room (ER) copay increased from \$150 to \$200
- KY Health Cooperative Silver 87% - deductible decreased from \$1,000 to \$700
- KY Health Cooperative Silver 87% - PCP, MHSA, and PT/OT/ST copays decreased from \$20 to \$15
- KY Health Cooperative Bronze - deductible increased from \$4,750 to \$5,750
- KY Health Cooperative High Deductible - deductible increased from \$6,600 to \$6,850
- KY Health Cooperative Silver 70%, KY Health Cooperative Bronze, and KY Health Cooperative High Deductible - MOOPs increased from \$6,600 to \$6,850
- KYHC MultiStatePlan IND Gold - default coinsurance increased from 10% to 15%
- KYHC MultiStatePlan IND Silver 70% - deductible increased from \$2,000 to \$2,500
- KYHC MultiStatePlan IND Silver 70% - default coinsurance increased from 25% to 35%
- KYHC MultiStatePlan IND Silver 73% - deductible increased from \$1,650 to \$1,800
- KYHC MultiStatePlan IND Silver 73% - MOOP increased from \$3,250 to \$3,500
- KYHC MultiStatePlan IND Silver 73% - default coinsurance increased from 25% to 30%
- KYHC MultiStatePlan IND Silver 87% - deductible increased from \$650 to \$800
- KYHC MultiStatePlan IND Silver 73% - deductible increased from \$100 to \$100

### Federal Transitional Reinsurance Program Changes

Federal transitional reinsurance program contributions and benefit limits have changed from last year. Specifically, the reinsurance contribution has changed from an estimated \$44 PMPY to \$27 PMPY. Further, the claims threshold upon which reinsurance recoveries are triggered has changed from \$70,000 (the 2015 pricing was based on the original guidance) to \$90,000; therefore, there will be an increase in the individual rates. Changes in the benefit levels of the reinsurance recoveries will only impact the individual market, while the changes in the reinsurance contribution levels will impact both the individual and small group markets.

## EXHIBIT 2. PROPOSED RATE INCREASE(S)

### Rate Increases by Plan

The following table summarizes proposed rates increase(s) by product:

<b>Product</b>	<b>2015 Rate</b>	<b>2016 Rate</b>	<b>Rate Increase</b>
KY Health Cooperative Gold	\$374.36	\$460.66	23.1%
KY Health Cooperative Silver	\$302.90	\$379.53	25.3%
KY Health Cooperative Bronze	\$236.75	\$309.96	30.9%
KY Health Cooperative High Deductible	\$114.25	\$148.79	30.2%
KYHCMultistatePlanIND Gold	\$417.74	\$496.87	18.9%
KYHCMultistatePlanIND Silver	\$334.99	\$404.10	20.6%

Rate increases vary by plan due to a combination of factors including shifts in benefit relativities and non-benefit expense allocation.

### EXHIBIT 3. EXPERIENCE PREMIUM AND CLAIMS

The experience reported on Worksheet 1, Section I of the URRT shows KYHC's earned premium and incurred and paid claims for the period of 1/1/2014 through 12/31/2014, with claims paid through 3/31/2015.

#### Premiums (net of MLR Rebate) in Experience Period

The premiums earned during the experience and as reported on Worksheet 1, Section I of the URRT are from KYHC's audited financial statements for CY2014.

#### Method for Determining Allowed Claims

The following table summarizes the experience premium and allowed claims as listed in Worksheet 1, Section I of the Part I Unified Rate Review Template:

Month	Total Billed Premiums	Allowed Medical	Medical Compl. Factor	Estimated Medical	Allowed Rx	Rx Compl. Factor	Estimated Rx	Allowed Capitation	Total Claims Including IBNR
Jan 13									
Feb 13									
Mar 13									
Apr 13									
May 13									
Jun 13									
Jul 13									
Aug 13									
Sep 13									
Oct 13									
Nov 13									
Dec 13									
<b>Total</b>	<b>\$173,213,617</b>			<b>\$300,975,949</b>			<b>\$48,450,096</b>		<b>\$349,426,045</b>

All allowed claims processed both in and out of the claim system were included. Of this amount, 100% was processed through the claim system. An estimate of incurred but not reported allowed claims was added to the processed amount to arrive at a final estimate of total allowed claims. No estimate of incurred but not reported claims was added to the prescription drug claims or capitated claims.

### EXHIBIT 3. EXPERIENCE PREMIUM AND CLAIMS

#### Method for Determining Paid Claims

The following table summarizes the experience premium and incurred claims as listed in Worksheet 1, Section I of the URRT:

Table 3.2 Kentucky Health Cooperative, Inc. Experience Incurred Claims and Premium by Product									
Month	Total Billed Premiums	Paid Medical	Medical Compl. Factor	Estimated Medical	Paid Rx	Rx Compl. Factor	Estimated Rx	Paid Capitation	Total Claims Including IBNR
Jan 13									
Feb 13									
Mar 13									
Apr 13									
May 13									
Jun 13									
Jul 13									
Aug 13									
Sep 13									
Oct 13									
Nov 13									
Dec 13									
<b>Total</b>	<b>\$173,213,617</b>			<b>\$248,013,019</b>			<b>\$40,130,432</b>		<b>\$288,143,451</b>

All paid claims processed both in and out of the claim system were included. Of this amount, 100% was processed through the claim system. An estimate of incurred but not paid claims was added to the processed amount to arrive at a final estimate of total paid claims. No estimate of incurred but not paid claims was added to the prescription drug claims or capitated claims.

The total incurred claims in table 3.2 do not tie to Worksheet 1, Section 1 of the URRT. The difference between the two is due to estimated Cost Share Reduction (CSR) payments estimated to be made to KYHC.

#### Method for Determining Incurred But Not Reported Paid Claims

Incurred claims were calculated by applying a completion factor to the paid claims from the experience period. The completion factors were developed using the lag development method. The completion factors for paid and allowed claims are the same.

#### Method for Determining Paid Cost Sharing

Paid member cost sharing was determined by subtracting paid claims from allowed claims.

## EXHIBIT 4. BENEFIT CATEGORIES

We assigned the experience and manual data utilization and cost information to benefit categories as shown in Worksheet 1, Section II of the Part 1 URRT based on place and type of service using a detailed claims mapping algorithm summarized as follows:

### **Inpatient Hospital**

Includes non-capitated facility 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.

### **Outpatient Hospital**

Includes non-capitated facility services for surgery, emergency room, lab, radiology, therapy, observation and other services provided in an outpatient facility setting and billed by the facility.

### **Professional**

Includes non-capitated primary care, specialist, therapy, the professional component of laboratory and radiology, and other professional services, other than hospital based professionals whose payments are included in facility fees.

### **Other Medical**

Includes non-capitated ambulance, home health care, DME, prosthetics, supplies, vision exams, dental services and other services. The measurement units for utilization used in this category are a mix of visits, cases, procedures, etc.

### **Capitation**

Includes all services provided under one or more capitated arrangements.

### **Prescription Drug**

Includes drugs dispensed by a pharmacy. This amount is net of rebates received from drug manufacturers.

## EXHIBIT 5. PROJECTION FACTORS

This section includes a description of each factor used to project the experience period allowed claims to the projection period, and supporting information related to the development of those factors.

### Changes in the Morbidity of the Population Insured

We used the following data source(s) and methodology in order to estimate the changes in the morbidity of the experience population and the projected population, as shown in the Population Risk Morbidity column of Worksheet 1, Section II of the URRT:

In order to determine the current morbidity and population mix of the Kentucky individual market, we utilized the May 1, 2014, HHS Office of the Assistant Secretary for Planning and Evaluation (ASPE) report. We also determined the morbidity and population mix of a standard population that might be expected once the market stabilizes and reaches a long term steady state. We utilized the Milliman *Health Cost Guidelines* (HCGs) for this determination. Based on our estimate of the current statewide average, the number of remaining uninsured, the state of the transitional market in Kentucky and other factors, we have assumed the long term steady state will occur in 2018.

We repeated the above exercise, but this time we determined the current morbidity and population mix of KYHC as compared to the long-term steady state.

We then created a 2016 distribution for KYHC by interpolating between the 2014 experience distribution by those same factors, and the long-term steady state distribution expected to occur in 2018. We used the HCGs in order to determine the projected average risk score for the midpoint distribution, compared to that of KYHC's 2014 experience distribution. We used the difference between these risk scores as the anticipated morbidity shift from the experience period to the projection period.

We have assumed that both Kentucky and KYHC will move toward the same steady state point. Therefore, once the market steady state is realized, we anticipate that there will no risk difference between the two. However, until that occurs there will be a difference that is recognized in our risk adjustment transfer payment calculation.

### Changes in Benefits

We made the following adjustments to reflect the expected differences in benefits between the experience period and projection period, as shown in the Other column of Worksheet 1, Section II of the URRT:

- KY Health Cooperative Gold - Out of Network deductible increased from \$3,500 to \$4,500
- KY Health Cooperative Gold - Out of Network MOOP increased from \$8,500 to \$9,000
- KY Health Cooperative Gold - Primary Care Physician (PCP), Mental Health / Substance Abuse (MHSA), and Physical / Occupational / Speech Therapy (PT/OT/ST) copays increased from \$20 to \$25
- KY Health Cooperative Gold - Emergency Room (ER) copay increased from \$150 to \$200
- KY Health Cooperative Silver 87% - deductible decreased from \$1,000 to \$700
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- KY Health Cooperative Silver 70%, KY Health Cooperative Bronze, and KY Health Cooperative High Deductible - MOOPs increased from \$6,600 to \$6,850
- KYHC MultiStatePlan IND Gold - default coinsurance increased from 10% to 15%
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- KYHC MultiStatePlan IND Silver 87% - deductible increased from \$650 to \$800
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We used the HCGs, in conjunction with the historical experience of KYHC's individual block of business, in order to estimate the benefit changes for each of the items listed above.

## EXHIBIT 5. PROJECTION FACTORS

### Changes in Demographics

We used the following data source(s) and methodology in order to estimate the changes in the demographic and geographic mix of the population:

Our rate projection is based on CY2014 experience, and reflects the average demographics and geographic mix of the CY2014 enrollees. Our development of the CY2016 Index Rate reflects the anticipated differences in the demographic and geographic mix of the population, as compared to the CY2014 experience period.

In determining these anticipated demographic differences, we projected a long-term steady state enrollment distribution by age and gender using the HCGs. We then created a 2016 distribution for KYHC by interpolating between the 2014 experience distribution by age and gender, and the long-term steady state distribution.

### Other Adjustments

Additional adjustments have been made to recognize the additional anticipated changes in claims experience between the base period and the projected period. We used the following data sources and methodology in order to estimate these changes:

- Changes in Plan mix: We projected a long-term steady state enrollment distribution by metal plan using the HCGs. We then created a 2016 distribution for KYHC by interpolating between the 2014 experience distribution by metal plan, and the long-term steady state distribution.
- Changes in Smoking Status mix: Secondary effect of change in demographic mix

### Trend Factors (Cost/Utilization)

The trends were developed from the HCGs.

## EXHIBIT 6. CREDIBILITY MANUAL RATE DEVELOPMENT

Not applicable. KYHC's experience in the base period is fully credible, for the purposes of the rate projection.

## EXHIBIT 7. CREDIBILITY OF EXPERIENCE

### Description of the Credibility Method Used

The credibility used was based on internal Milliman credibility research. This research was specifically completed to determine appropriate credibility levels for Commercial insurance as currently marketed under the ACA environment. The research was performed under two different approaches. The first approach utilized a claims probability distribution (CPD) approach, while the second approach made use of Monte Carlo sampling.

The CPD method proposes a full commercial credibility threshold of 65,591 member months. Therefore, KYHC's 2014 individual experience would be 100% with 586,125 member months.

Under the Monte Carlo sampling results, in order to achieve 5% projection accuracy, given 586,125 member months, the credibility assigned would be 99.6%. This assumes 0% lapses. Higher lapsation assumptions would serve to lower the credibility assigned even further; however, we have reviewed the credibility under various lapse assumptions and have still determined that the experience would be 100% credible.

### Resulting Credibility Level Assigned to the Base Period Experience

The credibility assigned to the base period experience is 100%.

## EXHIBIT 8. PAID TO ALLOWED RATIO

The following table provides support for the average paid to allowed ratio shown in Worksheet 1, Section III of the URRT. The table also demonstrates that the ratio is consistent with membership projections by plan included in Worksheet 2.

<b>Table 8.1</b> <b>Kentucky Health Cooperative, Inc.</b> <b>Paid to Allowed Average Factor Support Exhibit</b>		
	<b>Worksheet 1, Section III</b>	<b>Worksheet 2, Section IV</b>
Allowed Per Member Per Month	\$487.79	\$487.79
Paid Per Member Per Month	\$354.62	\$347.85
Average Paid to Allowed Ratio	72.7%	71.3%

The average factor Worksheet 1 shown above was developed based on the projection of the average mix of plans sold. The Worksheet 2 factor shown above was measured using the projected Allowed PMPMs by plan from Worksheet 2 and the Actuarial Value calculated using the Federal AV Calculator model. Because Catastrophic plans by definition do not have an AV Calculator value, the actual AV is used in the Worksheet 2 calculation for these plans.

## EXHIBIT 9. RISK ADJUSTMENT AND REINSURANCE

### Experience Period Risk Adjustments PMPM

The following methodology was used to estimate final risk adjustment transfers for CY2014:

We do not feel that credible information is present to suggest a risk adjustment transfer payable or receivable for the experience period. Therefore, we are assuming a risk adjustment transfer amount of \$0.00 PMPM for CY2014.

### Projected Risk Adjustments PMPM

Table 9.1 illustrates the calculation of KYHC's expected Risk Adjustment transfer receivable for CY2014.

Table 9.1 Kentucky Health Cooperative, Inc. Projection Period Risk Adjustment Estimate				
Statewide Average Premium PMPM	Metallic Plans		Catastrophic Plans	
	Plan	Statewide	Plan	Statewide
<u>Adjustments without Risk Selection</u>				
Metallic Level Actuarial Value				
Allowable Rating Factor				
Induced Demand Factor				
<u>Geographic Cost Factor</u>				
Adjustment Factor without Risk Selection				
<b>Expected Plan Premium PMPM without Risk Selection</b>				
<u>Adjustments with Risk Selection</u>				
Risk Score				
Induced Demand Factor				
<u>Geographic Cost Factor</u>				
Adjustment Factor with Risk Selection				
<b>Expected Plan Premium PMPM with Risk Selection</b>				
<u>Transfer Payment from (to) Plan</u>				
PMPM				
As a % of premium				
<u>Single Risk Pool Composite Risk Adjustment</u>				
Transfer Payment from (to) Plan		<u>PMPM</u>		<u>As a % of Premium</u>
Risk Adjustment User Fee		(\$6.12)		
Transfer Payments Net of User Fees		\$0.15		
		(\$5.98)		

The anticipated risk transfer payments, net of risk adjustment fees assumed to be \$0.15 for CY2016, are applied to the Index Rate as a market level adjustment. The overall impact of projected net risk adjustment transfers is a premium decrease of \$5.98 PMPM, which is applied at the market level.

## EXHIBIT 9. RISK ADJUSTMENT AND REINSURANCE

### Experience Period ACA Reinsurance Recoveries Net of Reinsurance Premium

The following methodology was used to estimate final reinsurance receivables for CY2014:

CY2014 reinsurance recoveries were calculated at the member level. Members for whom the carrier's total paid claims obligation, including IBNR, were identified as being greater than the CY2014 federal reinsurance attachment point of \$45,000 were identified. As specified in the HHS federal reinsurance calculation formula for CY2014, 80% coinsurance was then applied to the member claims between this attachment point and the CY2014 reinsurance limit of \$250,000. This resulted in a reinsurance recovery estimate of \$70.95 PMPM. The CY2014 reinsurance contribution of \$5.25 PMPM was netted against this amount for a total net receivable of \$65.70 PMPM.

### Projected ACA Reinsurance Recoveries Net of Reinsurance Premium

We assumed that individual membership both sold through and outside the Marketplace will be assessed \$2.25 PMPM in reinsurance contributions in CY2016.

The transitional reinsurance recoveries, net of contributions, are applied to the Index Rate as a market level adjustment. The overall impact of projected net reinsurance recoveries is a premium decrease of \$18.01 PMPM.

## EXHIBIT 10. NON-BENEFIT EXPENSES AND PROFIT & RISK

The following table summarizes retention components included in the rate development.

Table 10.1 Kentucky Health Cooperative, Inc. Illustration of Administrative Expenses by URR Worksheet 1 Category				
Retention Description	PMPM	% Premium	Basis	Annotation
<u>Administrative Expense Load</u>				
General Admin			PMPM	(1)
Commission			PMPM	(2)
Commercial Reinsurance Recoveries			PMPM	(3)
Commercial Reinsurance Premiums			PMPM	(4)
+ Quality Improvement			PMPM	(5)
<b>Subtotal: Administrative Expense Load</b>				(6) = (1) + (2) + (3) + (4) + (5)
<u>Profit and Risk Load</u>				
Target Gain/Loss			% of Premium	
<b>Subtotal: Profit and Risk Load</b>				(7)
<u>Taxes and Fees</u>				
Kentucky GAP Assessment			% of Premium	(8)
Comparative Effectiveness Research Fee			PMPM	(9)
+ Health Insurer Provider Fee			% of Premium	(10)
<b>Subtotal: Taxes and Fees</b>				(11) = (8) + (9) + (10)
<b>Total Retention</b>				<b>(12) = (6) + (7) + (11)</b>

General Administrative Expenses, Commissions, Commercial Reinsurance Premiums, and Quality Improvement Expenses were developed based on information provided by KYHC. The resulting PMPM was then converted to the average premium PMPM to determine the administrative cost as a percent of premium.

Commercial Reinsurance Recoveries were estimated at the plan level and converted into an average PMPM which was then applied as a percent of expected premium. KYHC provided stop-loss contract terms of 80% reinsurance for all plan liability above \$400,000 per claimant annually. The HCGs, combined with the projected allowed charges by plan, were used to estimate a claims probability distribution for each plan. The out-of-pocket maximum was added to the attachment point to estimate the carrier's paid claims obligation in excess of \$400,000. A coinsurance rate of 80% was applied to the difference to estimate the expected annual reinsurance recovery. This amount was divided by 12 to obtain an expected monthly reinsurance recovery of \$5.80 PMPM.

KYHC is filing 0% Profit and Risk Margin in 2016. KYHC has a business plan to minimize losses in future years as enrollment increases and short term administrative costs related to start-up are eliminated. KYHC has access to capital through a solvency loan arrangement with the Federal Government that will allow the company to maintain required surplus levels despite the small margin levels. Because of these reasons, we find KYHC's rates to be adequate even though potential losses could occur in 2016.

## EXHIBIT 10. NON-BENEFIT EXPENSES AND PROFIT & RISK

The following table summarizes taxes and fees included in rate development.

<b>Table 10.2</b> <b>Kentucky Health Cooperative, Inc.</b> <b>Summary of Taxes and Fees</b>	
<b>Description</b>	<b>Amount</b>
Kentucky GAP Assessment <sup>1</sup>	1.0% of Premium
Comparative Effectiveness Research	\$0.19 PMPM
Health Insurance Provider Fee	
Marketplace User Fee	0.0% of Premium

<sup>1</sup>The Commonwealth of Kentucky levies a 1.0% GAP funding assessment in lieu of Premium Tax

Due to PMPM administrative expense items being applied as a percent of average premium, the administrative expense load as a percent of premium does not vary by plan.

## EXHIBIT 11. PROJECTED LOSS RATIO

The projected loss ratio is 88.4%. This loss ratio is calculated consistently with the MLR methodology according to the National Association of Insurance Commissioners as prescribed by 211 CMR 147.00.

No additional state-specific projected loss ratio demonstration is required in the Commonwealth of Kentucky.

## EXHIBIT 12. SINGLE RISK POOL

KYHC rates are developed using a single risk pool, established according to the requirements in 45 CFR section 156.80(d) and reflects all covered lives for every non-grandfathered product/plan combination, in the Commonwealth of Kentucky individual health insurance market.

### EXHIBIT 13. INDEX RATE

The index rate for the experience period is a measurement of the average allowed claims PMPM for EHB benefits. The experience period index rate reflects the actual mixture of smoker/non-smoker population, area factors, catastrophic/non-catastrophic enrollment, and the actual mixture of risk morbidity that KYHC received in the Single Risk Pool during the experience period. There were no additional benefits offered beyond the EHB benefits. The experience Index Rate has not been adjusted for payments and charges under the risk adjustment and reinsurance programs, or for Marketplace user fees.

The experience period Index Rate is equal to the experience period total allowed claims PMPM since there are no benefits that were offered beyond the EHB benefits.

The index rate for the projection period is a measurement of the average allowed claims PMPM for EHB benefits. The projected index rate reflects the projected CY2016 mixture of smoker/non-smoker population, area factors, catastrophic/non-catastrophic enrollment, and the projected mixture of risk morbidity that KYHC expects to receive in the Single Risk Pool. There were no additional benefits offered beyond the EHB benefits. The projected Index Rate has not been adjusted for payments and charges projected under the risk adjustment and reinsurance programs, or for Marketplace user fees.

The projected Index Rate is equal to the projected total allowed claims PMPM since there are no benefits offered beyond the EHB benefits.

The following table summarizes the factors applied to the Experience Period Index Rate to determine the Projected Index Rate:

<b>Table 13.1</b>	
<b>Kentucky Health Cooperative, Inc.</b>	
<b>Projected Index Rate Development (\$PMPM)</b>	
<b>Experience Period Index Rate</b>	\$596.16
<b>Single Risk Pool Adjustments</b>	
<b>2-year Trend and Benefit Changes</b>	[REDACTED]
<b>Change in Metal and Demographic Mix</b>	[REDACTED]
<b>Morbidity Shift</b>	[REDACTED]
<b>Projection Period Index Rate</b>	\$487.79

## EXHIBIT 14. MARKET ADJUSTED INDEX RATES

The following table summarizes the factors applied to the Index Rate in the projection period to determine the Market Adjusted Index Rate.

Table 14.1 Kentucky Health Cooperative, Inc. Marked Adjusted Index Rate Development	
Index Rate	\$487.79
Net Risk Adjustment	(\$5.98)
Net Transitional Reinsurance	(\$18.01)
Exchange Fee	
Paid to Allowed Average Factor	
Market Adjustments (Allowed Basis)	
<b>Market Adjusted Index Rate</b>	

\* Market Adjusted Index Rate = Market Adjustment (Allowed Basis)  
+ Index Rate

The Market Adjusted Index Rate is not calibrated. This means that this rate reflects the average demographic characteristics of the single risk pool.

Each of the above modifiers were developed as follows:

- Net Risk Adjustment  
This adjustment includes the impact of the estimated risk adjustment transfer payment as addressed in Exhibit 9 plus the Risk Adjustment User Fee of \$0.15.
- Net Transitional Reinsurance  
This adjustment includes the impact of the estimated Transitional Reinsurance PMPM recovery as addressed in Exhibit 9 plus the Transitional Reinsurance Contribution of \$2.25 PMPM.
- Marketplace User Fee adjustment  
The Marketplace User Fee adjustment was determined as the average of no fee and the Marketplace user fee, weighted using the expected distribution of issuer enrollment sold through versus outside the Marketplace.

## EXHIBIT 15. PLAN ADJUSTED INDEX RATES

The Market Adjusted Index Rate is adjusted to compute the Plan Adjusted Index Rates using the following allowable adjustments:

- Actuarial value and cost sharing adjustment
  - The CMS Actuarial Value Calculator was used to determine the AV metal value for each plan.
  - The AV and cost sharing pricing adjustment was developed utilizing Milliman's 2014 *Health Cost Guidelines*. Relativities between plans were based on the differences in cost and utilization for varying levels of cost sharing.
  - KYHC will charge a tobacco surcharge for smokers. An adjustment has been developed and included here so that the resulting Plan Adjusted Index Rate excludes the cost expected to be recouped through the tobacco surcharge.
- Provider network, delivery system and utilization management adjustment
  - There are no expected differences in the provider network and/or utilization management between plans.
- Adjustment for benefits in addition to the EHBs
  - There are no benefits being offered in addition to the EHBs.
- Adjustment for distribution and administrative costs
  - Adjustment is developed to indicate the impact of non-benefit expenses.
- Impact of specific eligibility categories for the catastrophic plan
  - This adjustment was developed to illustrate the impact of the restricted age requirements in the Catastrophic risk pool, effect of tobacco loads applied to the expected catastrophic population, and the expected risk score specific to that population.

The following table demonstrates the Plan Adjusted Index Rate development for each plan:

Table 15.1 Kentucky Health Cooperative, Inc. Projection Period Plan Adjusted Index Rate Development							
Plan	Market Adjusted Index Rate	AV & Cost Sharing	Provider Network Adjustment	Benefits In Addition to EHBs	Admin Costs Excl. Mktplace User Fee	Specific Catastrophic Eligibility	Plan Adjusted Index Rate
KY Health Cooperative Gold (77894KY0010002)							\$442.81
KY Health Cooperative Silver (77894KY0010003)							\$364.83
KY Health Cooperative Bronze (77894KY0010004)							\$297.95
KY Health Cooperative High Deductible (77894KY0010005)							\$236.59
KYHCMultistatePlanIND Gold (77894KY0200001)							\$477.62
KYHCMultistatePlanIND Silver (77894KY0200002)							\$388.44

The Plan Adjusted Index Rates reflect the average demographic characteristics of the single risk pool and therefore are not calibrated.

## EXHIBIT 15. PLAN ADJUSTED INDEX RATES

### Experience Period Plan Adjusted Index Rates

Although Plan Adjusted Index Rates were not required for the CY2014 filing, the methodology for their development is given below. The following table demonstrates the retroactive Plan Adjusted Index Rate development for each filed CY2014 plan, recognizing the relationship between the Consumer Adjusted Premium Rate and the Plan Adjusted Index Rate. We begin with a single Consumer Adjusted Premium Rate and remove the consumer-specific adjustments, then translating the resulting values into rates that reflect the average demographic characteristics of the single risk pool as filed for CY2014. The result is the retroactive Plan Adjusted Index Rates for the experience period:

Table 15.2 Kentucky Health Cooperative, Inc. Experience Period Plan Adjusted Index Rate Development							
Plan	Age 21 Rate	Rating Area	Area Factor	Age 21 Factor	Area Calibration	Demographic Calibration	Plan Adjusted Index Rate
KY Health Cooperative Gold (77894KY0010002)							\$241.70
KY Health Cooperative Silver (77894KY0010003)							\$213.42
KY Health Cooperative Bronze (77894KY0010004)							\$172.65
KY Health Cooperative High Deductible (77894KY0010005)							\$135.99
KYHCMultistatePlanIND Gold (77894KY0200001)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
KYHCMultistatePlanIND Silver (77894KY0200002)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

The Plan Adjusted Index Rates reflect the average demographic characteristics of the single risk pool and therefore are not calibrated.

## EXHIBIT 16. CALIBRATION

A single calibration factor is applied to the Plan Adjusted Index Rates from Exhibit 15 to calibrate rates for the expected age and geographic distribution expected to enroll in the plan. The single calibration factor is applied uniformly across all plans.

### Age Curve Calibration

In order to determine the calibration factor for age, the projected distribution of members by age was determined. The weighted average of the factors in the age curve was then calculated using this distribution. The average age was then determined by finding the age of a member that would have the closest factor to the weighted average age curve calibration factor. Prior to applying the allowed rating factors for age, geography and tobacco, the plan adjusted index rates need to be divided by the age curve calibration factor.

Additional information regarding the age curve can be found on Exhibit 17.

### Geographic Factor Calibration

In order to determine the calibration factor for geography, the projected distribution of members by area was determined. The weighted average of the area factors was then determined using this distribution. The area factors used are reflective of differences in delivery costs (including unit cost and provider practice pattern differences) only, and do not reflect any difference in population morbidity. Prior to applying the allowed rating factors for age, geography and tobacco, the plan adjusted index rates need to be divided by the geography calibration factor.

Additional information regarding the area rating factors can be found on Exhibit 17.

The following table demonstrates the calibration performed for each plan.

Table 16.1 Kentucky Health Cooperative, Inc. Plan Adjusted Index Rate Calibration					
Plan	Plan Adjusted Index Rate	Age Calibration Factor	Geography Calibration Factor	Calibration Factor	Calibrated Plan Adjusted Index Rate
KY Health Cooperative Gold (77894KY0010002)	\$442.81			1.544	\$286.81
KY Health Cooperative Silver (77894KY0010003)	\$364.83			1.544	\$236.30
KY Health Cooperative Bronze (77894KY0010004)	\$297.95			1.544	\$192.98
KY Health Cooperative High Deductible (77894KY0010005)	\$236.59			1.544	\$153.24
KYHCMultistatePlanIND Gold (77894KY0200001)	\$477.62			1.544	\$309.36
KYHCMultistatePlanIND Silver (77894KY0200002)	\$388.44			1.544	\$251.60

## EXHIBIT 17. CONSUMER ADJUSTED PREMIUM RATE DEVELOPMENT

The Consumer Adjusted Premium Rate is the final premium rate for a plan that is charged to an individual, family, or small employer group utilizing the rating and premium adjustments as articulated in the applicable Market Reform Rating Rules. It is the product of the Plan Adjusted Index Rate, the geographic rating factor, the age rating factor and the tobacco status rating factor. All rating factors are described and shown below.

KYHC's CY2016 age and tobacco rating factors are shown below. The age rating factors used by KYHC are identical to those prescribed by CMS. Industry research regarding tobacco use and differences in health costs for smokers by age was used as the basis of our adjustment factors.

**Table 17.1**  
**Kentucky Health Cooperative, Inc.**  
**2016 Age and Tobacco Factors**

Age Band	Rate Factor	Tobacco Factor	Age Band	Rate Factor	Tobacco Factor
0-17	0.635	1.000	41	1.302	1.160
18	0.635	1.000	42	1.325	1.160
19	0.635	1.000	43	1.357	1.160
20	0.635	1.000	44	1.397	1.160
21	1.000	1.100	45	1.444	1.170
22	1.000	1.100	46	1.500	1.170
23	1.000	1.100	47	1.563	1.170
24	1.000	1.100	48	1.635	1.170
25	1.004	1.120	49	1.706	1.170
26	1.024	1.120	50	1.786	1.180
27	1.048	1.120	51	1.865	1.180
28	1.087	1.120	52	1.952	1.180
29	1.119	1.120	53	2.040	1.180
30	1.135	1.140	54	2.135	1.180
31	1.159	1.140	55	2.230	1.190
32	1.183	1.140	56	2.333	1.190
33	1.198	1.140	57	2.437	1.190
34	1.214	1.140	58	2.548	1.190
35	1.222	1.150	59	2.603	1.190
36	1.230	1.150	60	2.714	1.200
37	1.238	1.150	61	2.810	1.200
38	1.246	1.150	62	2.873	1.200
39	1.262	1.150	63	2.952	1.200
40	1.278	1.160	64+	3.000	1.200

KYHC's CY2016 geographic rating factors are shown below. These factors were developed from the Milliman Health Cost Guidelines. The geographic factors used incorporate differences in delivery costs (including unit cost and provider practice pattern differences) only, and do not reflect any difference in population morbidity.

**EXHIBIT 17. CONSUMER ADJUSTED PREMIUM RATE DEVELOPMENT**

<b>Table 17.2</b> <b>Kentucky Health Cooperative, Inc.</b> <b>2016 Geographic Area Factors</b>	
<b>Area</b>	<b>Rate Factor</b>
Rating Area 1	
Rating Area 2	
Rating Area 3	
Rating Area 4	
Rating Area 5	
Rating Area 6	
Rating Area 7	
Rating Area 8	

The premium for family coverage is determined by summing the consumer adjusted premium rates for each individual family member, provided at most three child dependents under age 21 are taken into account.

**Below is an example of how to arrive at the July 1 rate for an age 34 individual in rating area 4 that is a smoker:**

<b>Table 17.4</b> <b>Kentucky Health Cooperative, Inc.</b> <b>Sample Consumer Adjusted Premium Rate Development</b>	
Plan Adjusted Index Rate for KY Health Cooperative Silver (77894KY0010003), Calibrated	\$236.30
Age factor for a 34-year-old	1.214
Smoker status adjustment: smoker	1.140
Area 4 factor	0.939
<b>Consumer Adjusted Premium Rate</b>	<b>\$307.08</b>

## EXHIBIT 18. AV METAL VALUES

The AV metal values included in Worksheet 2 are entirely based on the AV Calculator. Table 18.1 below summarizes these values for each product.

<b>Plan</b>	<b>Actuarial Value</b>	<b>Actuarial Value Source</b>
KY Health Cooperative Gold (77894KY0010002)	0.790	Federal AV Calculator
KY Health Cooperative Silver (77894KY0010003)	0.689	Federal AV Calculator
KY Health Cooperative Bronze (77894KY0010004)	0.620	Federal AV Calculator
KY Health Cooperative High Deductible (77894KY0010005)	0.568	Federal AV Calculator
KYHCMultistatePlanIND Gold (77894KY0200001)	0.815	Federal AV Calculator
KYHCMultistatePlanIND Silver (77894KY0200002)	0.719	Federal AV Calculator

## EXHIBIT 19. AV PRICING VALUES

The following table summarizes all of the adjustments included in the AV Pricing Value:

Table 19.1 Kentucky Health Cooperative, Inc. Actuarial Value Pricing Values						
Plan	AV & Cost Sharing	Provider Network Adjustment	Benefits In Addition to EHBs	Admin Costs Excl. Mktplace User Fee	Specific Catastrophic Eligibility	AV Pricing Value
KY Health Cooperative Gold (77894KY0010002)						0.974
KY Health Cooperative Silver (77894KY0010003)						0.802
KY Health Cooperative Bronze (77894KY0010004)						0.655
KY Health Cooperative High Deductible (77894KY0010005)						0.520
KYHCMultistatePlanIND Gold (77894KY0200001)						1.050
KYHCMultistatePlanIND Silver (77894KY0200002)						0.854

The AV Pricing Value represents the cumulative effect of the adjustments made by KYHC to move from the Market Adjusted Index Rate to the Plan Adjusted Index Rate.

The adjustment for plan cost sharing includes expected differences in utilization due to differences in cost sharing. Adjustments in utilization due to differences in cost sharing were based on the contractual adjustments from the HCGs. These adjustment factors only contain expected differences in utilization due to differences in cost sharing and not due to health status.

## EXHIBIT 20. MEMBERSHIP PROJECTIONS

The projected membership (as displayed in Worksheet 2, Section IV of the URRT) was determined by considering the size of the projected Kentucky individual market in 2016 in the plan's service area and an assumed penetration rate of this market. The size of the market was estimated based on the following:

- Current size of the Kentucky individual market in the plan's service area
- The individual mandate
- Potential Medicaid expansion
- Projected population growth in the Commonwealth
- Projected "take-up" rates based on current membership status (i.e., current insured/uninsured) and federal subsidy available if a member enrolls in a plan sold in the marketplace.

KYHC's penetration rate in the market was determined based on 2014 and emerging 2015 membership counts as compared to the size of the Kentucky small group market as a whole.

We estimated the members that would select each of KYHC's benefit plans based on the plans for which they would qualify (given their age and income level).

There are differences between the distribution of projected member months relative to the current membership distribution. As described in Exhibit 5, we estimated that the 2016 mix of demographics and metal plans would resemble the midpoints of KYHC's actual 2014 experience and the expected steady state.

We projected cost sharing reduction (CSR) eligibles by first estimating the breakdown by income (i.e., Federal Poverty Level – FPL) of the total individual market purchasing coverage. We assumed CSR eligibles will enroll in plans that provide the highest subsidy level for which they are eligible.

<b>Plan Name</b>	<b>73%</b>	<b>87%</b>	<b>94%</b>	<b>Total</b>
KY Health Cooperative Silver (77894KY0010003)	44,829	109,789	51,533	<b>206,150</b>
KYHCMultistatePlanIND Silver (77894KY0200002)	8	20	9	<b>38</b>

## EXHIBIT 21. TERMINATED PRODUCTS

The following is a list of terminated products:

Table 21.1 Kentucky Health Cooperative, Inc. Terminated Products				
Product Name	Plan ID	Product Type	Present in Experience?	New Plan Mapping
KY Health Cooperative Platinum	77894KY0010001	PPO	Yes	N/A

## EXHIBIT 22. PLAN TYPE

There are no differences between the plans of KYHC and the plan type selected in the drop-down box in Worksheet 2, Section I of the URRT.

## EXHIBIT 23. WARNING ALERTS

The following warning alert(s) occurred in Worksheet 2 of the URRT:

There is a warning on the Plan Adjusted Index Rate line of Worksheet 2, Section III. The difference is due to the fact that the Plan Adjusted Index Rates for CY2014 were based on a projected population, while the premium amount on Worksheet 1 is based on actual population mix. In addition, the Plan Adjusted Index Rate differs from Average Premium in that the Plan Adjusted Index Rate does not include the impact of any tobacco load.

There is an additional warning on the Total Premium line of Worksheet 2, Section III. The difference is due to the issue noted above, as the values on this are equal to the values on the Plan Adjusted Index Rate line multiplied by projected member months.

There is a warning on the Plan Adjusted Index Rate line of Worksheet 2, Section IV. The difference is due to the fact that the Plan Adjusted Index Rates do not include the impact of any tobacco load.

There is an additional warning on the Total Premium line of Worksheet 2, Section IV. The difference is due to the issue noted above, as the values on this are equal to the values on the Plan Adjusted Index Rate line multiplied by projected member months.

## EXHIBIT 24. EFFECTIVE RATE REVIEW INFORMATION (OPTIONAL)

Not applicable.

## EXHIBIT 25. RELIANCE

In performing this analysis, I relied on data and other information provided by KYHC. I have not audited or verified this data and other information. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete.

I performed a limited review of the data used directly in the analysis for reasonableness and consistency and have not found material defects in the data. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or for relationships that are materially inconsistent. Such a review was beyond the scope of the assignment.

A data reliance letter is attached to this rate submission.

## EXHIBIT 26. ACTUARIAL CERTIFICATION

I am a Principal & Consulting Actuary with the firm of Milliman, Inc. Kentucky Health Cooperative, Inc. engaged me to provide the opinion herein.

Guidelines issued by the American Academy of Actuaries require actuaries to include their professional qualifications in all actuarial communications. I am a member of the American Academy of Actuaries, and I meet its qualification standards to perform the analysis and render the actuarial opinion contained herein.

I certify to the best of my knowledge and judgment:

1. The projected index rate is
  - In compliance with all applicable State and Federal Statutes and Regulations (45 CFR 156.80(d)(1)),
  - Developed in compliance with the applicable Actuarial Standards of Practice,
  - Reasonable in relation to the benefits provided and the population anticipated to be covered, and
  - Neither excessive nor deficient based on my best estimates of the 2016 individual market.
2. 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. The percent of total premium that represents essential health benefits included in Worksheet 2, Sections III and IV of the Part I Unified Rate Review Template (URRT) was calculated in accordance with actuarial standards of practice.
4. The geographic rating factors used reflect only differences in the cost of delivery, and do not include differences for population morbidity by geographic area.
5. The CMS Actuarial Value Calculator was used to determine the AV Metal Values shown in Worksheet 2, Section I of the URRT for all plans.

The URRT does not demonstrate the process used to develop proposed premium rates. It is representative of information required by Federal regulation to be provided in support of the review of rate increases, for certification of qualified health plans for federally facilitated and state-run marketplaces and for certification that the index rate is developed in accordance with Federal regulation and used consistently and only adjusted by the allowable modifiers.

The information provided in this actuarial memorandum is in support of the items illustrated in the URRT and does not provide an actuarial opinion regarding the process used to develop proposed premium rates. It does certify that rates were developed in accordance with applicable regulations, as noted.

Differences between the projections and actual amounts depend on the extent to which future experience conforms to the assumptions made for this analysis. It is certain that actual experience will not conform exactly to the assumptions used in this analysis. Actual amounts will differ from projected amounts to the extent that actual experience deviates from expected experience.

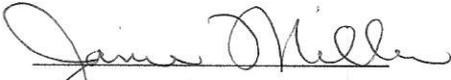
Signed:   
Name: Rachel W. Killian, FSA, MAAA  
Title: Principal & Consulting Actuary  
Date: April 30, 2015

**Kentucky Health Cooperative, Inc.**

**List of Data and Information Received and Relied Upon by Milliman  
for the Unified Rate Review Template (URRT)**

I, Janie Miller, Chief Executive Officer, hereby affirm that to the best of my knowledge and belief, the underlying data sources and information relied upon by Milliman for use in preparing the Unified Rate Review Template (URRT) and Actuarial Memorandum are accurate and complete.

Further, I acknowledge that in preparing the URRT and Actuarial Memorandum, Milliman has relied on certain assumptions provided by Kentucky Health Cooperative, Inc. as described in the attached, and I affirm that to the best of my knowledge and belief, these assumptions are consistent with the Company's reasonable expectations regarding the future financial performance.



4/30/15

Date

**Kentucky Health Cooperative, Inc.**

**List of Data and Information Received and Relied Upon by Milliman  
Provided Under the Direction of Janie Miller, Chief Executive Officer  
Unified Rate Review Template (URRT)**

- A. Detailed claims and membership information
- B. Projected 2016 General administrative costs
- C. Projected 2016 Commissions and QI expenses
- D. Projected 2016 Commercial reinsurance terms
- E. 2016 Plan benefit designs and product offerings