

# INDIVIDUAL HEALTH INSURANCE PREMIUMS FOR 2018

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# OUTLINE

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graph LR; A[Introduction] --> B[Preliminary Data Analysis]; B --> C[Adjustments and Trends]; C --> D[Final Premiums]
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**Introduction**

**Preliminary  
Data  
Analysis**

**Adjustments  
and Trends**

**Final  
Premiums**

# INTRODUCTION

# OBJECTIVE

Using base data from BruinCare insurance company, price individual health insurance premiums in three different regions for various age groups in the year 2018.

# REGION NAMES

- Region 1: Grizzly
- Region 2: Gold
- Region 3: Poppy

# REGIONAL SHIFTS

- In 2018, **Grizzly** and **Gold** Regions will increase population size by **2%** and **3%**, respectively
- **Poppy** will decrease population by **5%**
- U.S. Care, a competitor with **35%** of the market share, will partially shift out of **Poppy** and some of their members will move to BruinCare

# ASSUMPTIONS

- U.S. Care's market share drops from 35% to 30% in Poppy Region
- BruinCare got a proportion of U.S. Care's members, increasing BruinCare's market share by 0.28%
- Increase in BruinCare members in the Poppy region of 2.3%

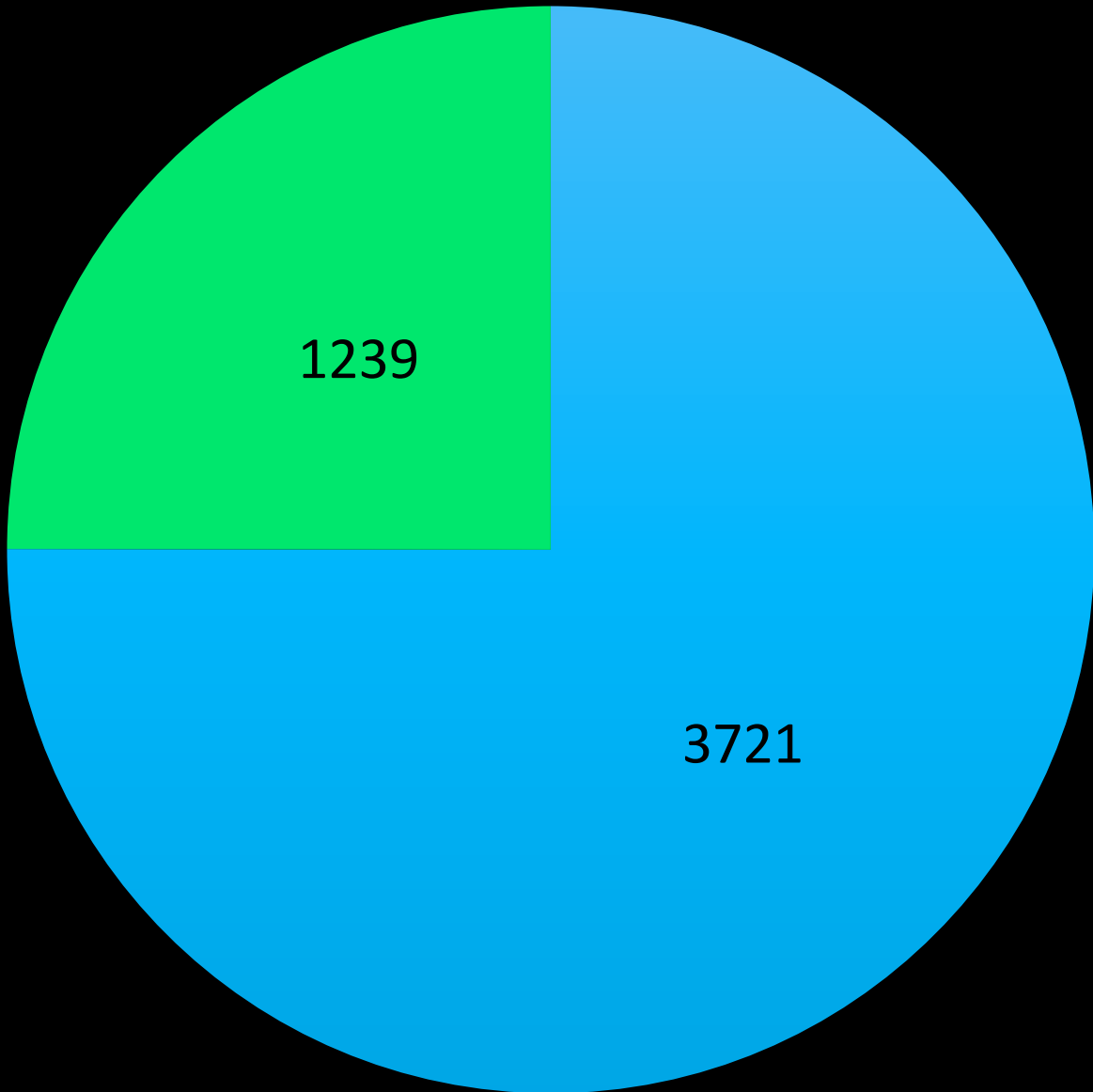
# ASSUMPTIONS

- All of the claims are based on Medicare
- Couldn't calculate lapse rate because we didn't know why certain members left
- New members have the same age and gender distribution



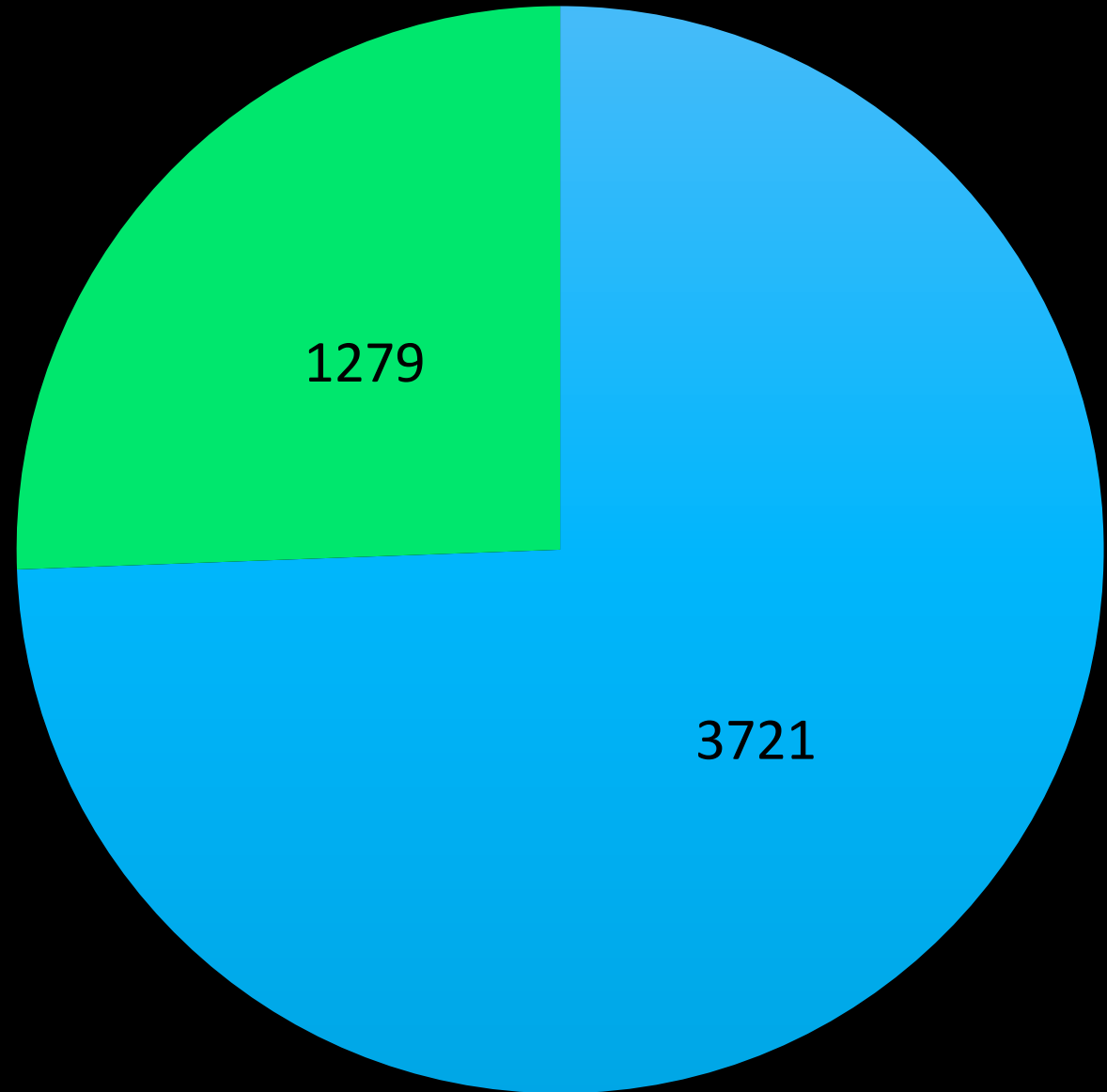
# PRELIMINARY DATA ANALYSIS

# 2015 Member Breakdown



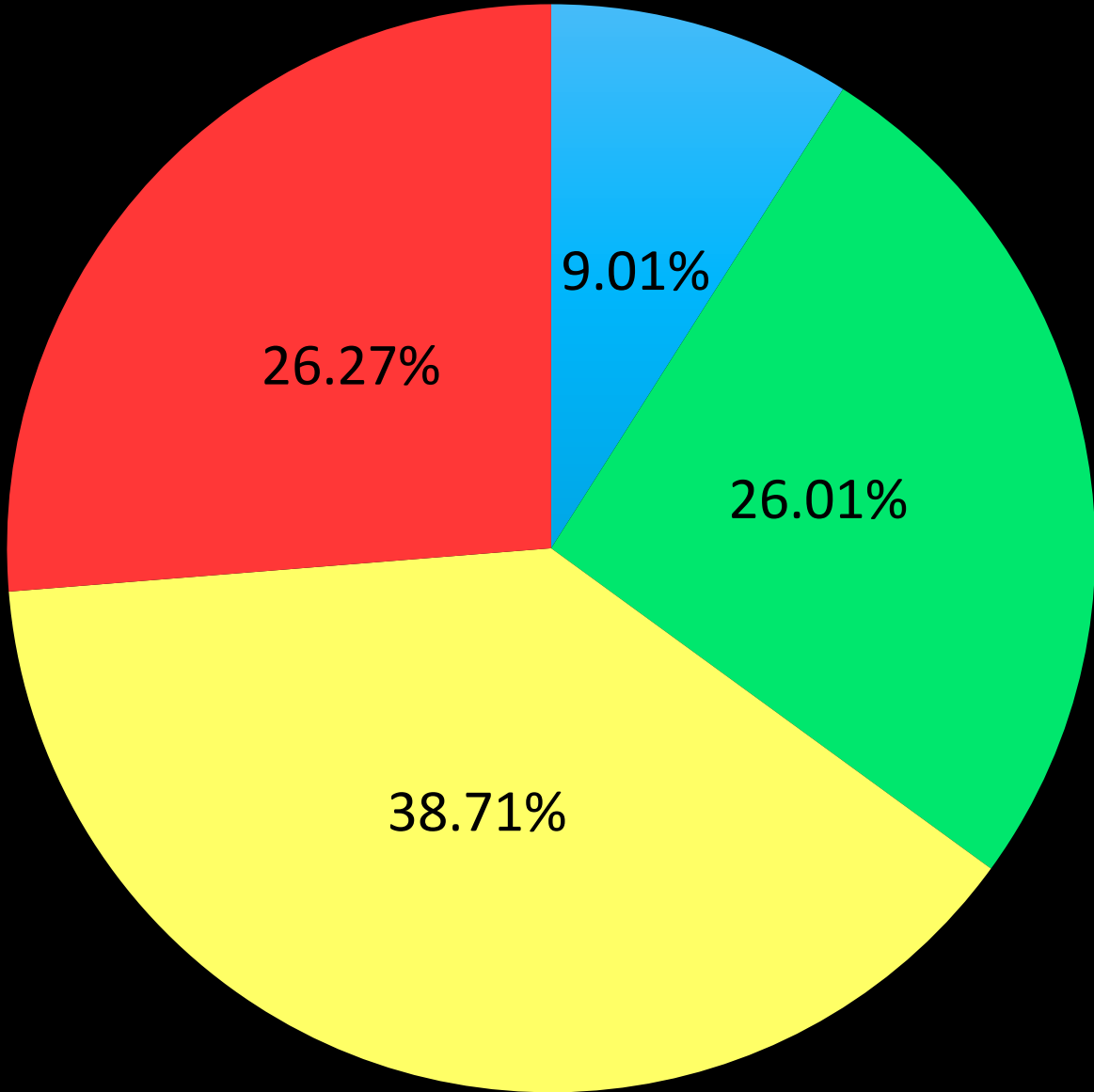
Common Members Unique Members

# 2016 Member Breakdown



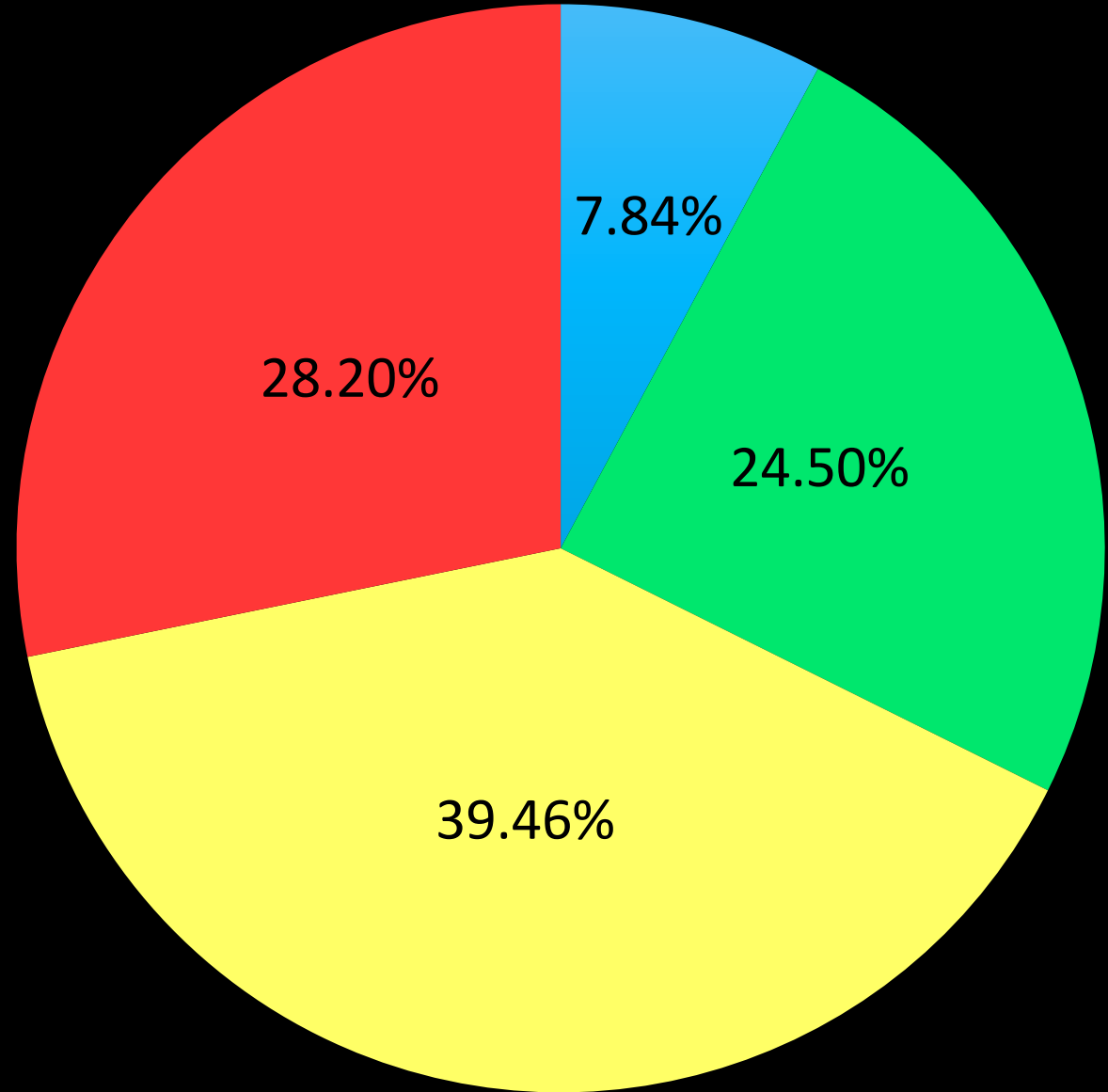
Common Members Unique Members

### 2015 Age Ratio



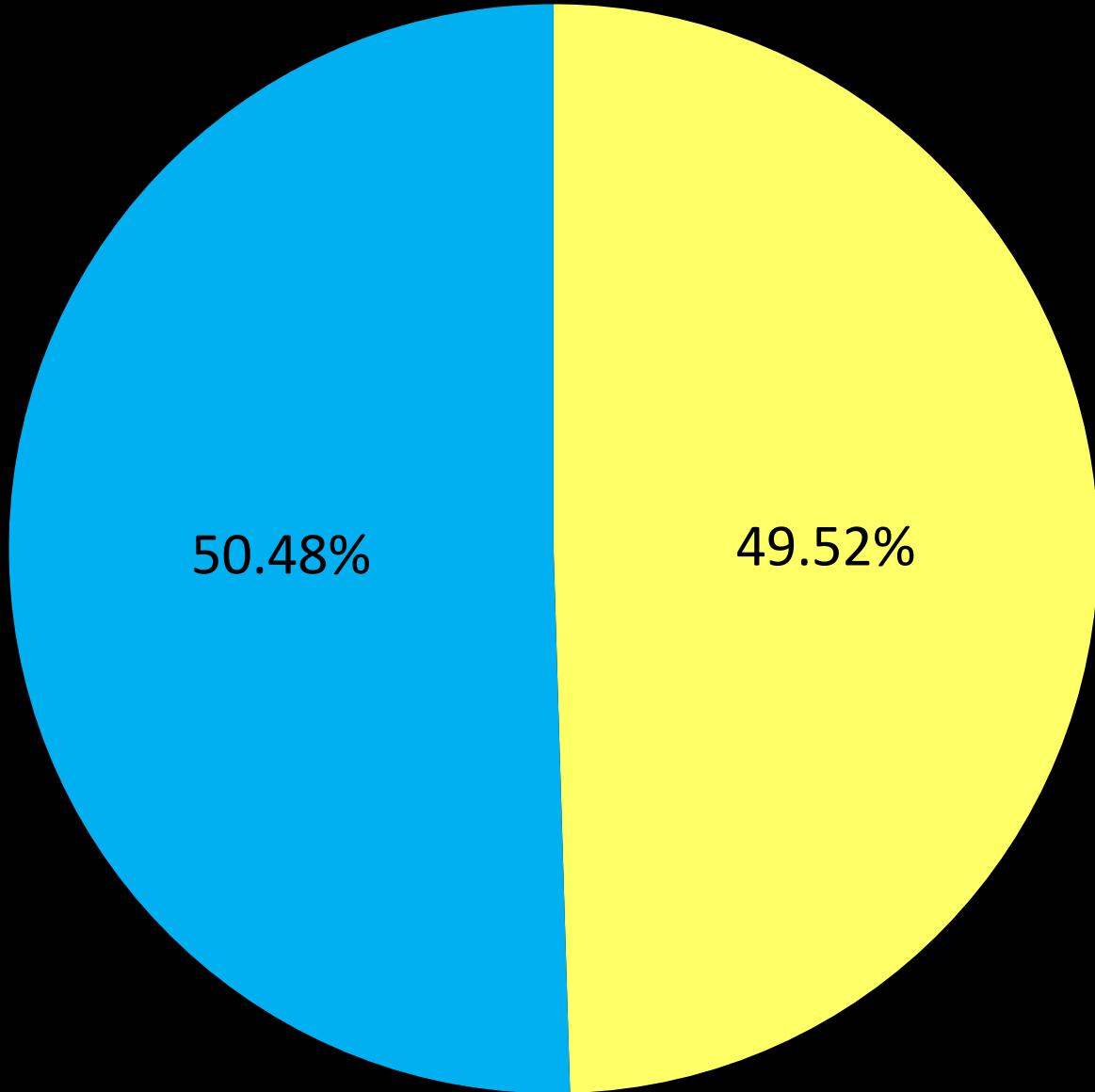
0-19 20-34 35-49 50+

### 2016 Age Ratio



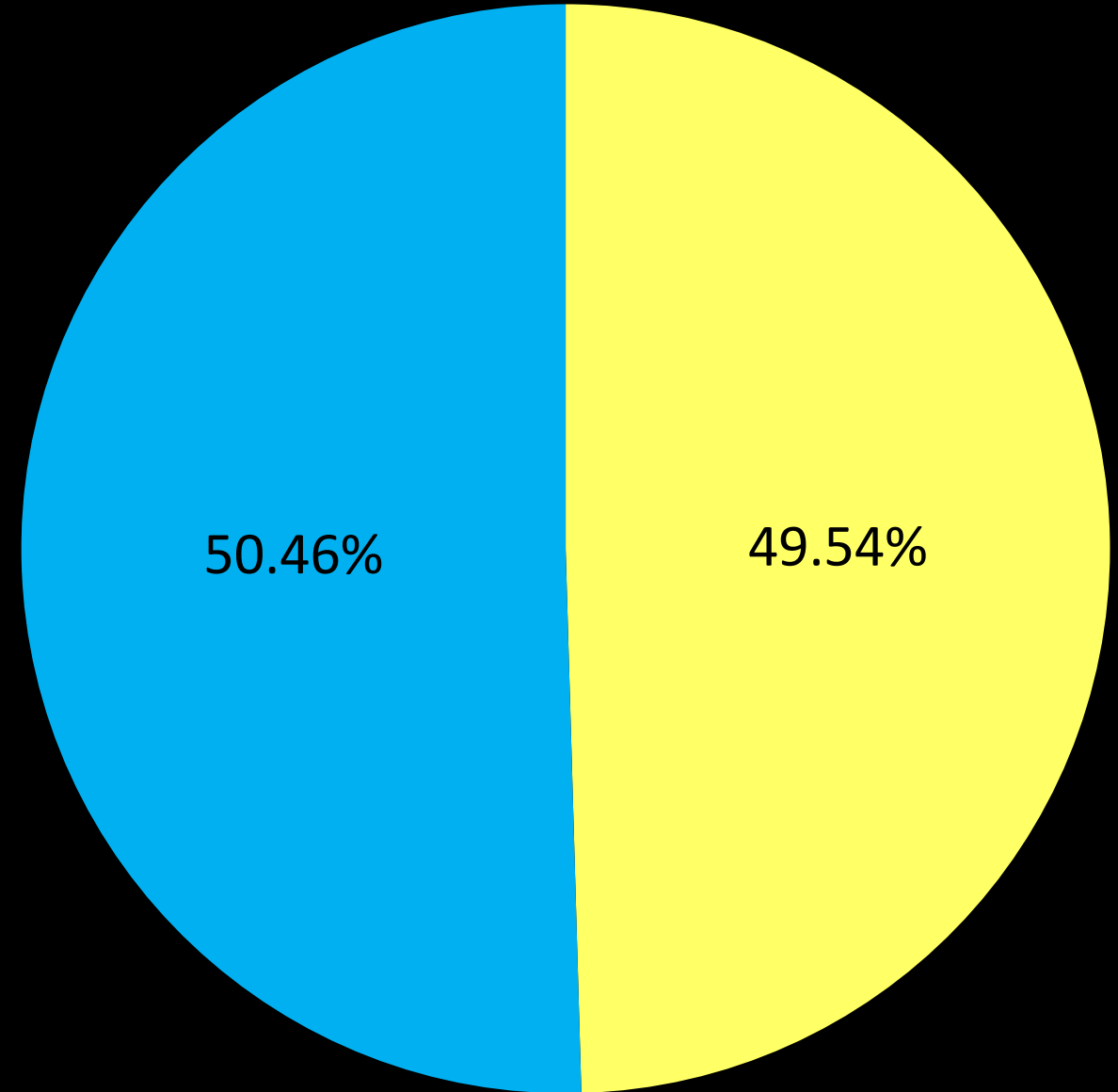
0-19 20-34 35-49 50+

### 2015 Gender Ratio



■ Females ■ Males

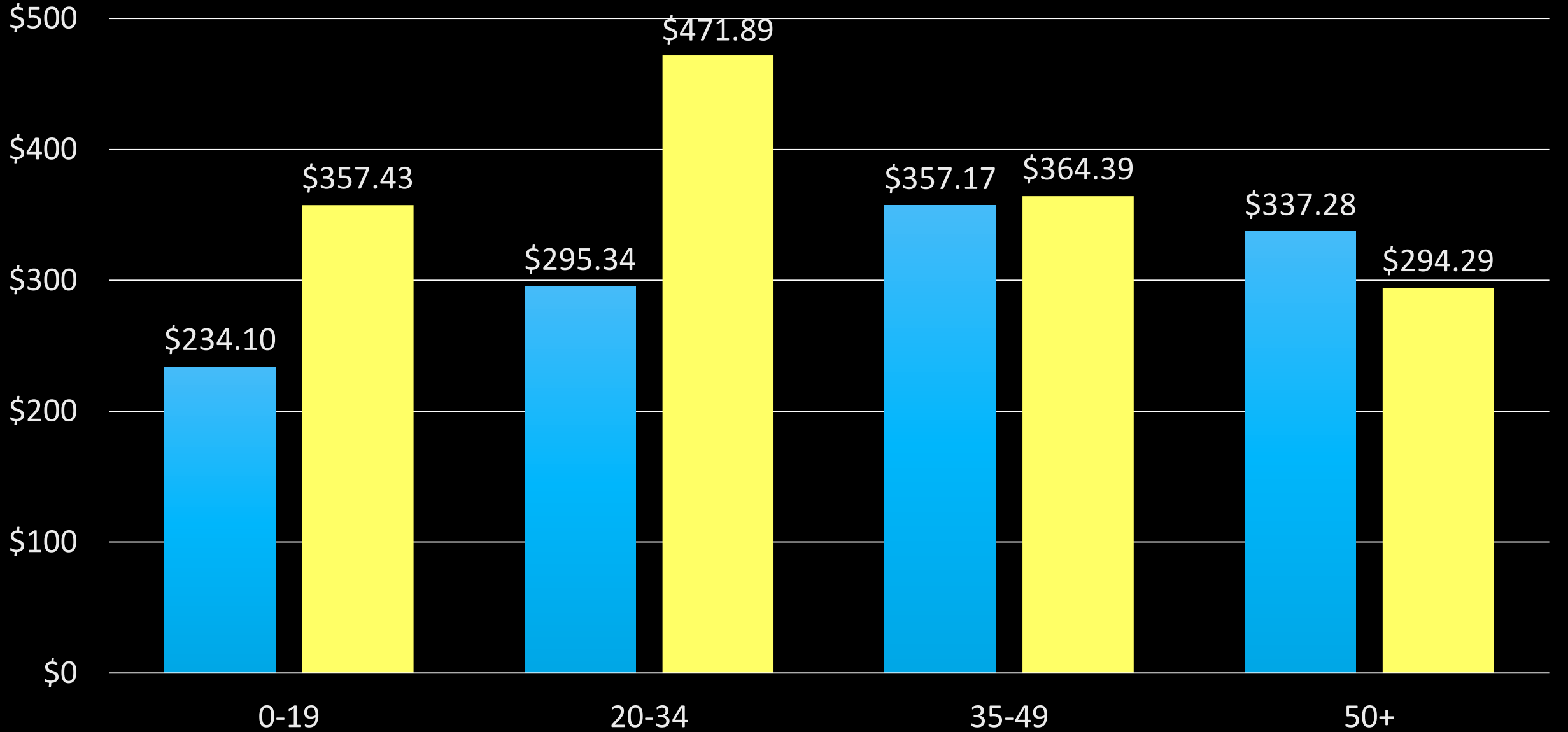
### 2016 Gender Ratio



■ Females ■ Males

# Base PMPM by Age and Gender

Male Female



## PROJECTED BASE DATA

- 2016: 5,000 members, 49,869 member months
- 2018: 5,120 members, 51,066 member months
- Total Cost Per Member Per Month with projected members is \$348.66

# PROJECTED DATA

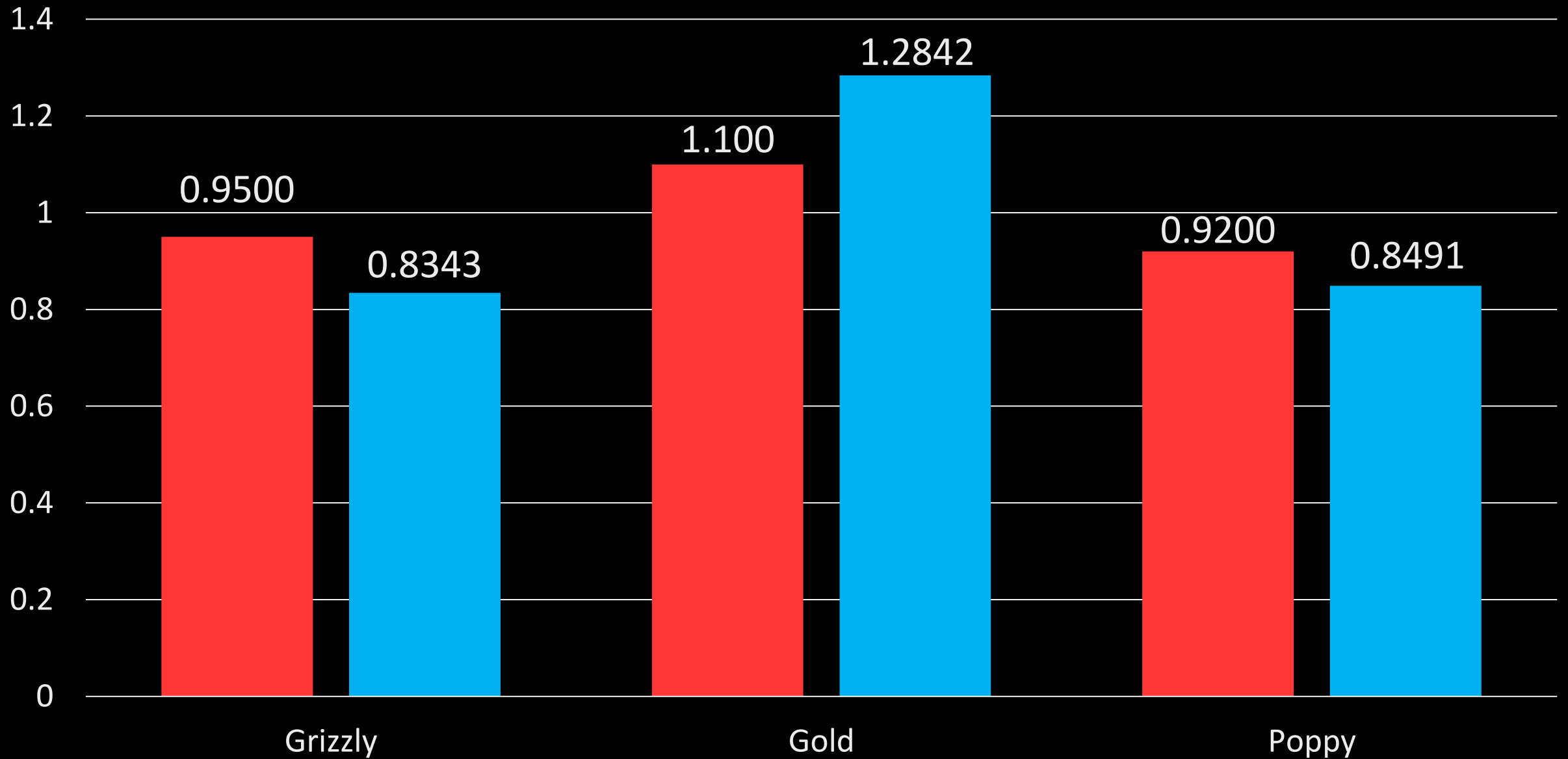
	<b>Util/1000</b>	<b>Unit Cost</b>	<b>PMPM</b>
HIP Total	492	\$2,696	\$110
HOP Total	2,314	\$449	\$87
Prof Total	12,327	\$88	\$90
Other Total	814	\$181	\$12
Rx	10,881	\$54	\$49
Total	26,828	\$156	\$348.66

# ADJUSTMENTS AND TRENDS



# Area Factors

2016 2018

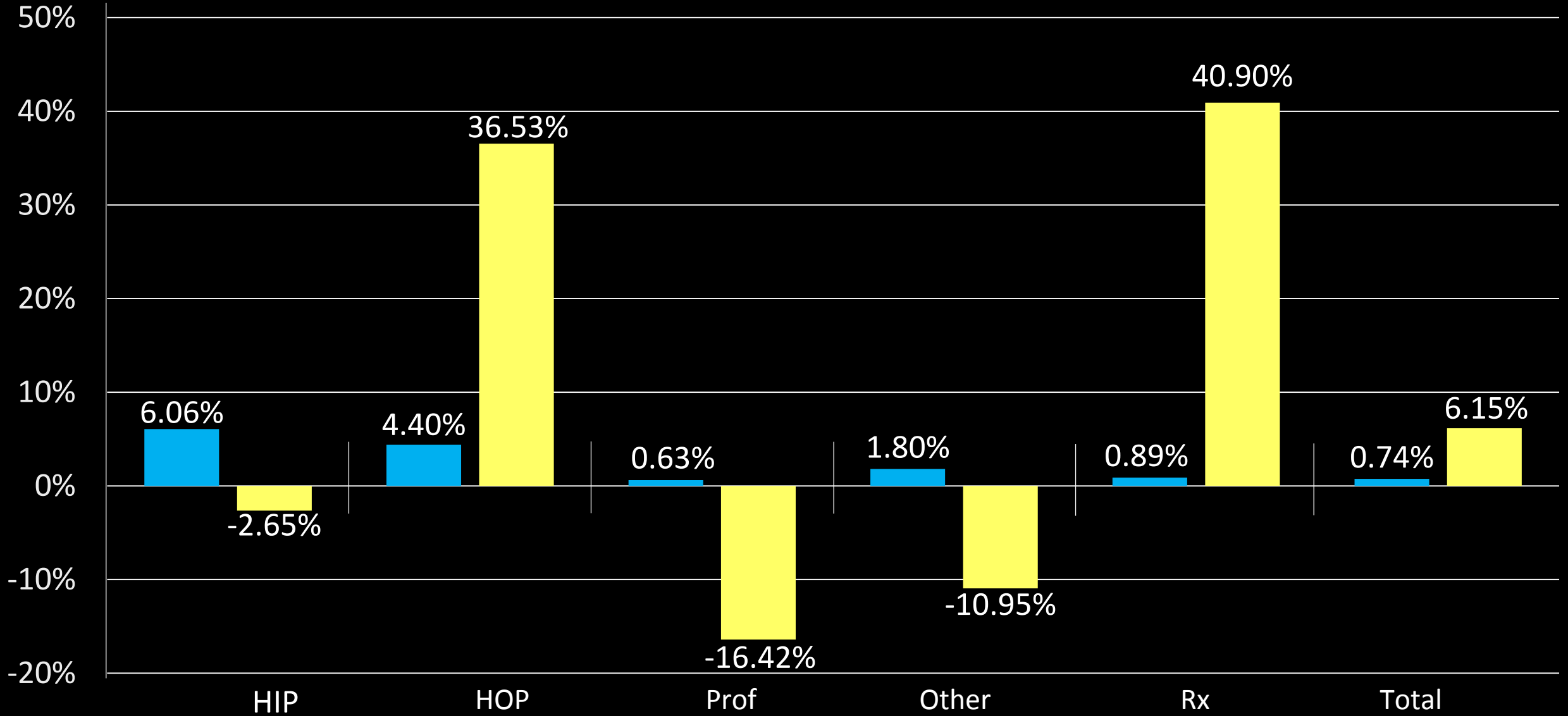


# CALIBRATIONS

- Tobacco calibration: **1.0**
- Area calibration: **1.0**
- Age calibration: **0.644**

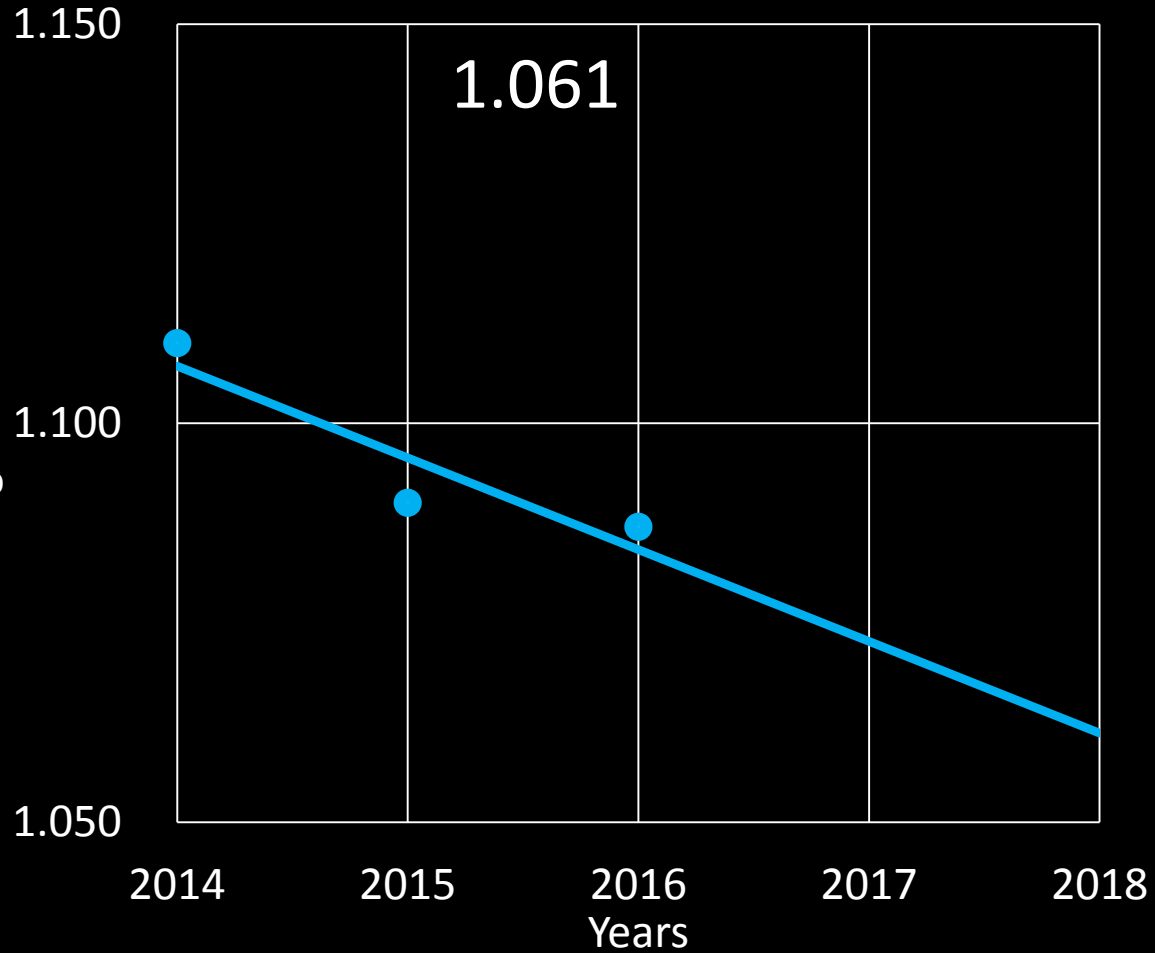
# Annual Claims Trend

Utilization Unit Cost

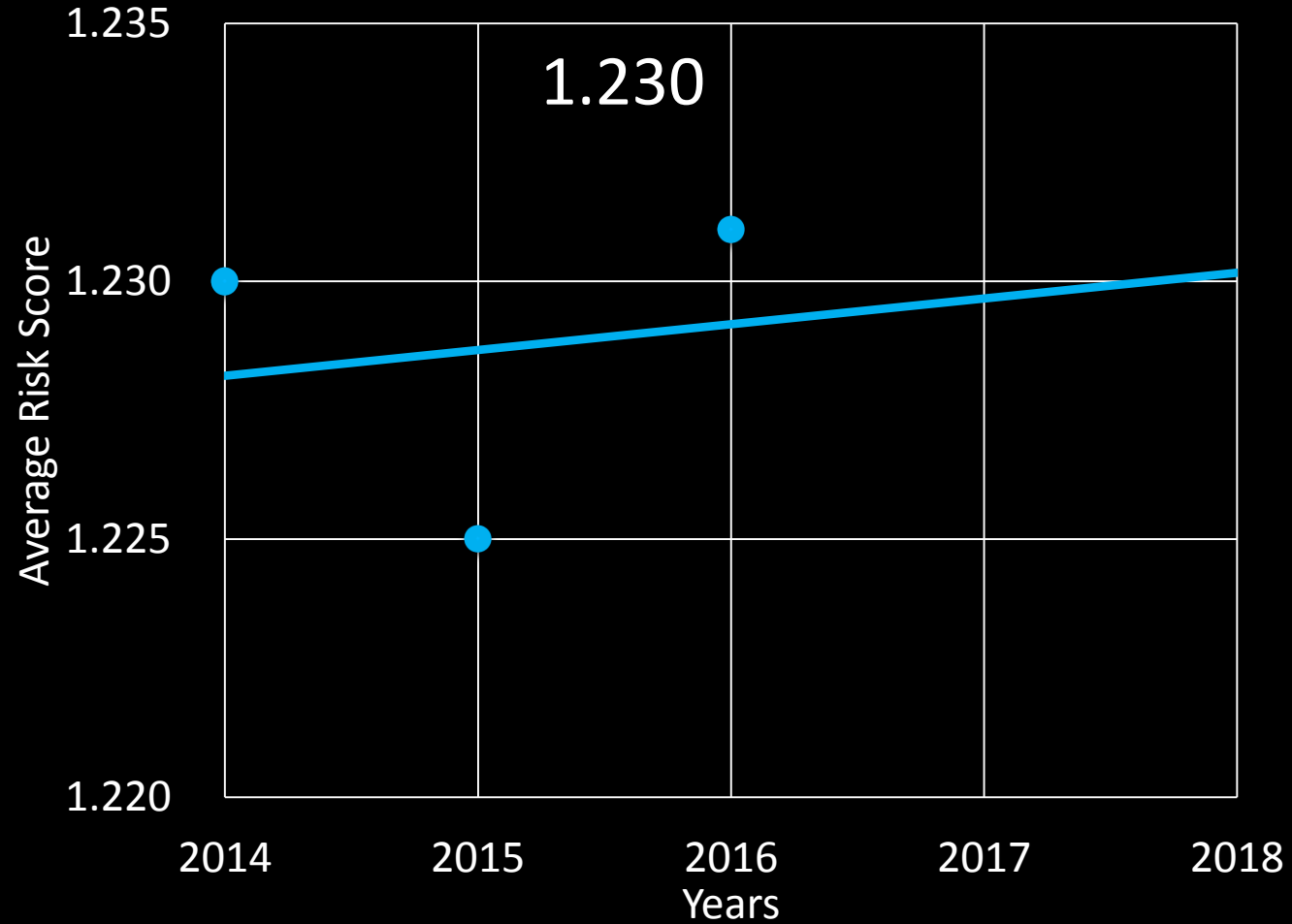


# RISK TRANSFER ADJUSTMENT

## Company Risk Score Projection

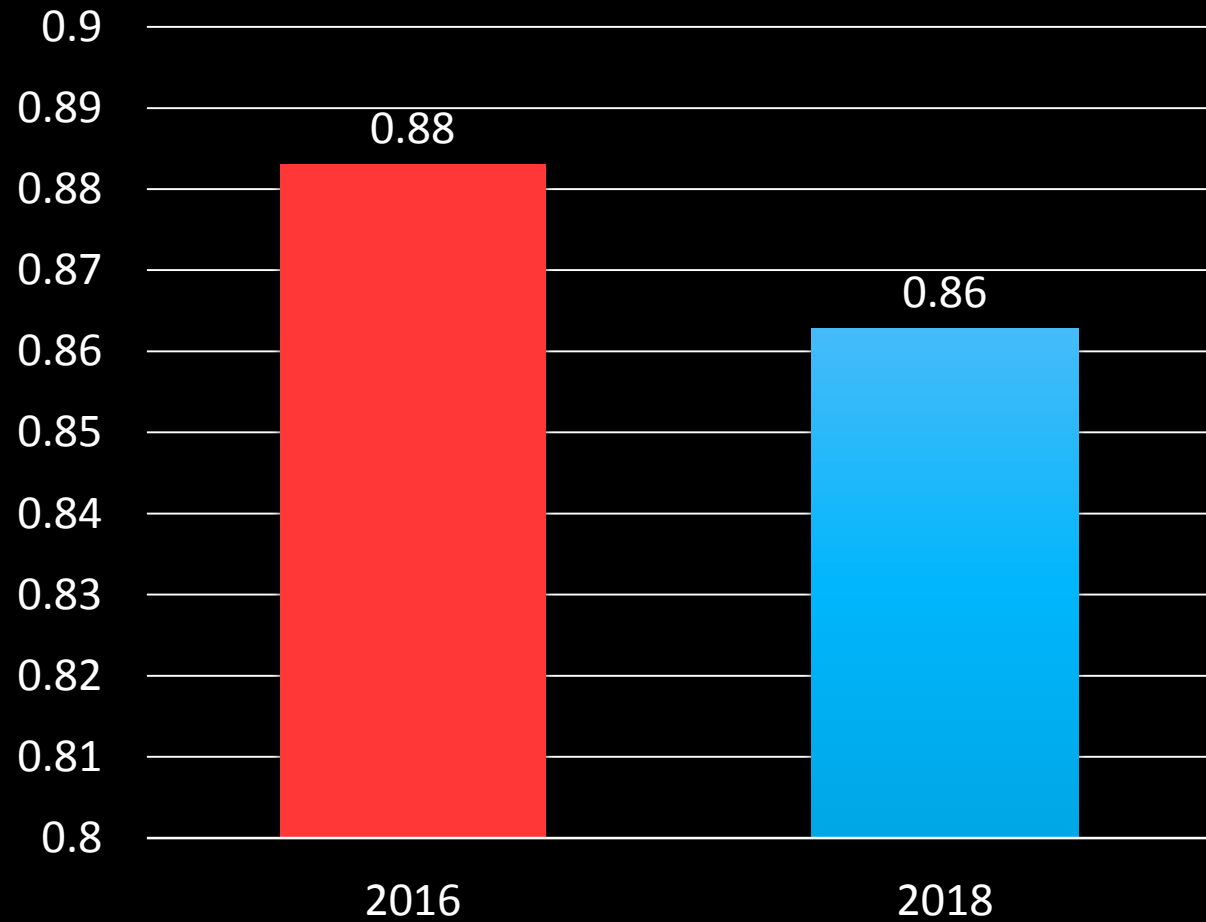


## State Risk Score Projection

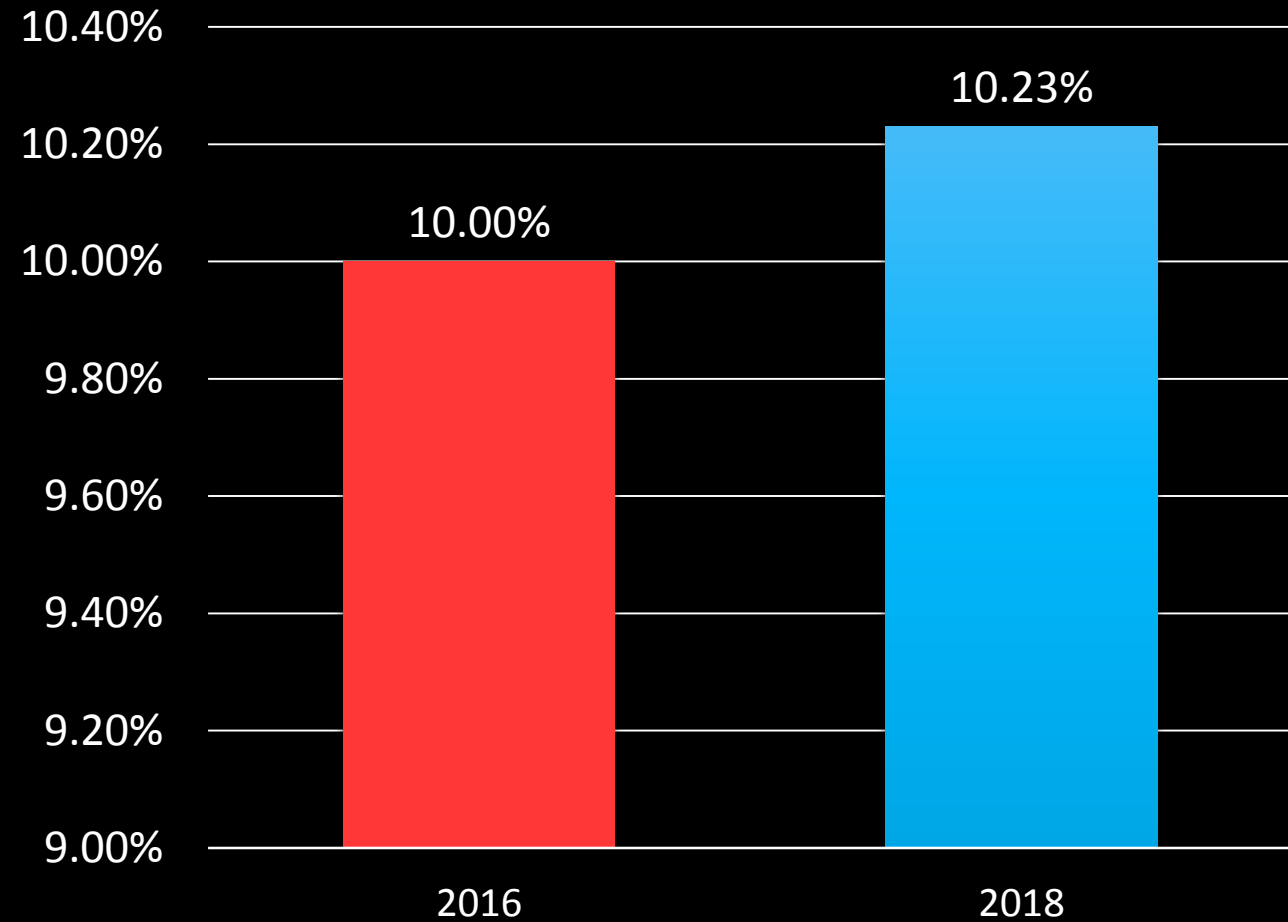


# RISK TRANSFER ADJUSTMENT

## Relative Risk

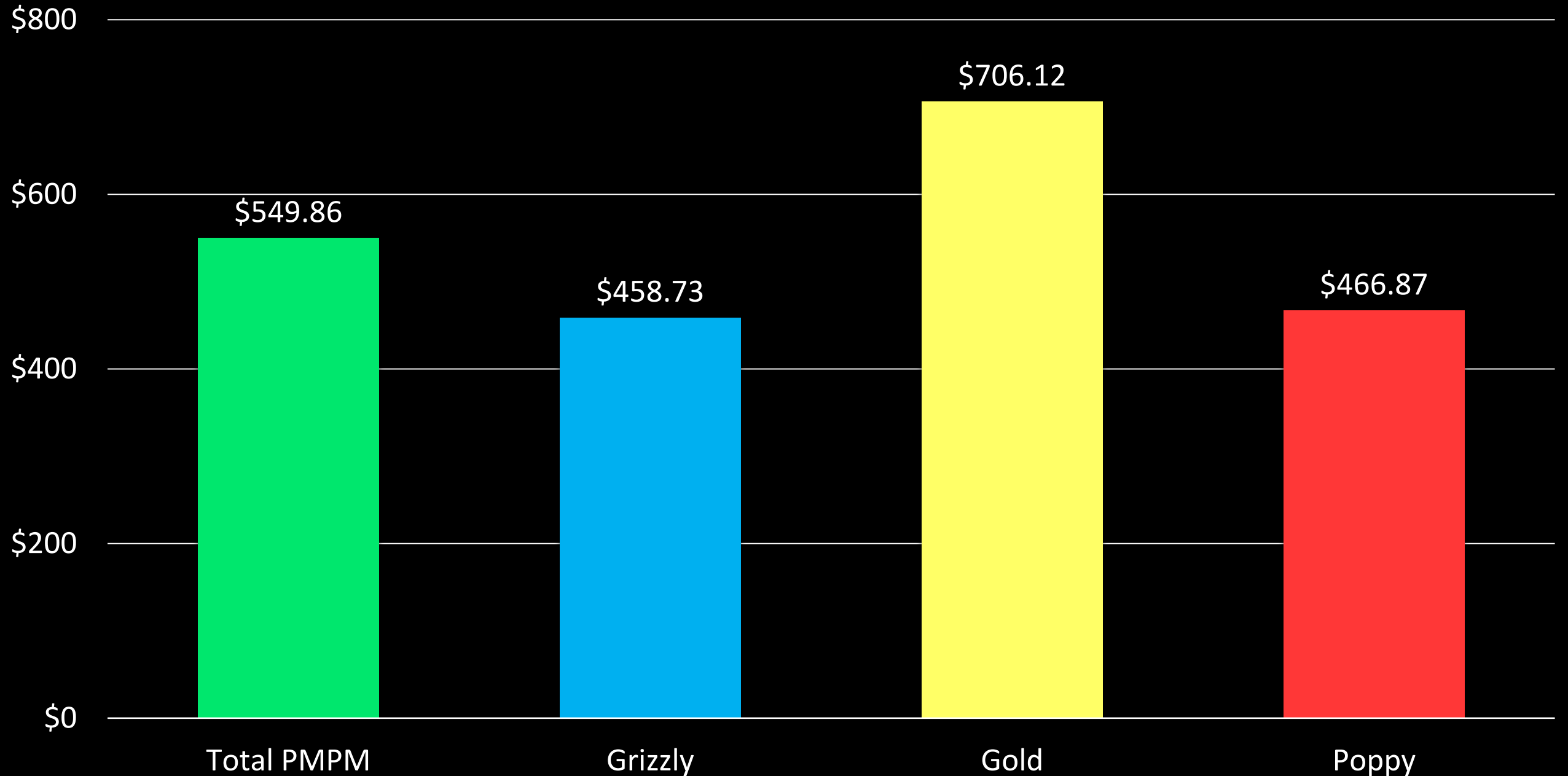


## Risk Transfer Adjustment

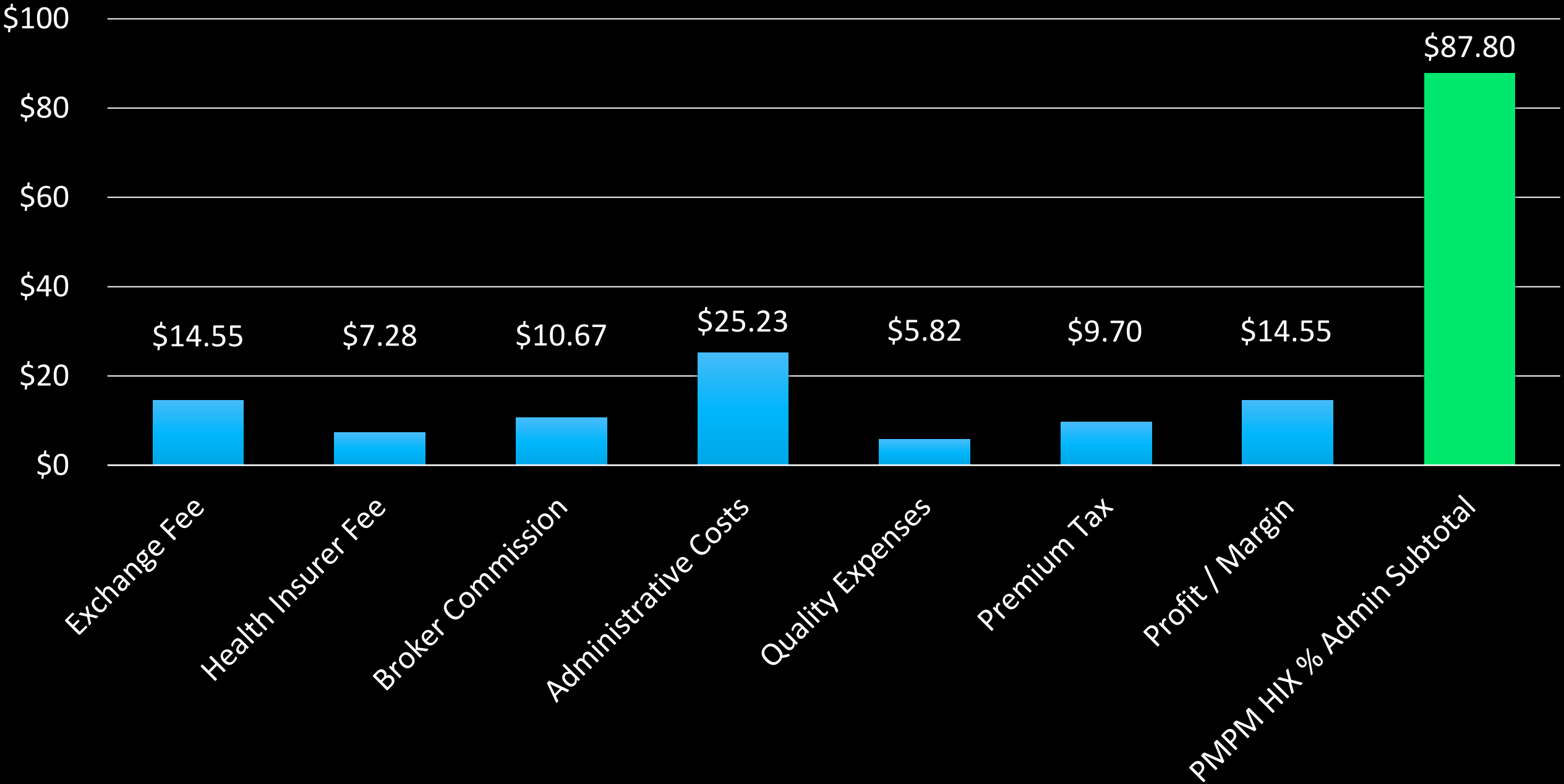


FINAL PREMIUMS

# Network Adjustment PMPM



# Administrative Expenses

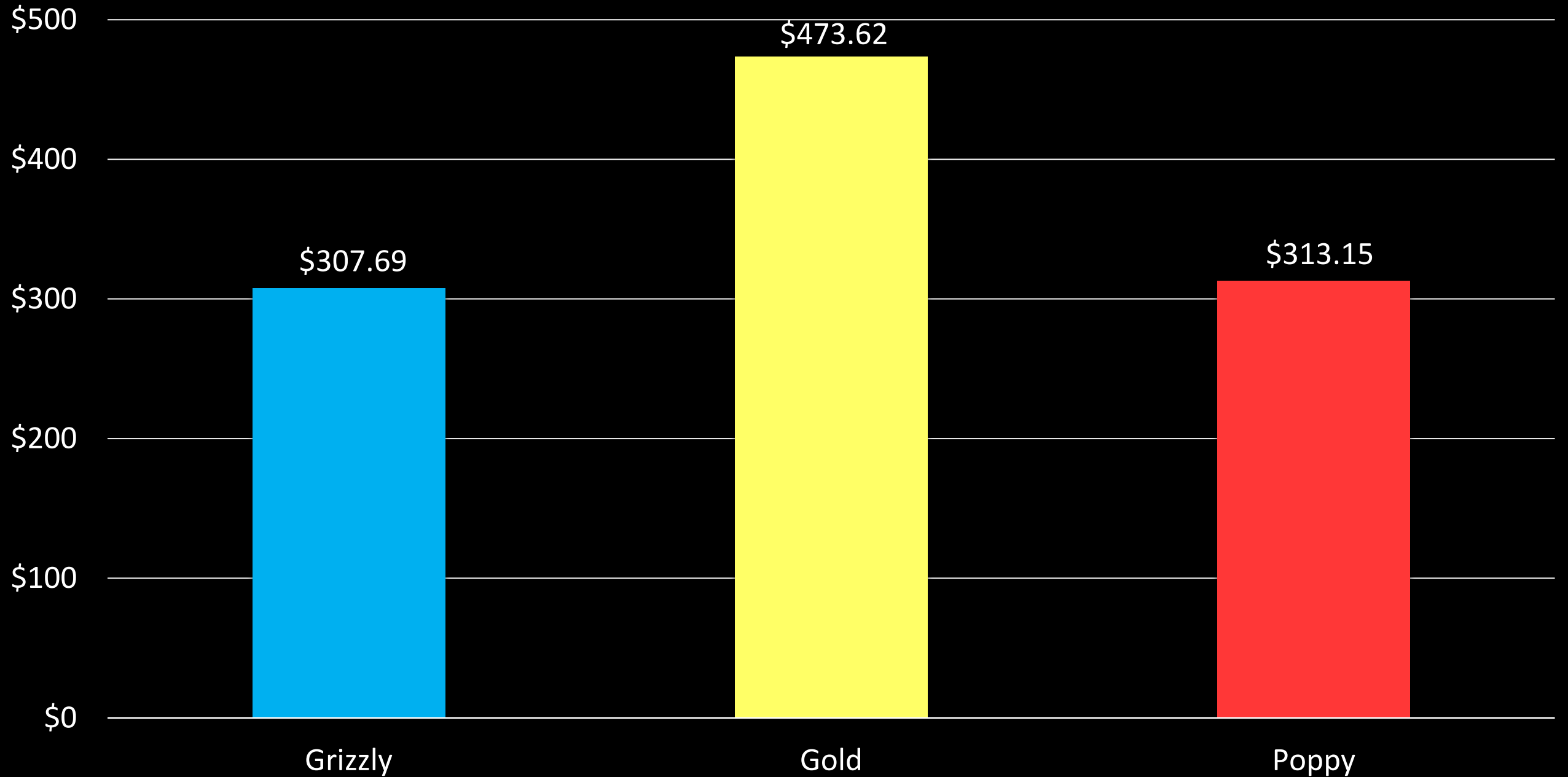




# RATE DEVELOPMENT

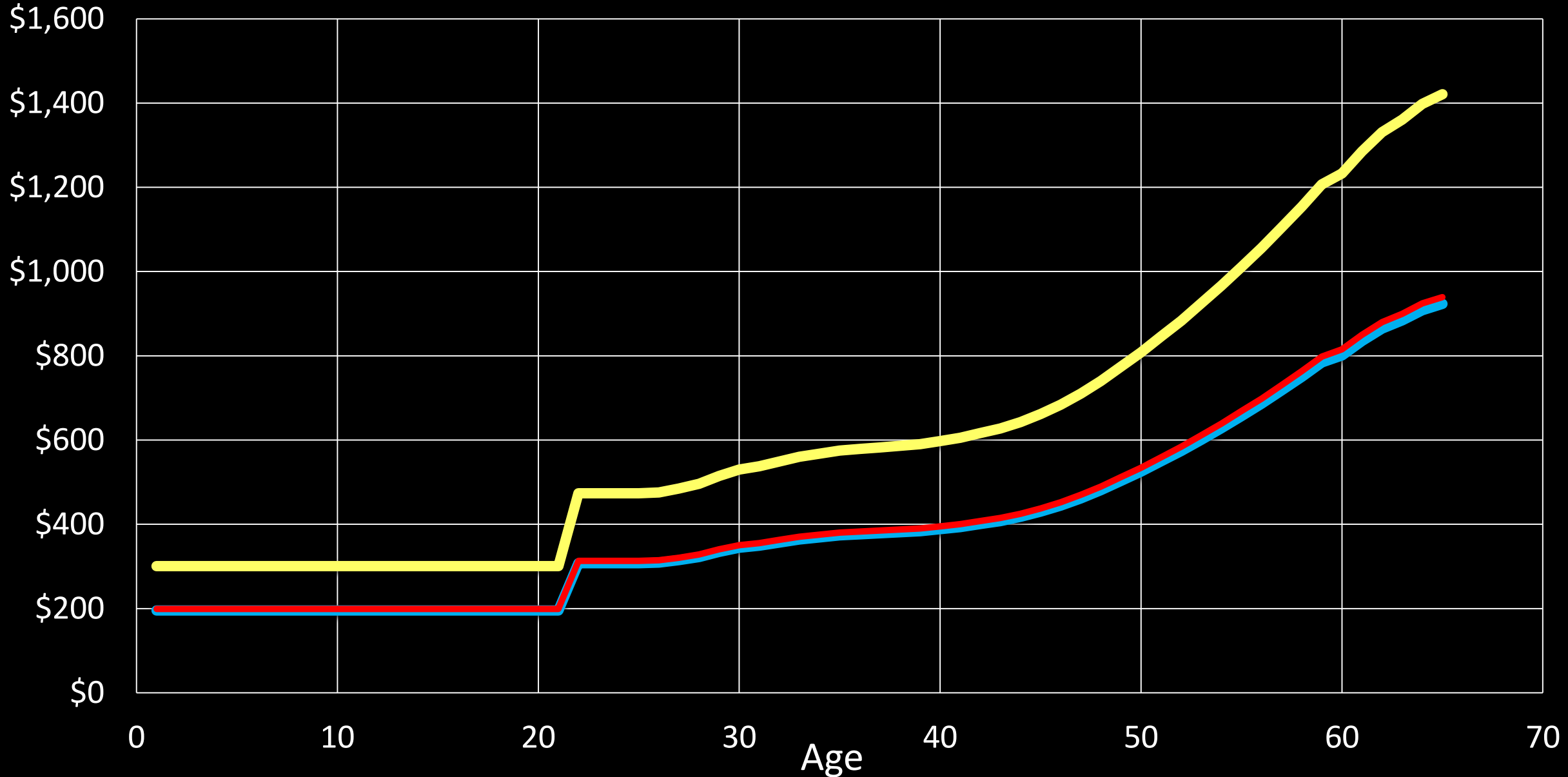
Base Member Months	51,066
Expected Members	5,120
Base Claims PMPMs	\$549.86
Experience Allowed Cost	\$628.77
HIX Claims Allowed Base PMPM – EHB	\$693.09
Paid to Allowed Factor	0.7
HIX Paid Claims PMPM	\$485.17
Total Administrative Expenses	\$87.80
<b>TOTAL PREMIUM</b>	<b>\$572.97</b>

# 21 Year Old Premiums By Region



# Consumer Adjusted Premium Rate

Grizzly Gold Poppy



THANK YOU!

# INDEX 1

Projected Members	5,120
Base Member Months	51,066.00

<u>Total w/ Proj Members</u>			
	<u>Util/1000</u>	<u>UnitCost</u>	<u>PMPM</u>
<b>HIP Total</b>	492	\$2,696.26	110
<b>HOP Total</b>	2,314	\$448.59	87
<b>Prof Total</b>	12,327	\$87.79	90
<b>Other Total</b>	814	\$181.16	12
<b>Rx</b>	10,881	\$54.29	49
<b>Total</b>	<b>26,828</b>	<b>\$155.96</b>	<b>\$348.66</b>

# INDEX 2

<b>Proj HIX Base</b>					
<b>Benefit Category</b>	<b>Util / 1000</b>	<b>Unit Cost</b>	<b>PMPM</b>	<b>Revised PMPM</b>	<b>Network Factor</b>
<b>Inpatient Hospital</b>	492	2,696	110.46	210.68	<b>1.907</b>
<b>Outpatient Hospital</b>	2,314	449	86.51	145.19	<b>1.678</b>
<b>Professional</b>	12,327	88	90.18	132.48	<b>1.469</b>
<b>Other Medical</b>	814	181	12.29	12.28	<b>1.000</b>
<b>Prescription Drug</b>	10,881	54	49.22	49.21	<b>1.000</b>
<b>Total</b>	26,828	156	348.66	549.86	<b>1.577</b>

# INDEX 3

	<b>Total</b>	<b>HIP</b>	<b>HOP</b>	<b>Prof</b>	<b>Other</b>	<b>Rx</b>
<b>Base Member Months</b>	<b>51,066</b>					
<b>Expected Members</b>	<b>5,120</b>					
<b>Base Claims PMPMs</b>	<b>549.86</b>	210.68	145.19	132.48	12.28	49.21
<b><u>Base PMPMs w/ Expected Members</u></b>	<b><u>549.86</u></b>	<u>210.68</u>	<u>145.19</u>	<u>132.48</u>	<u>12.28</u>	<u>49.21</u>
<b>Demographic/Age Adjustment</b>	<b>1.000</b>	<b>1.000</b>	<b>1.000</b>	<b>1.000</b>	<b>1.000</b>	<b>1.000</b>
<b>Utilization Trend</b>	<b>1.007</b>	1.061	1.044	1.006	1.008	1.009
<b><u>Unit Cost Trend</u></b>	<b><u>1.062</u></b>	0.974	1.365	0.836	0.891	1.409
<b>Experience Allowed Cost</b>	<b>628.77</b>	<b>224.59</b>	<b>294.99</b>	<b>93.72</b>	<b>9.90</b>	<b>99.45</b>
<b>Other</b>	<b>1.102</b>	1.102	1.102	1.102	1.102	1.102
<b>HIX Claims Allowed Base PMPM - EHB</b>	<b>693.09</b>	<b>247.57</b>	<b>325.17</b>	<b>103.31</b>	<b>10.91</b>	<b>109.62</b>

# INDEX 4

## Premium Assumptions

HIX Claims Allowed Base PMPM - EHB	<u>693.09</u>	
<u>Paid to Allowed Factor</u>	0.7	
HIX Paid Claims PMPM	\$485.17	
		<b>% of Premium</b>
Exchange Fee	\$14.55	3.0%
Health Insurer Fee	\$7.28	1.5%
Broker Commission	\$10.67	2.2%
Administrative Costs	\$25.23	5.2%
Quality Expenses	\$5.82	1.2%
Premium Tax	\$9.70	2.0%
<u>Profit / Margin</u>	\$14.55	3.0%
PMPM HIX % Admin Subtotal	\$87.80	18.1%
<b>Total Premium</b>	<b>\$572.97</b>	



# INDEX 5

## Selected Premiums

	<b>Age 0-19</b>	<b>Age 30</b>	<b>Age 40</b>	<b>Age 50</b>	<b>Age 60</b>	<b>Age 64+</b>
<b>Grizzly</b>	\$195.38	\$349.23	\$393.23	\$549.53	\$835.07	\$923.07
<b>Gold</b>	\$300.75	\$537.56	\$605.29	\$845.89	\$1285.42	\$1420.87
<b>Poppy</b>	\$198.85	\$355.42	\$400.20	\$559.28	\$849.88	\$939.44

# INDEX 6

	0-19	20-34	35-49	50+
Male	\$310.02	\$373.57	\$318.36	\$340.71
Female	\$291.78	\$260.16	\$424.32	\$269.61