

**AON**

**PEBP**

PEBP Cost Driver Analysis

April 14<sup>th</sup>, 2022





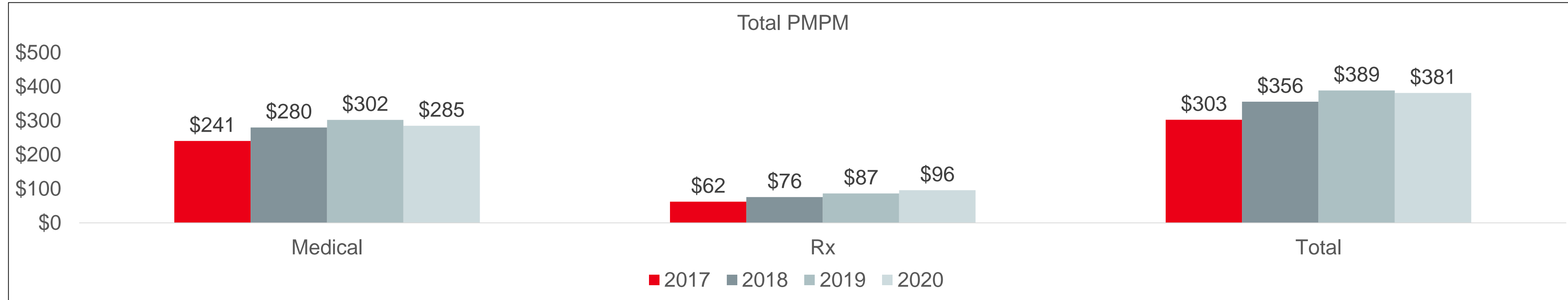
# Data and Methodology

- **Medical claims and member month counts were collected from HealthScope data warehouse**
- **Rx claims were received from ESI and do not include Rx rebates**
- **Claims represent employer paid claims**
- **HealthScope data warehouse stores 5 years of data – all data represents claims incurred from March 2017 – December 2020 and paid through February 2022**
- **Utilizer counts are based on monthly utilization and aggregated by calendar year**
- **Geographic regions map to the following counties;**
  - **North Region – Washoe and Carson City**
  - **South Region – Clark County**
  - **Rural Region – All other Nevada counties**
  - **Outside of NV**

# **Spend – All Enrollees**

## **Medical and Pharmacy Claims**

# Per Member Per Month (PMPM) Spend by Benefit



| PMPM (Medical + Rx) Trend |             |  |              |             |
|---------------------------|-------------|--|--------------|-------------|
| CY                        | Medical     |  | Rx           | Total       |
| 2017                      | -           |  | -            | -           |
| 2018                      | 16%         |  | 22%          | 18%         |
| 2019                      | 8%          |  | 14%          | 9%          |
| 2020                      | -6%         |  | 11%          | -2%         |
| <b>Average YOY Trend</b>  | <b>+ 6%</b> |  | <b>+ 16%</b> | <b>+ 8%</b> |

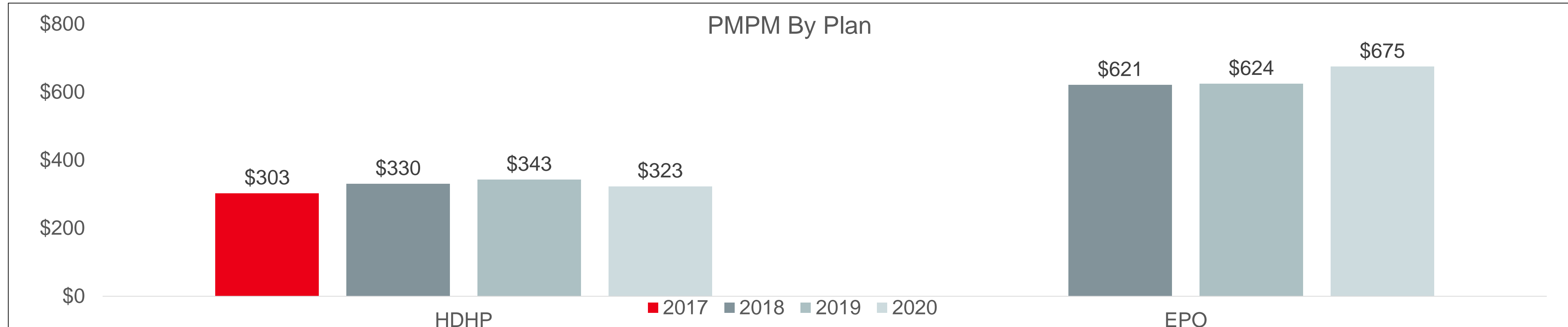
- Medical claim costs have increased on average of 6% per year, in line with healthcare market trends
  - 2018 medical/pharmacy includes a new population effective 7/1/2018 since the EPO plan moved from fully insured to self funded. This population has historically higher healthcare costs
  - 2020 medical costs decreased 6% from 2019 as elective surgeries and procedures were deferred due to Covid-19
- Rx claim costs have grown significantly at an average of 16% per year prior to rebates

# Spend by Plan

## Medical and Pharmacy Claims

# PMPM by Plan

## Medical + Rx



| PMPM (Medical + Rx) Trend |            |            |  |
|---------------------------|------------|------------|--|
| CY                        | HDHP       | EPO        |  |
| 2017                      | -          | -          |  |
| 2018                      | 9%         | -          |  |
| 2019                      | 4%         | 1%         |  |
| 2020                      | -6%        | 8%         |  |
| <b>Average YOY Trend</b>  | <b>+2%</b> | <b>+4%</b> |  |

- The EPO plan costs PMPM is nearly double the HDHP plan as the design is richer and attracts higher risk participants
- The HDHP plan costs has increased on average of 2% per year, but saw a large decrease in 2020 of -6%
  - The EPO plan costs increased 8% in 2020 as higher risk participants continued routine healthcare utilization while HDHP participants deferred procedures

\*EPO Plan began 7/1/2018

# Utilization by Plan

## Medical

| CY                       | Medical Claims |              | Total Monthly Utilizers |                 | Spend Per Monthly Utilizer |            | Visits  |         |
|--------------------------|----------------|--------------|-------------------------|-----------------|----------------------------|------------|---------|---------|
|                          | HDHP           | EPO          | HDHP                    | EPO             | HDHP                       | EPO        | HDHP    | EPO     |
| 2017                     | \$103,936,717  | -            | 131,161<br>(30%)        | -               | \$792                      | n/a        | 273,012 | n/a     |
| 2018                     | \$136,843,093  | \$25,290,141 | 160,949<br>(30%)        | 21,562<br>(42%) | \$850                      | \$1,173    | 337,584 | 47,425  |
| 2019                     | \$144,220,606  | \$48,960,651 | 166,345<br>(31%)        | 45,599<br>(43%) | \$867                      | \$1,074    | 347,302 | 101,751 |
| 2020                     | \$127,654,394  | \$52,349,087 | 154,350<br>(29%)        | 43,224<br>(41%) | \$827                      | \$1,211    | 330,516 | 99,725  |
| <b>Average YOY Trend</b> |                |              |                         |                 | <b>+1%</b>                 | <b>+2%</b> |         |         |

- The HDHP plan has lower average monthly utilizers (30%) than the EPO plan (42%), the EPO plan became self-funded beginning 7/1/2018
- Spend per monthly utilizer trend has trended at 1% per year for the HDHP plan and 2% per year for the EPO plan
  - The EPO plan saw a 13% increase in per utilizer trend from 2019 to 2020
- From 2019 to 2020, total visits by HDHP members decreased -5% while EPO visits decreased only -2%

# Utilization

## Rx

| Calendar Year            | Rx Claims    | Total Monthly Utilizers | Spend Per Monthly Utilizer |
|--------------------------|--------------|-------------------------|----------------------------|
| 2017                     | \$26,887,944 | 146,420<br>(34%)        | \$184                      |
| 2018                     | \$43,857,720 | 198,755<br>(34%)        | \$221                      |
| 2019                     | \$55,254,593 | 207,209<br>(32%)        | \$267                      |
| 2020                     | \$60,563,632 | 197,982<br>(31%)        | \$306                      |
| <b>Average YOY Trend</b> |              |                         | <b>+19%</b>                |

- Rx spend per utilizer has increased an average of 19% per year as plan participants have utilized higher cost drugs
- Rx claims were not impacted by Covid-19 as utilization remained steady

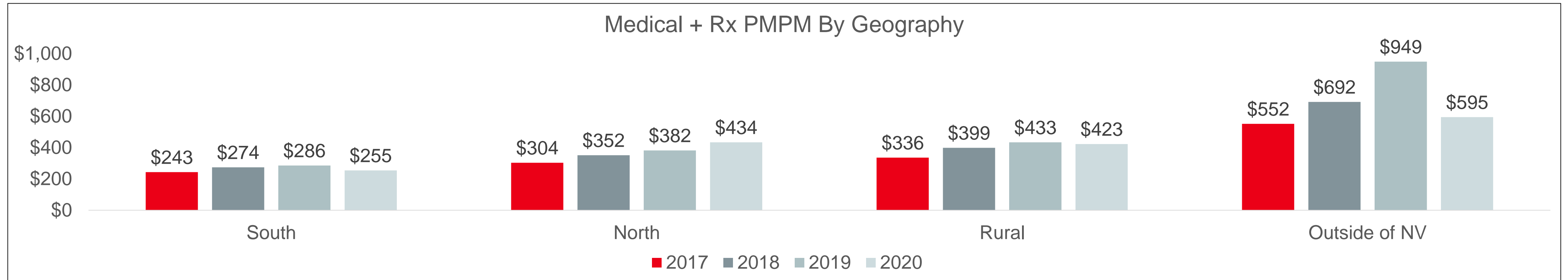


# Spend by Geography

## Medical and Pharmacy

# Spend by Geography

## Medical + Rx



| PMPM (Medical + Rx) Trend |            |             |            |               |
|---------------------------|------------|-------------|------------|---------------|
| CY                        | South      | North       | Rural      | Outside of NV |
| 2017                      | -          | -           | -          | -             |
| 2018                      | +13%       | +16%        | +19%       | +25%          |
| 2019                      | +4%        | +9%         | +9%        | +37%          |
| 2020                      | -11%       | +14%        | -2%        | -37%          |
| <b>Average YOY Trend</b>  | <b>+2%</b> | <b>+13%</b> | <b>+8%</b> | <b>+3%</b>    |

- The South region is the lowest cost region for PEBP on a PMPM basis
- The North region has the fastest growing costs at an average of 13% per year
  - In 2020, the North region cost 70% more than the South region compared to 25% more in 2017
- Outside of Nevada region is the highest cost PMPM, but only accounts for 9% of total Medical and Rx claims from 2017 – 2020
  - 2019 claims were heavily impacted by high-cost claimants

# Utilization by Geography

## Medical

| Calendar Year            | Medical Claims |              |              |               | Total Monthly Utilizers |                 |                 |                | Medical Spend Per Monthly Utilizer |            |            |               | Visits  |         |        |               |
|--------------------------|----------------|--------------|--------------|---------------|-------------------------|-----------------|-----------------|----------------|------------------------------------|------------|------------|---------------|---------|---------|--------|---------------|
|                          | South          | North        | Rural        | Outside of NV | South                   | North           | Rural           | Outside of NV  | South                              | North      | Rural      | Outside of NV | South   | North   | Rural  | Outside of NV |
| 2017                     | \$35,337,813   | \$36,234,586 | \$20,398,525 | \$9,433,910   | 52,415<br>(29%)         | 46,967<br>(32%) | 20,581<br>(28%) | 6,119<br>(26%) | \$674                              | \$771      | \$991      | \$1,542       | 109,234 | 98,553  | 40,818 | 19,166        |
| 2018                     | \$48,953,772   | \$60,765,240 | \$32,023,601 | \$14,833,944  | 66,376<br>(29%)         | 73,867<br>(33%) | 29,501<br>(30%) | 7,497<br>(27%) | \$738                              | \$823      | \$1,086    | \$1,979       | 138,643 | 156,698 | 59,337 | 22,841        |
| 2019                     | \$51,854,933   | \$76,853,752 | \$38,430,768 | \$20,753,631  | 69,768<br>(30%)         | 93,741<br>(36%) | 35,077<br>(32%) | 7,257<br>(27%) | \$743                              | \$820      | \$1,096    | \$2,860       | 146,938 | 200,533 | 71,195 | 22,812        |
| 2020                     | \$43,825,788   | \$87,266,262 | \$34,389,003 | \$10,701,767  | 65,771<br>(28%)         | 88,024<br>(33%) | 32,208<br>(30%) | 6,157<br>(25%) | \$666                              | \$991      | \$1,068    | \$1,738       | 140,285 | 192,384 | 64,694 | 19,555        |
| <b>Average YOY Trend</b> |                |              |              |               |                         |                 |                 |                | <b>0%</b>                          | <b>+9%</b> | <b>+3%</b> | <b>+4%</b>    |         |         |        |               |

- Spend per utilizer has increased significantly in North region by 9% per year on average
  - The North region is the highest utilizer of medical benefits with 33% of monthly members utilizing benefits in 2020
  - The North region was the only one to see an increase in spend per utilizer in 2020
- The Rural region saw the largest decrease in visits out of any group in 2020

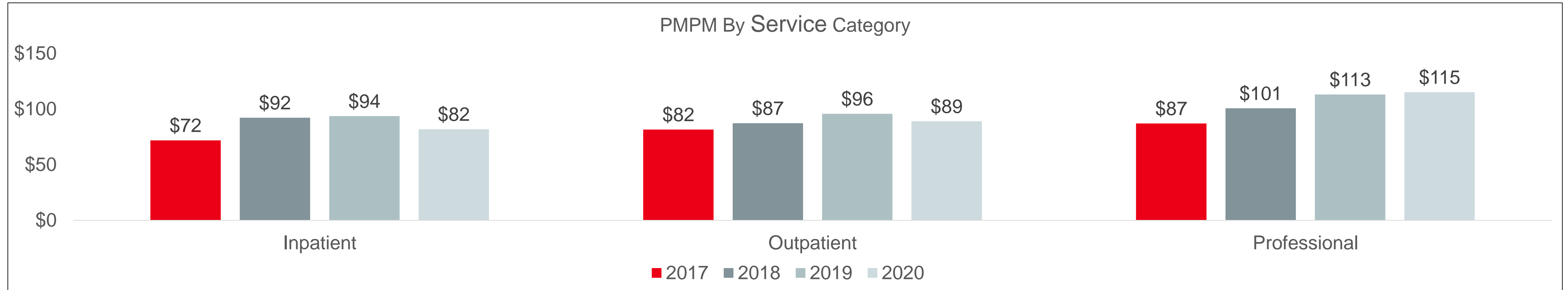


# Spend by Service Category

**Medical Only**

# Spend by Service

## Medical



| PMPM (Medical) Trend     |           |            |              |  |
|--------------------------|-----------|------------|--------------|--|
| CY                       | Inpatient | Outpatient | Professional |  |
| 2017                     | -         | -          | -            |  |
| 2018                     | 28%       | -7%        | 16%          |  |
| 2019                     | 2%        | 10%        | 12%          |  |
| 2020                     | -12%      | -7%        | 2%           |  |
| <b>Average YOY Trend</b> | <b>4%</b> | <b>3%</b>  | <b>10%</b>   |  |

- Outpatient and Inpatient costs decreased -7% and -12%, respectively, from 2019 to 2020
- Professional services PMPM increased slightly at 2%
- Professional costs have trended at 10% on average

# Utilization by Service

## Medical

| Calendar Year            | Total Monthly Utilizers |                |                  | Spend Per Monthly Utilizer |            |              | Visits    |            |              |
|--------------------------|-------------------------|----------------|------------------|----------------------------|------------|--------------|-----------|------------|--------------|
|                          | Inpatient               | Outpatient     | Professional     | Inpatient                  | Outpatient | Professional | Inpatient | Outpatient | Professional |
| 2017                     | 1,822<br>(0%)           | 24,137<br>(6%) | 128,019<br>(30%) | \$17,049                   | \$1,461    | \$294        | 2,468     | 41,095     | 249,790      |
| 2018                     | 2,639<br>(0%)           | 36,153<br>(6%) | 182,530<br>(32%) | \$20,220                   | \$1,397    | \$319        | 4,141     | 59,660     | 363,711      |
| 2019                     | 2,961<br>(0%)           | 43,245<br>(7%) | 211,655<br>(33%) | \$20,193                   | \$1,414    | \$341        | 4,792     | 71,059     | 421,224      |
| 2020                     | 2,627<br>(0%)           | 41,812<br>(7%) | 194,280<br>(31%) | \$19,667                   | \$1,343    | \$374        | 4,116     | 68,428     | 401,290      |
| <b>Average YOY Trend</b> |                         |                |                  | <b>5%</b>                  | <b>-3%</b> | <b>8%</b>    |           |            |              |

- Professional spend per utilizer has increased the highest at 8% per year on average
- Outpatient spend per utilizer has decreased as the number of visits at this place of service (POS) has increased since 2017
- Inpatient service spend per monthly utilizer has increased at 5% per year on average; however, less than 1% of members utilize inpatient services



# Spend by Health Conditions

**Medical Only**

# Spend by Top 5 Health Conditions

## Medical

| Medical Claims                                 |              |                            |                   |                           |              |                               |
|--|--------------|----------------------------|-------------------|---------------------------|--------------|-------------------------------|
| Calendar Year                                  | Cancer       | Gastrointestinal Disorders | Cardiac Disorders | Musculoskeletal Disorders | Pregnancy    | Total Claims (All Conditions) |
| 2017   | \$13,560,996 | \$9,953,728                | \$6,118,976       | \$9,009,951               | \$7,043,321  | \$103,936,717                 |
| 2018   | \$20,158,197 | \$14,361,773               | \$12,994,392      | \$11,726,368              | \$10,769,553 | \$162,133,234                 |
| 2019   | \$19,345,078 | \$15,629,031               | \$15,256,313      | \$14,305,501              | \$12,532,225 | \$193,181,258                 |
| 2020   | \$20,275,923 | \$14,170,362               | \$14,128,467      | \$12,744,681              | \$10,602,200 | \$180,003,482                 |
| <b>Average Percent of Total Medical Claims</b> | <b>11%</b>   | <b>8%</b>                  | <b>8%</b>         | <b>7%</b>                 | <b>6%</b>    |                               |

- 5 health conditions accounted for ~41% of total Medical claims from 2017 to 2020: Cancer, Gastrointestinal disorders, Cardiac disorder, MSK, Pregnancy
- The 3 top increasing cost conditions include:
  - Infections, hematological (blood) disorders, and Mental Health
  - These 3 conditions represented 13% of medical claims in 2020 compared to 7% in 2017

# Utilization by Top 5 Health Conditions

## Medical

| Total Monthly Utilizers  |        |                            |                   |                           |                             | Spend Per Monthly Utilizer |                            |                   |                           |                             |
|--------------------------|--------|----------------------------|-------------------|---------------------------|-----------------------------|----------------------------|----------------------------|-------------------|---------------------------|-----------------------------|
| Calendar Year            | Cancer | Gastrointestinal Disorders | Cardiac Disorders | Musculoskeletal Disorders | Pregnancy-related Disorders | Cancer                     | Gastrointestinal Disorders | Cardiac Disorders | Musculoskeletal Disorders | Pregnancy-related Disorders |
| 2017                     | 3,597  | 8,932                      | 10,448            | 20,094                    | 2,549                       | \$3,770                    | \$1,114                    | \$586             | \$448                     | \$2,763                     |
| 2018                     | 4,935  | 12,456                     | 14,043            | 27,125                    | 3,625                       | \$4,085                    | \$1,153                    | \$925             | \$432                     | \$2,971                     |
| 2019                     | 5,617  | 14,470                     | 16,113            | 31,306                    | 4,287                       | \$3,444                    | \$1,080                    | \$947             | \$457                     | \$2,923                     |
| 2020                     | 5,185  | 12,855                     | 14,861            | 26,582                    | 3,957                       | \$3,910                    | \$1,102                    | \$951             | \$479                     | \$2,679                     |
| <b>Average YOY Trend</b> |        |                            |                   |                           |                             | <b>1%</b>                  | <b>0%</b>                  | <b>18%</b>        | <b>2%</b>                 | <b>-1%</b>                  |

- Spend per utilizer has remained relatively flat for each of the top 5 conditions with the exception of cardiac disorders
- Cardiac disorders saw a large increase from 2017 to 2018, but has remained relatively flat since then

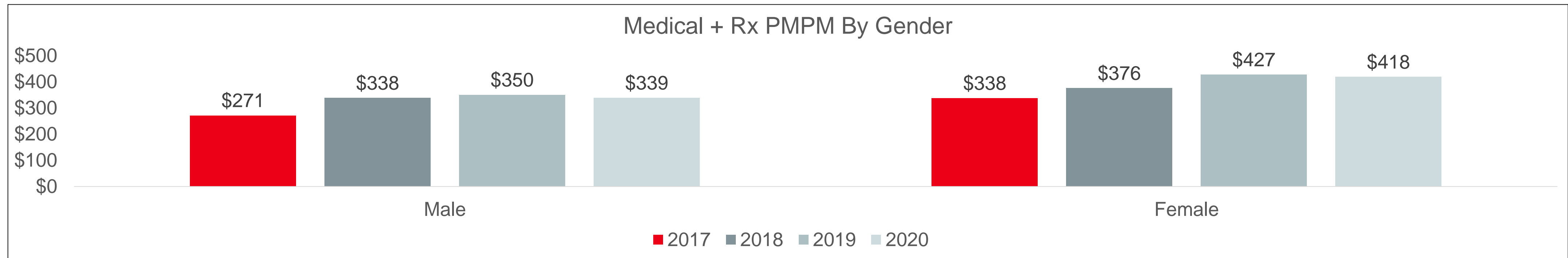


# Spend by Demographic

## Medical and Pharmacy

# Spend by Gender

## Medical + Rx



| PMPM (Medical + Rx) Trend |            |            |  |
|---------------------------|------------|------------|--|
| CY                        | Male       | Female     |  |
| 2017                      | -          | -          |  |
| 2018                      | +25%       | +11%       |  |
| 2019                      | +4%        | +14%       |  |
| 2020                      | -3%        | -2%        |  |
| <b>Average YOY Trend</b>  | <b>+8%</b> | <b>+7%</b> |  |

- Female member claims are higher than males on a PMPM basis
  - This is largely driven by higher utilization of benefits for females
  - Men who utilize benefits tend to cost much more than females, specifically on Rx
- Males and female PMPM costs have trended at 8% and 7%, respectively, per year on average

# Utilization by Gender

## Medical

| Calendar Year            | Medical Claims |               | Total Monthly Utilizers |                  | Spend Per Monthly Utilizer |            | Medical Visits |         |
|--------------------------|----------------|---------------|-------------------------|------------------|----------------------------|------------|----------------|---------|
|                          | Male           | Female        | Male                    | Female           | Male                       | Female     | Male           | Female  |
| 2017                     | \$44,142,027   | \$59,590,260  | 52,436<br>(26%)         | 78,706<br>(35%)  | \$842                      | \$757      | 108,906        | 165,890 |
| 2018                     | \$73,647,113   | \$88,129,730  | 72,920<br>(27%)         | 110,173<br>(37%) | \$1,010                    | \$800      | 151,726        | 233,780 |
| 2019                     | \$79,962,458   | \$112,668,015 | 84,984<br>(28%)         | 127,321<br>(38%) | \$941                      | \$885      | 178,011        | 272,868 |
| 2020                     | \$73,319,397   | \$106,620,555 | 79,371<br>(27%)         | 119,804<br>(36%) | \$924                      | \$890      | 165,996        | 261,116 |
| <b>Average YOY Trend</b> |                |               |                         |                  | <b>+3%</b>                 | <b>+6%</b> |                |         |

- A higher percentage of female members utilize medical benefits
  - In 2020, 38% of female members utilized benefits vs 28% of males
  - Females represent 53% of total members, but 60% of utilizers and 61% of visits
- Men who utilize benefits cost more than females
  - 4% higher cost in 2020 and 6% higher in 2019



# Utilization by Gender

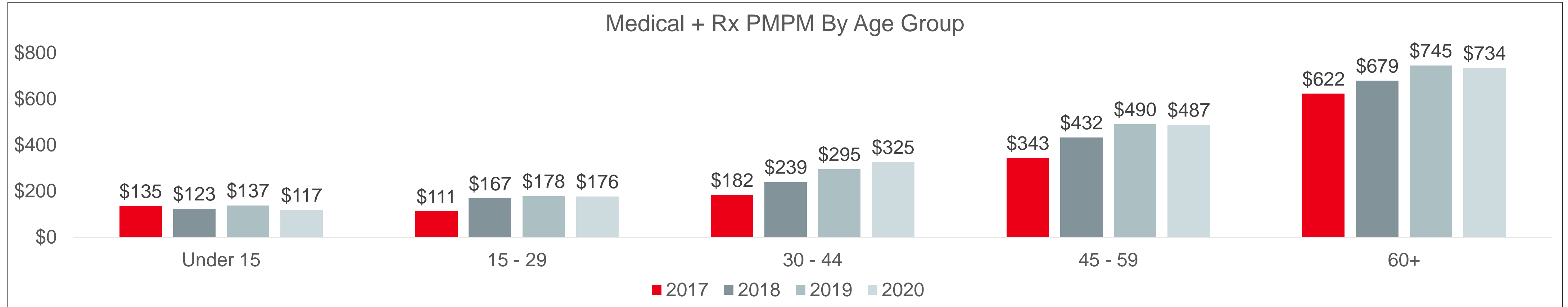
## Rx

| Rx Claims                |              |              | Total Monthly Utilizers |               | Spend Per Monthly Utilizer |             |
|--------------------------|--------------|--------------|-------------------------|---------------|----------------------------|-------------|
| Calendar Year            | Male         | Female       | Male                    | Female        | Male                       | Female      |
| 2017                     | \$11,372,073 | \$15,515,871 | 56,820 (28%)            | 89,600 (40%)  | \$200                      | \$173       |
| 2018                     | \$18,948,267 | \$24,909,453 | 77,648 (28%)            | 121,107 (40%) | \$244                      | \$206       |
| 2019                     | \$25,343,814 | \$29,912,916 | 82,108 (27%)            | 125,101 (37%) | \$309                      | \$239       |
| 2020                     | \$28,122,043 | \$32,415,731 | 77,917 (26%)            | 120,065 (36%) | \$361                      | \$270       |
| <b>Average YOY Trend</b> |              |              |                         |               | <b>+22%</b>                | <b>+16%</b> |

- Male spend per utilizer is 34% higher than females in 2020
- Rx spend per utilizer has increased significantly from 2017 to 2020
  - 22% for males and 16% for females per year

# Spend by Age Group

## Medical + Rx



| PMPM (Medical + Rx) Trend |            |            |            |            |           |  |
|---------------------------|------------|------------|------------|------------|-----------|--|
| CY                        | Under 15   | 15 - 29    | 30 - 44    | 45 - 59    | 60+       |  |
| 2017                      | -          | -          | -          | -          | -         |  |
| 2018                      | -9%        | +50%       | +31%       | +26%       | +9%       |  |
| 2019                      | +12%       | +6%        | +23%       | +13%       | +10%      |  |
| 2020                      | -14%       | -1%        | +10%       | -1%        | -1%       |  |
| <b>Average YOY Trend</b>  | <b>-4%</b> | <b>17%</b> | <b>21%</b> | <b>12%</b> | <b>6%</b> |  |

- The <15 age group PMPM cost decreased 14% cost in 2020, possibly indicating that many children did not receive routine preventive care
  - The 30-44 age group was the only group with an increase in cost in 2020
- The 15-29 and 30-44 age groups have the highest cost trend on average per year
- 60+ age group represents 40% of total cost but only 21% of total members

# Utilization by Age Group

## Medical

| Calendar Year            | Total Monthly Utilizers |                 |                 |                 |                 | Medical Spend Per Monthly Utilizer |           |            |           |           | Medical Visits |         |         |         |         |
|--------------------------|-------------------------|-----------------|-----------------|-----------------|-----------------|------------------------------------|-----------|------------|-----------|-----------|----------------|---------|---------|---------|---------|
|                          | Under 15                | 15 - 29         | 30 - 44         | 45 - 59         | 60+             | Under 15                           | 15 - 29   | 30 - 44    | 45 - 59   | 60+       | Under 15       | 15 - 29 | 30 - 44 | 45 - 59 | 60+     |
| 2017                     | 11,961<br>(25%)         | 18,159<br>(19%) | 22,565<br>(25%) | 32,025<br>(33%) | 43,560<br>(44%) | \$508                              | \$476     | \$576      | \$735     | \$1,156   | 18,631         | 31,435  | 42,567  | 66,962  | 108,436 |
| 2018                     | 17,916<br>(25%)         | 26,046<br>(21%) | 32,963<br>(28%) | 46,416<br>(35%) | 56,283<br>(45%) | \$441                              | \$699     | \$685      | \$868     | \$1,202   | 28,704         | 48,647  | 63,889  | 98,725  | 137,870 |
| 2019                     | 23,099<br>(26%)         | 30,660<br>(22%) | 39,853<br>(30%) | 55,399<br>(37%) | 59,297<br>(47%) | \$458                              | \$671     | \$769      | \$911     | \$1,275   | 37,639         | 58,125  | 79,951  | 120,012 | 146,281 |
| 2020                     | 20,284<br>(21%)         | 29,579<br>(22%) | 40,143<br>(29%) | 53,988<br>(36%) | 50,374<br>(44%) | \$464                              | \$621     | \$809      | \$946     | \$1,288   | 34,387         | 58,334  | 82,089  | 118,667 | 123,341 |
| <b>Average YOY Trend</b> |                         |                 |                 |                 |                 | <b>-3%</b>                         | <b>9%</b> | <b>12%</b> | <b>9%</b> | <b>4%</b> |                |         |         |         |         |

- The <15 and 15-29 age groups utilize benefits the least amount as a percent of total members
- Spend per utilizer has increased the highest for 30-44 age group at 12% per year on average



# Utilization by Age Group

## Rx

| Calendar Year            | Total Monthly Utilizers |                 |                 |                 |                 | Rx Spend Per Monthly Utilizer |            |            |            |           |
|--------------------------|-------------------------|-----------------|-----------------|-----------------|-----------------|-------------------------------|------------|------------|------------|-----------|
|                          | Under 15                | 15 - 29         | 30 - 44         | 45 - 59         | 60+             | Under 15                      | 15 - 29    | 30 - 44    | 45 - 59    | 60+       |
| 2017                     | 9,146<br>(19%)          | 19,864<br>(21%) | 28,335<br>(32%) | 49,473<br>(51%) | 39,602<br>(40%) | \$52                          | \$88       | \$112      | \$194      | \$300     |
| 2018                     | 12,849<br>(18%)         | 26,508<br>(21%) | 38,130<br>(32%) | 67,171<br>(51%) | 54,097<br>(43%) | \$74                          | \$112      | \$154      | \$254      | \$315     |
| 2019                     | 13,574<br>(16%)         | 28,367<br>(21%) | 40,441<br>(30%) | 69,415<br>(47%) | 55,412<br>(44%) | \$105                         | \$142      | \$210      | \$322      | \$341     |
| 2020                     | 10,322<br>(11%)         | 27,143<br>(20%) | 40,260<br>(29%) | 66,799<br>(45%) | 53,458<br>(47%) | \$175                         | \$199      | \$299      | \$329      | \$361     |
| <b>Average YOY Trend</b> |                         |                 |                 |                 |                 | <b>50%</b>                    | <b>31%</b> | <b>39%</b> | <b>19%</b> | <b>6%</b> |

- Spend per utilizer has increased significantly for all age groups
- Members age 45 – 59 have the highest cost per utilizer