COTIVITI

Medical Intelligence

2018/2019 Year End Year-Over-Year Comparison

PIMA COUNTY - ARIZONA

Incurred: Jul 2018 thru Jun 2019

Custom Time Period

Presented By:

CBIZ

COTIVITI Medical Intelligence

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Introduction

All the metrics are calculated based on the claims incurred from July 2018 to June 2019.

All quality and risk metrics like QRM compliance, RI, CGI and Risk Scores are calculated based on the full cycle irrespective of the selected time period.

Period-over-period comparisons are performed on selected sections within this report. The two periods selected for analysis are:

1. Current Period (P2)
    - Incurred from July 2018 through June 2019
2. Previous Period (P1)
    - Incurred from July 2017 through June 2018

Please Note:

1. This report displays Plan Paid Amounts unless otherwise specified.
2. Many dollar values are rounded to the nearest dollar for increased readability. However, calculated values (such as total sums) are calculated precisely and then rounded afterwards. This produces more accurate results, but may occasionally cause calculated fields to appear inexact.
3. Some sections in the Appendix are dependent on previous sections. If the underlying previous sections are not requested, then the corresponding sections in the Appendix will not be populated.
4. The information contained in report has been produced from data provided to Cotiviti, which has not been independently verified by Cotiviti for accuracy or completeness. Additional information, including, but not limited to, any claims that have been incurred but not paid as of the date of this report, or claims that were subject to subsequent adjustment, should be considered before any action is taken on the basis of the contents of this report. This report does not constitute the provision of medical or legal advice by Cotiviti to any party.

1. SUMMARY OF FINDINGS [1]

This report provides an analysis of the healthcare information for PIMA COUNTY - ARIZONA. The information is based on eligibility, medical claims, and pharmacy claims data for employees and their families on incurred basis. The cost figures below reflect the time frame specified.

Summary of Expenses Paid by Plan

		Commercial Norms [2]
Medical Claims	$24,528,909.39	
Pharmacy Claims	$10,850,537.72	
Total Claims	**$35,379,447.11**	
PEPM Medical Expenses	$326.92	$662.16
PEPM Pharmacy Expenses	$144.62	$191.25
Total PEPM Expenses	**$471.54**	**$853.42**

1 Source: Medical Intelligence : Executive Summary Module
2 Norm in this report refers to the values from Cotiviti's Commercial Normative database.

2. POPULATION CHARACTERISTICS

This section explores the aggregate demographic, economic and clinical characteristics of the population.

Section 2.1 contains the population's demographic characteristics, including the change in total and current membership levels, and age and gender breakouts with associated economics.

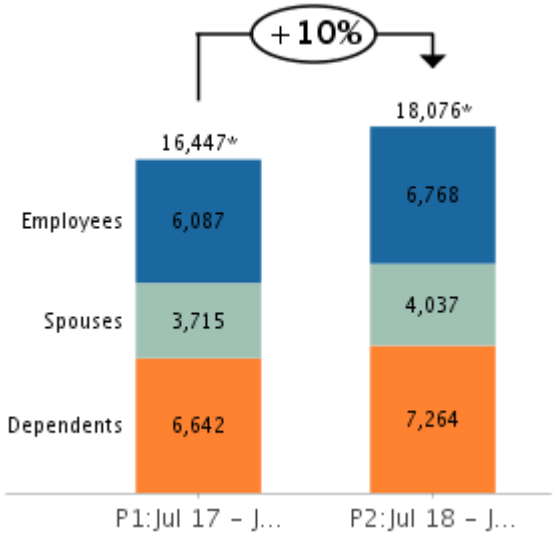
Section 2.2 details the population's high-level economic characteristics. This includes an assessment of the drivers of cost growth, such as change in enrollment, change in costs, and medical versus pharmacy PEPM. Trends in total and PEPM costs over time - both medical and pharmacy - are calculated. Finally, cost distribution by spending band is explored. Deeper economic analyses into the drivers of pharmacy and medical expenses are detailed in Section 3: Economic Findings and Opportunities.

Section 2.3 analyzes the population's high-level clinical characteristics. The first breakout shows the relationship between age and disease burden as quantified by the Relative Risk Score (RRS) and the related Care Gap Index (CGI). These are analyzed both relative to each other and relative to the Cotiviti book of business benchmark. The second breakout shows the distribution of diseases across the population - identifying what is large or growing rapidly from a prevalence standpoint. Prevalence of the ten most chronic diseases is then compared to benchmarks.

2.1 Demographics

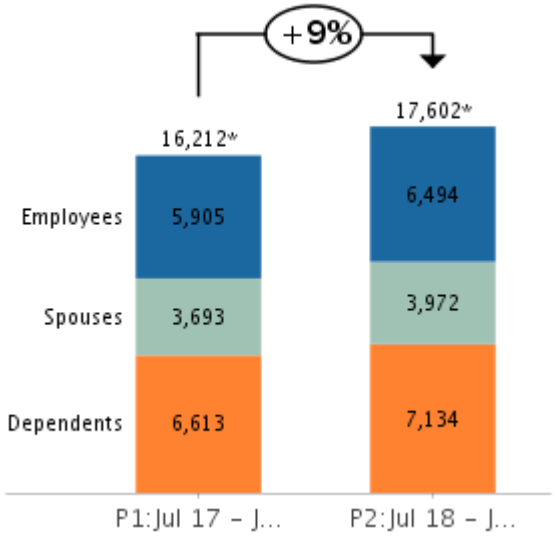
Figure 2.1.1 presents total membership change, by relationship status, from previous period to current period. The percentage changes are also provided so that period-over-period trends can be evaluated. Figure 2.1.2 presents the distribution of current members in that specific period. For both total and current members, average PMPM is provided, where dependents typically spend the least amount per month. Finally, Figure 2.1.3 and Table 2.1.1 show the total claims paid and membership profile by age group and gender; in absolute terms employees and spouses typically constitute proportionally more spend than dependents.

Figure 2.1.1 Total Member Count by relationship status [3, 4]



Member Growth	Average PMPM Jul 17 - Jun 18	Average PMPM Jul 18 - Jun 19	PMPM Growth
11.2%	$282.60	$272.20	-3.7%
8.7%	$247.69	$200.83	-18.9%
9.4%	$70.24	$67.03	-4.6%

Figure 2.1.2 Current Members



Member Growth	Average PMPM Jul 17 - Jun 18	Average PMPM Jul 18 - Jun 19	PMPM Growth
10.0%	$275.96	$262.36	-4.9%
7.6%	$246.37	$199.61	-19.0%
7.9%	$70.08	$66.34	-5.3%

3 **Note:** *Totals included counts for the 'Unknown' category
Refer to Appendix 5.1 for more information on member expenses by relationship status.

4 Source: Medical Intelligence : Individuals Module. For Relationship, filter using Rel Flag (E = Employees, S=Spouses, D = Dependents). For Current Members, Current = 'Y'.

Figure 2.1.3 Claims Paid by Gender and Age [5]

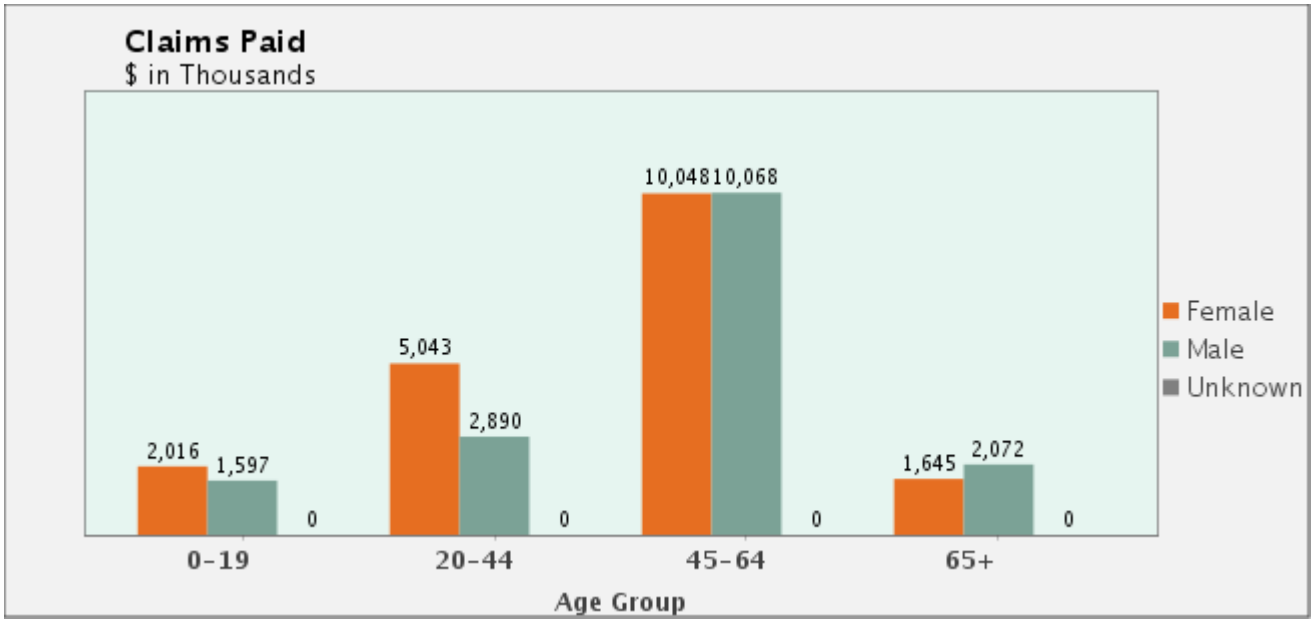


Table 2.1.1 Membership Profile [6]

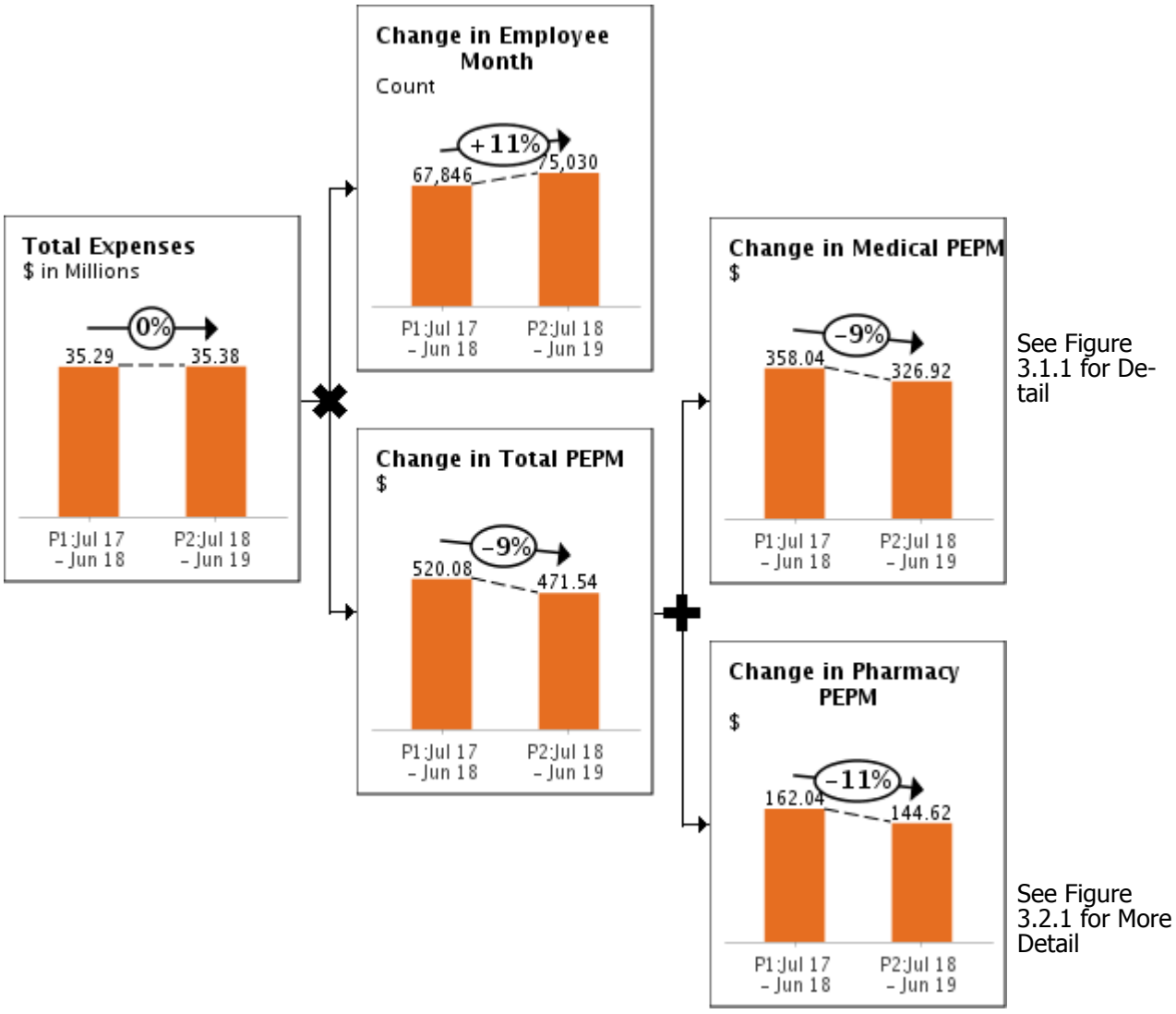
	Female Member		Male Member		Unknown		Total Member	
	Count	**Percent**	**Count**	**Percent**	**Count**	**Percent**	**Count**	**Percent**
Employee	3,351	18.5%	3,417	18.9%	0	0.0%	6,768	37.4%
Spouse	2,473	13.7%	1,564	8.7%	0	0.0%	4,037	22.3%
Dependent	3,499	19.4%	3,765	20.8%	0	0.0%	7,264	40.2%
Unknown	3	0.0%	4	0.0%	0	0.0%	7	0.0%
Total	**9,326**	**51.6%**	**8,750**	**48.4%**	**0**	**0%**	**18,076**	**100%**

5 **Note:** Unknown members will be displayed in graph if applicable.
Source: Medical Intelligence : Demography Module / Age Group
6 Source: Medical Intelligence : Individuals Module / filter on Gender and Rel. Flag

2.2 Aggregate Economics

Figure 2.2.1 breaks out cost growth into discrete drivers, such as change in member volume, change in PEPM, and medical versus pharmacy PEPM. The change in Employee Months will closely approximate the change in current members. This analysis helps delineate whether absolute costs are growing because the population is growing, or because the cost per member is growing. Further cost breakouts are present in Section 3: Economic Findings and Opportunities. Employee Month is always Medical Employee Month in the "Change in Employee Month" graph of Figure 2.2.1.

Figure 2.2.1 Distribution of Expenses [7]



See Figure 3.1.1 for Detail

See Figure 3.2.1 for More Detail

7 **Note:**
Medical PEPM includes Non-PBM drug spend (J-Codes).
Source: Medical Intelligence : Claims Module / custom timeframes for medical and pharmacy expenses.

2.2.1 Monthly Comparison of Paid Claims

Figures 2.2.2 and 2.2.3 track monthly claim paid amounts for claims incurred during the period July 2018 through June 2019. Seasonality in claims paid (in terms of date incurred) is expected, with the highest monthly claims generally occurring in the winter. Claim volumes may also rise just before or after installation of a new health plan. Claims are presented both as total and PEPM calculations.

Figure 2.2.2 Medical and Pharmacy Paid - Total [8]

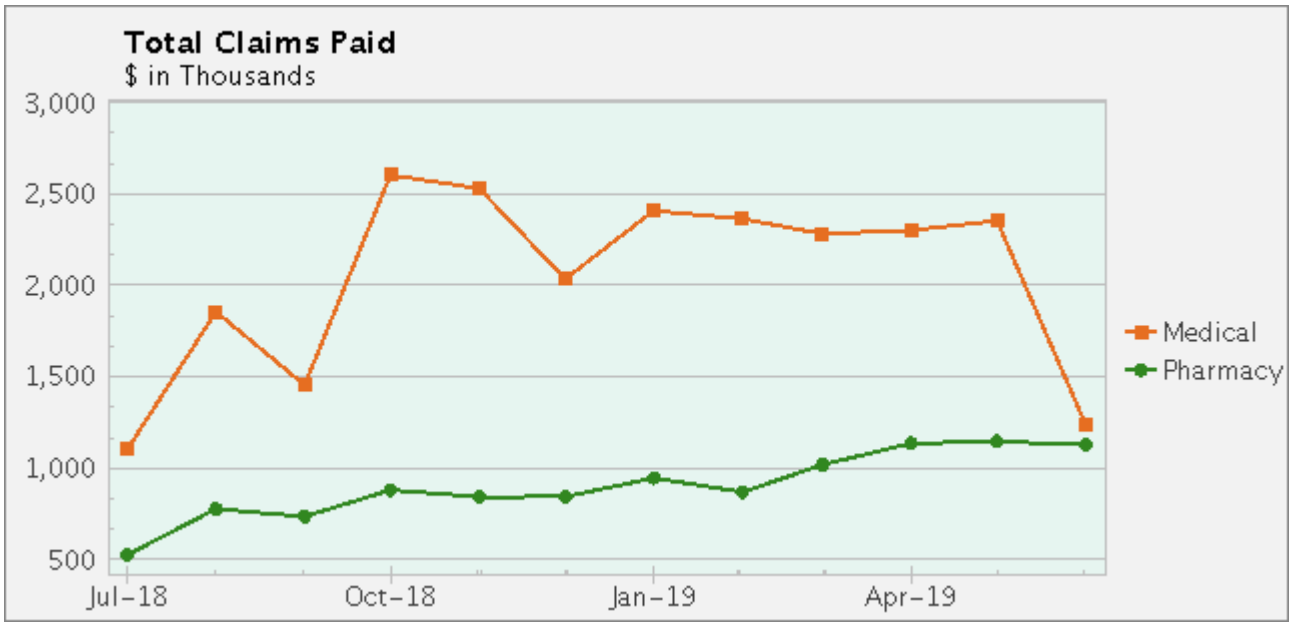
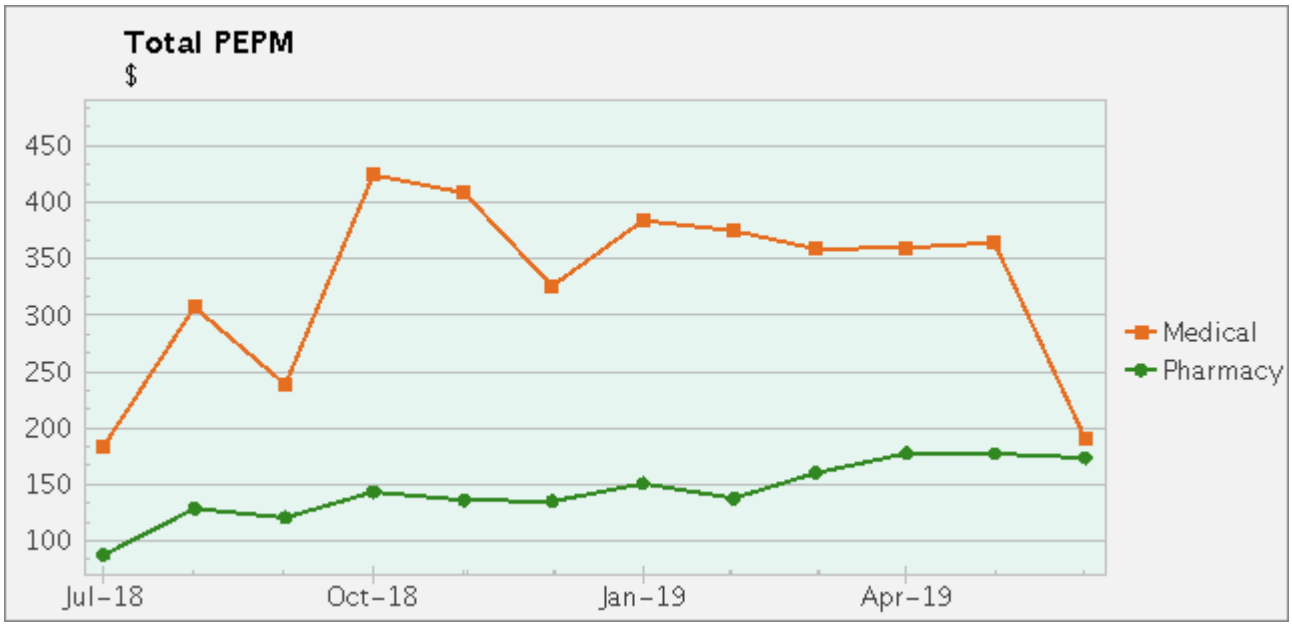


Figure 2.2.3 Medical and Pharmacy Paid - PEPM

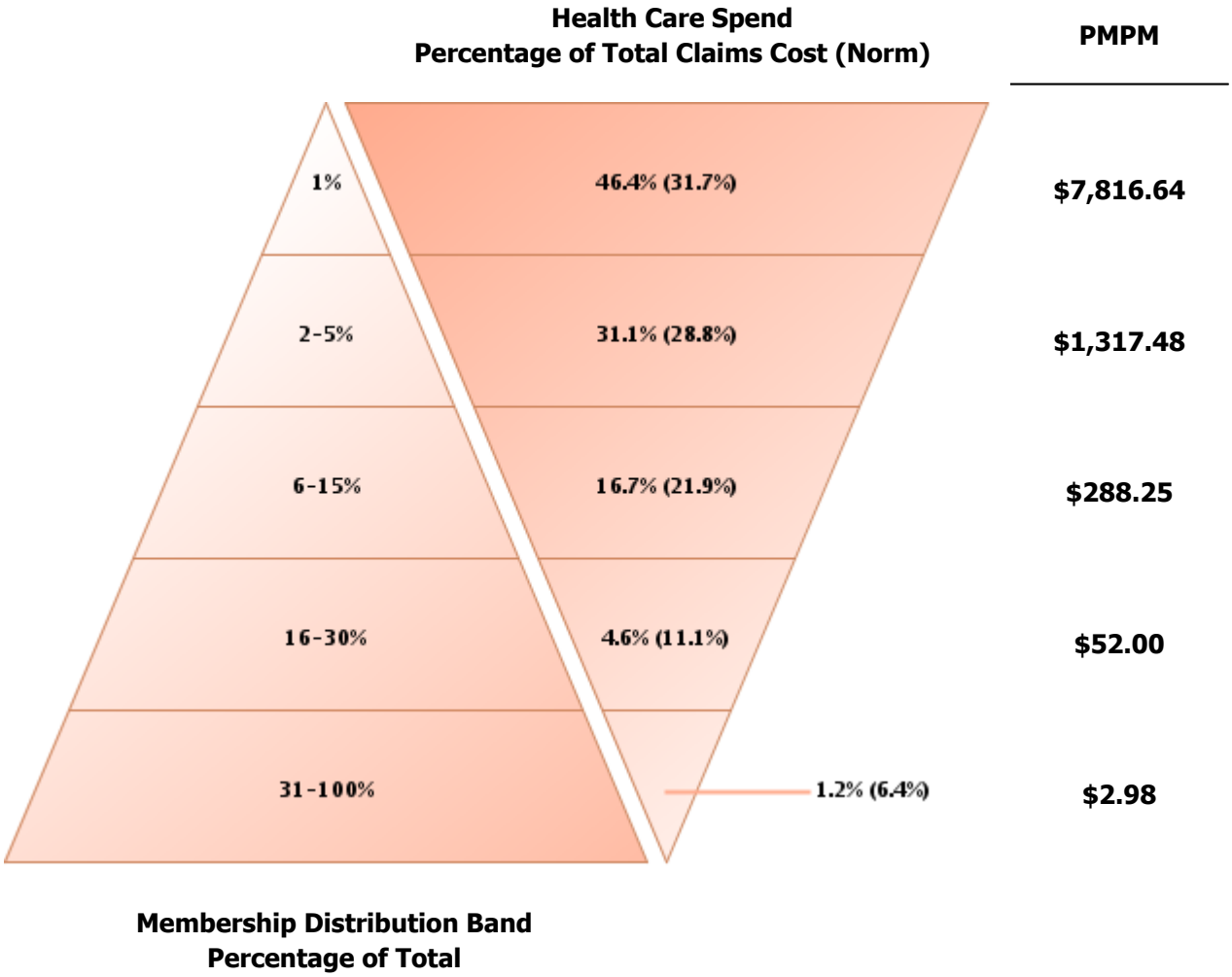


8 **Note:** Refer to Table 5.2.1 and 5.2.2 in Appendix 5.2 for supporting monthly detail.
Source: Medical Intelligence : Claims Module / Medical or Pharmacy / Trend by Month.

2.2.2 Expense Distribution by Percent Spending Band

Figure 2.2.4 shows claim payments for five different population bands including both current and termed members. Members are ranked by total claims for purposes of creating the bands. For example, the band representing 1% of the population consists of the most expensive 1% of members; approximately one-third of the total claims expense is generally accounted for by this group. These members have extremely high claims expense and should be reviewed to verify their case management status. A significant number of members in the next two bands will be high risk members, often with multiple chronic conditions. The risk associated with these members, many of whom to date have not generated significant claims expense, can be further evaluated using the Medical Intelligence Expense Distribution module.

Figure 2.2.4 Claims Expense Distribution [9]



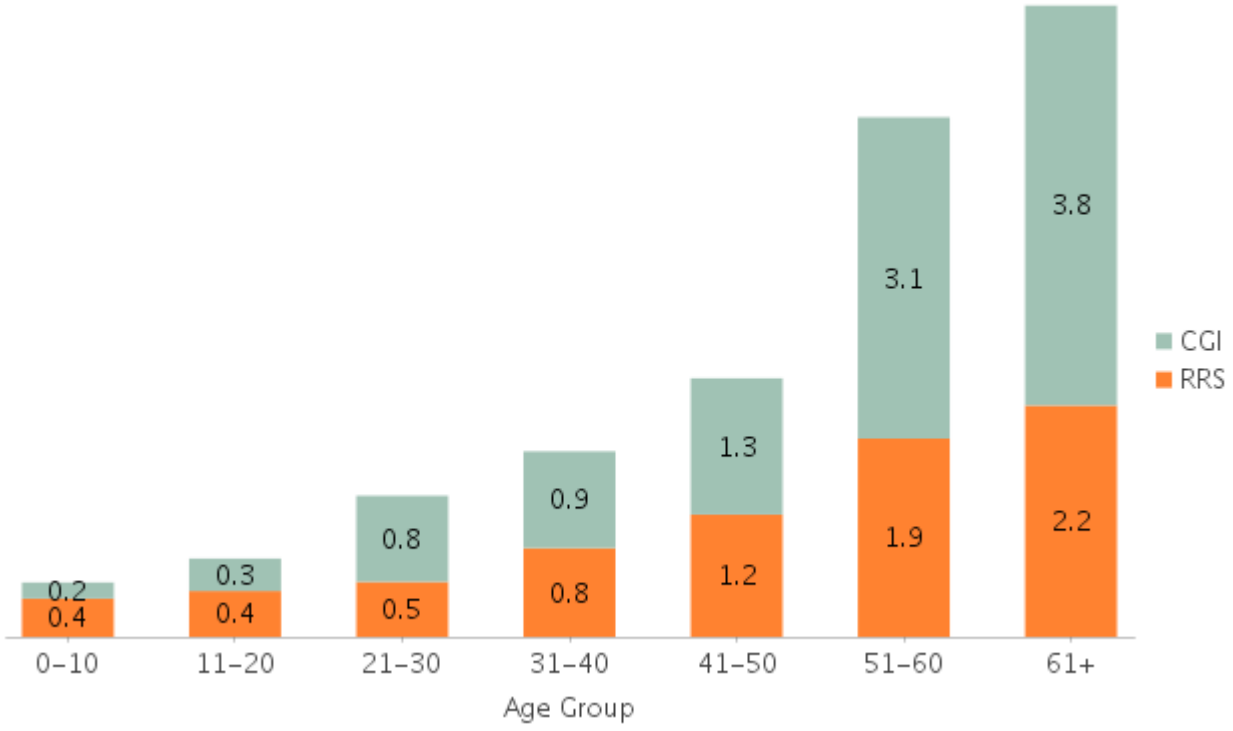
9 **Note:** Refer to Table 5.2.3 in Appendix 5.2 for further detail.
Source: Medical Intelligence : Expense Distribution Module.
PEPM Source: Medical Intelligence : Expense Distribution Module / Individual

2.3 Clinical Disease Fingerprint

The Relative Risk Score (RRS) quantifies the disease burden of an individual member, while the Care Gap Index (CGI) quantifies the gaps in appropriate medical care that a member is receiving. Depending on the diseases that a member has, the extent of care gaps present serves as one assessment of the quality of care they receive.

Figures 2.3.1 show the relationship between the RRS and the CGI. As age increases, RRS and CGI usually increase proportionally. Figure 2.3.2 shows the RRS and CGI relative to benchmark performance and discusses how to determine the extent to which your CGI is driven by high disease burden or poor quality care.

Figure 2.3.1 Average Care Gap and RRS [10]



10 Source: Medical Intelligence : Average of RRS and CGI fields, grouping members by age in the Individuals Module

Figure 2.3.2 shows the RRS and CGI relative to the Norm. Four scenarios are possible:

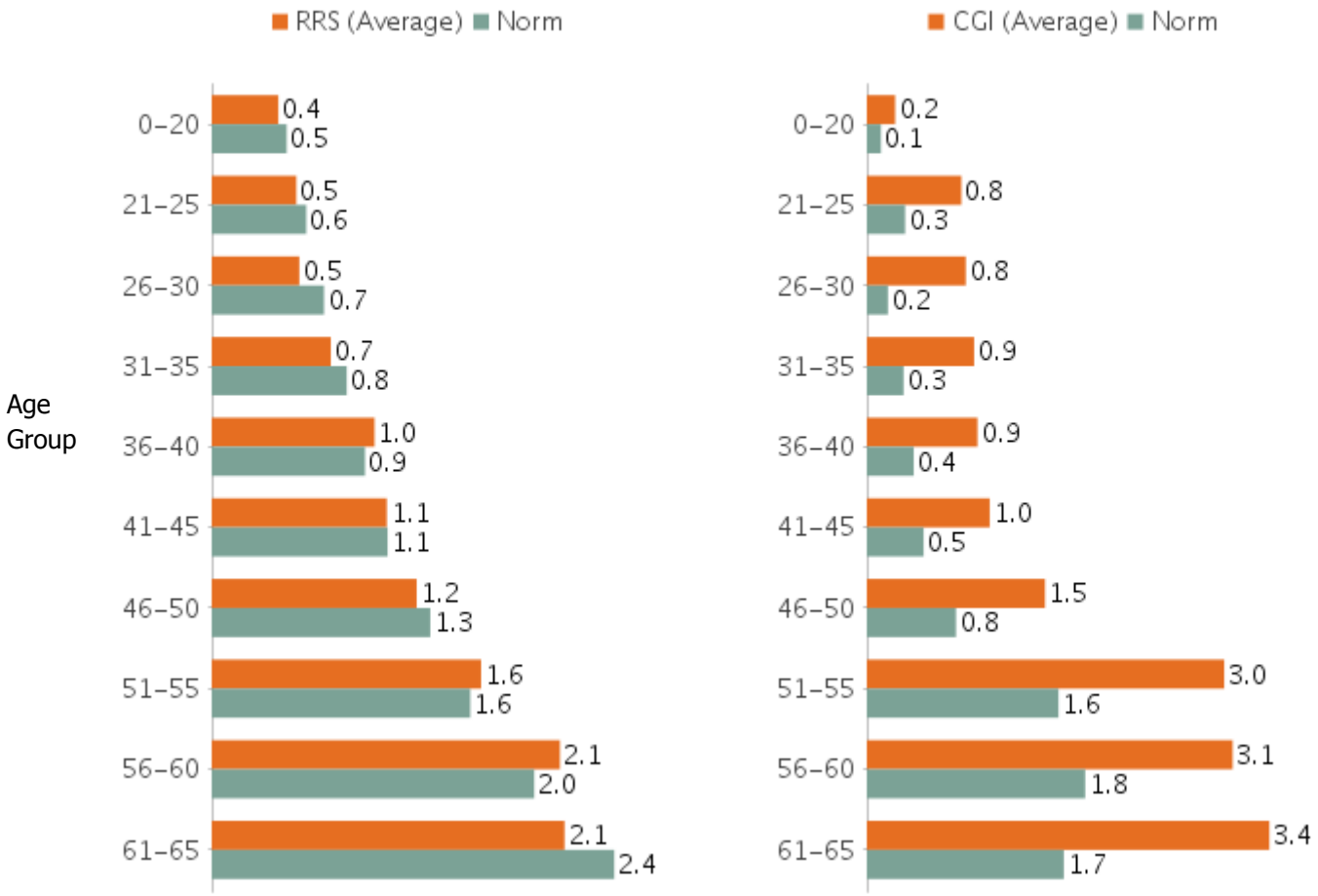
1. The population has a **higher RRS but a lower CGI** relative to the norm. This is a positive finding. The population has a higher disease burden, yet compliance with evidence-based medicine generates a CGI lower than the norm.

2. The population has a **higher RRS and a higher CGI** relative to the norm. This is a mixed finding. The population is sicker than the Norm. Because it is sicker, we expect gaps in care to be more prevalent as well. This population presents an opportunity to reduce care gaps and claims cost through disease management.

3. The population has a **lower RRS and a lower CGI** relative to the norm. This is a positive finding. The population is healthier than the Norm and also enjoys correspondingly fewer gaps in care.

4. The population has a **lower RRS but a higher CGI** relative to the norm. This is a negative finding. Although the illness burden is low for this population, there exist disproportionate gaps in compliance with evidence-based care guidelines - either through member non-compliance or poor provider quality.

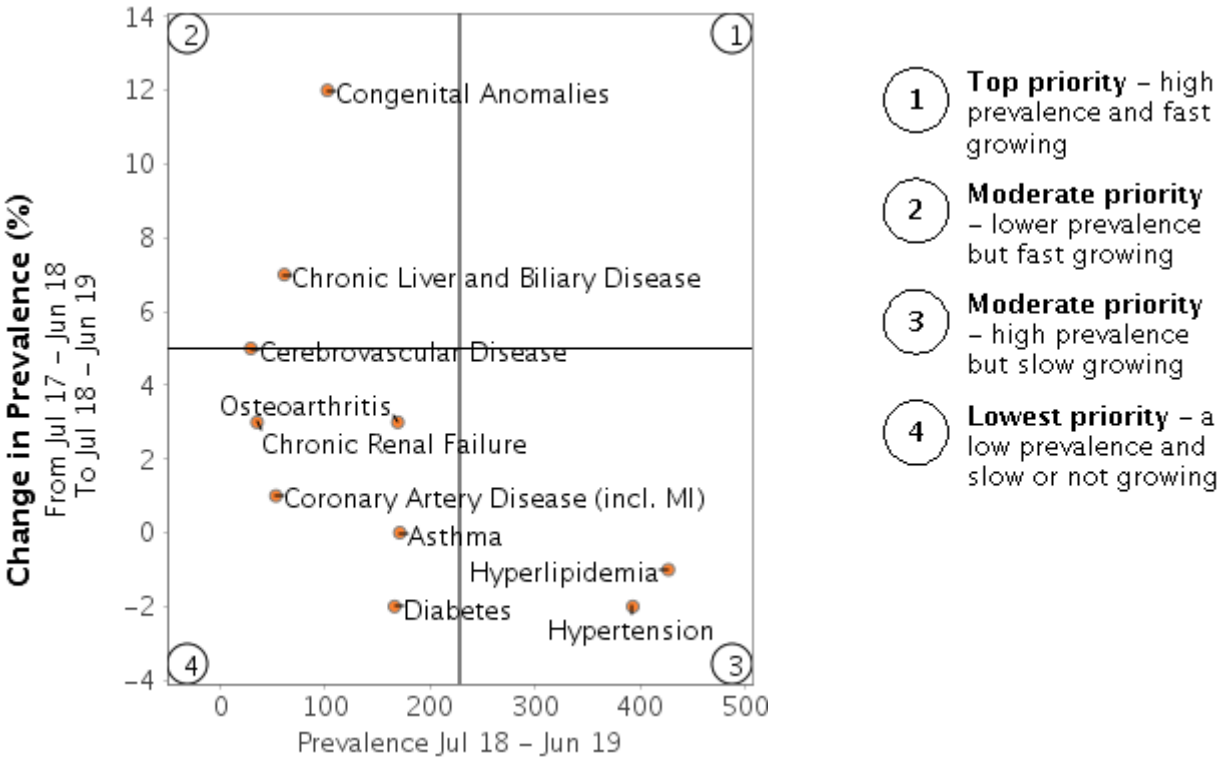
Figure 2.3.2 Spread of disease burden and gaps in care by age groups. [11]



11 Norm in this report refers to the values from Cotiviti's Commercial Normative database.

Figure 2.3.3 presents the top ten chronic diseases using the Cotiviti Disease classification scheme - this is the population's "disease fingerprint". Reducing the cost associated with these diseases is typically achieved with Disease Management programs, which typically reduce absolute utilization, and shift utilization from high cost setting to low cost settings.

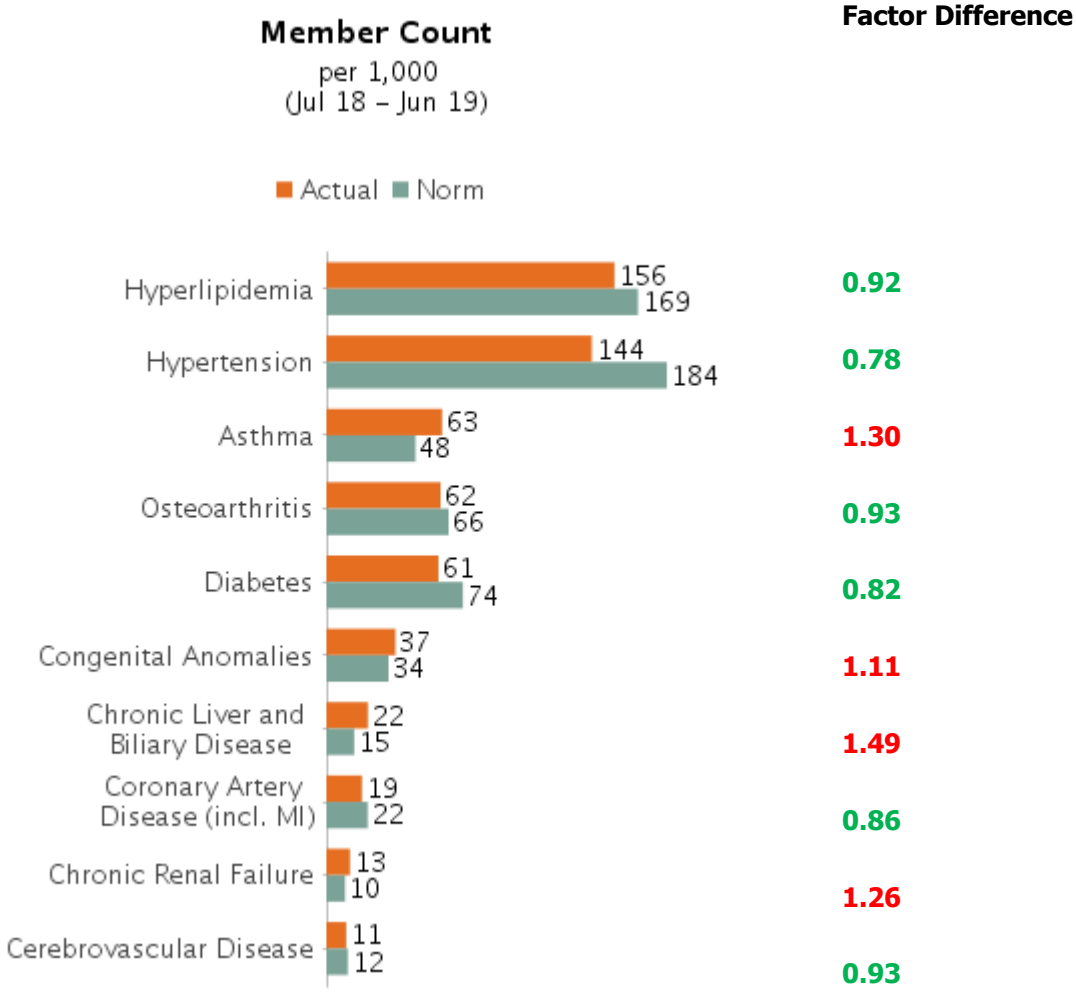
Figure 2.3.3 Prevalence and Growth of Top 10 Chronic Diseases [12]



12 **Note:** Figure 2.3.3 is based on members having a qualifying primary diagnosis (ICD9 diagnosis code).
Source: Medical Intelligence : Disease Registry Module / sort by Actual Members per 1000 / Top 10 records

Figure 2.3.4 shows the prevalence of the population's top 10 chronic diseases relative to the Cotiviti Commercial Norm benchmark values. Diseases with a factor difference less than 1, labeled in green, have lower prevalence than the Norm, while diseases labeled in red have higher prevalence. A high prevalence relative to the norm means that the high cost in claims is in part driven by intrinsic population disease burden, which can be addressed by Disease and Wellness Management programs.

Figure 2.3.4 Prevalence View of top 10 Chronic Diseases. [13, 14]



13 **Note:** Factor Difference = Actual Members per 1000 / Norm Members per 1000
Source: Medical Intelligence : Disease Registry Module / sort by Actual Members per 1000 / Top 10 records

14 Norm in this report refers to the values from Cotiviti's Commercial Normative database.

3. ECONOMIC FINDINGS AND OPPORTUNITIES

Economic findings are broken out into Medical and Pharmaceutical subsections.

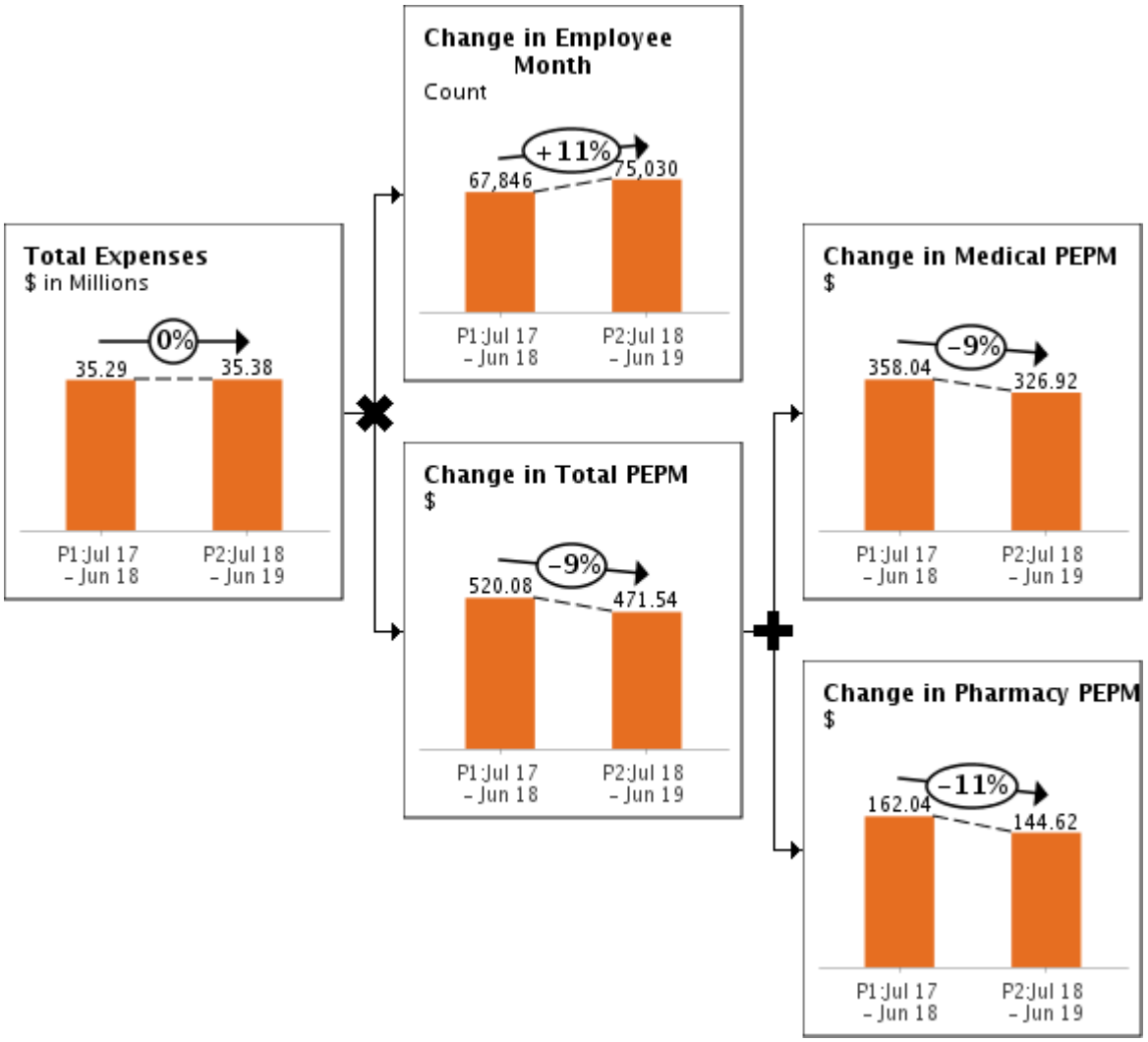
In section 3.1 - the Medical Economics subsection- this report examines:

- Factors that primarily impact unit pricing, including contract discount power and in versus out-of-network utilization rates. We also examine which geographic areas are associated with the most out-of-network spend.
- Factors that drive utilization, including specialty procedures and consultations, diagnostic testing, and the place of service. For these utilization-based drivers, we assess both changes in utilization and cost.

In section 3.2 - the Pharmaceutical section - this report examines:

- Drug classes that affect PBM drug spend, and whether the change in this spend is due to pricing growth or utilization growth. This section also details the highest cost drugs and opportunities for generic and branded switching.
- Overall Non-PBM drug spend: because this spend is a "medical" cost - not a PBM cost - the impact of these high-cost drugs is often hidden.

Figure 3.1 Expense Drivers [15]



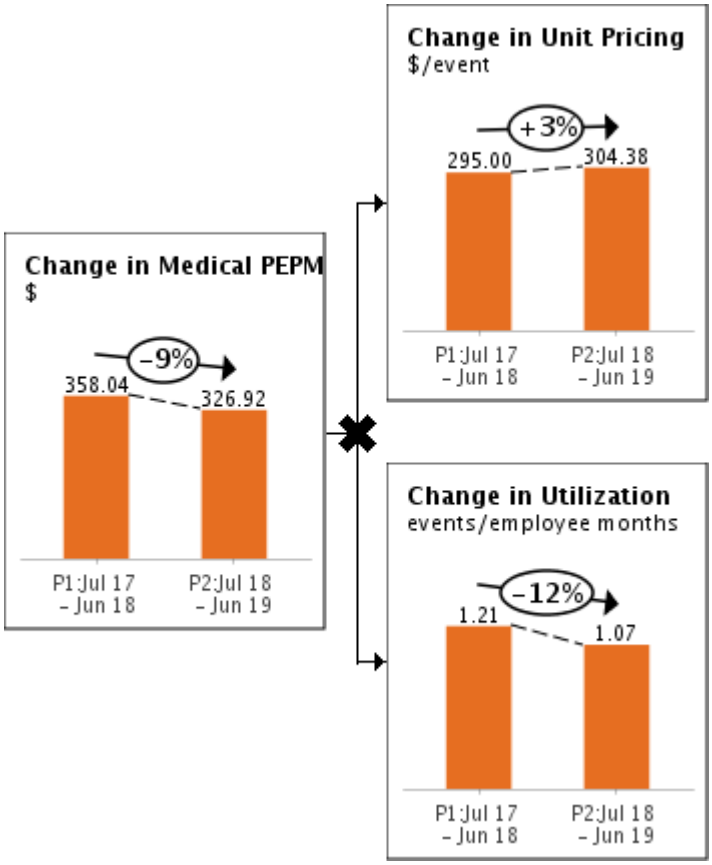
15 **Note:**
Medical PEPM includes Non-PBM drug spend (J-Codes).
Source: Medical Intelligence : Claims Module / Custom timeframes for medical and pharmacy expenses.

3.1 Medical Economics

Section 3.1 assesses medical economics - where cost increases are occurring, what is driving them, and how they can be controlled. While the areas and opportunities assessed are not additive, they are complementary. For example, managing Coronary Artery Disease more effectively can be expected to reduce the number of cardiac catheterizations, reduce the overall number of cardiology consultations, and move cardiology consultations from the inpatient setting to the lower-cost office setting.

Figure 3.1.1 shows the change in Medical expenses from previous period to current period. This chart is related to chart 2.2.1 from our assessment of aggregate economics.

Figure 3.1.1 Medical Expense Growth over Time (Refer to Figure 3.1) [16]



Changes in unit pricing are typically a function of overall medical inflation, Payor discount power, and the amount of services that are delivered in-network versus out-of-network. Payor contracting is the primary lever to control this cost driver.

Changes in utilization are typically a function of the overall disease burden of a population, benefits design and physician referral patterns. Disease and Wellness management programs, rational benefits structuring, and close network management are the primary levers to control this cost driver.

16 **Note:** Events are a distinct count of Member ID and Date of Service for the reported population and reporting period. Source: Medical Intelligence : Claims Module / Custom timeframes for medical expenses.

Section 3.1 will analyze the five areas listed directly below.

	What the analysis assesses	How excessive costs are incurred
Contract discount power	• The percent discount that a payor is able to achieve from provider	• Payors with weaker networks - and lower network discount rates - will pay higher per-unit costs
Network utilization	• The percentage and location of out-of-network claims occurrences	• On a per-unit basis, out-of-network costs are generally higher than in-network costs
Specialty procedures & consultations **Diagnostic testing** **Place of service**	• Costs are prioritized by total amount and growth rate • Cost growth drivers are disaggregated into change-in-utilization and change-in-price drivers	• High rates of utilization will drive excessive costs; utilization is typically driven by excessive specialty procedures or diagnostic testing • Excessive costs can also be driven by inappropriate location of care; for example, if a disease is treated in the ER instead of clinic

3.1.1 Network utilization and contract discounts

Table 3.1.1 details in-network (Par) and out-of-network (Non-Par) costs, ranked by plan paid, for the various networks used by your plan participants. This analysis also provides a comparison of discounts for the top ten participating networks. Most benefit plans utilize a provider network where providers have agreed to accept lower reimbursements in return for inclusion on a preferred provider list. Some out-of-network utilization is expected; examples are members seeing a provider while away from home (out-of-area claims), or seeing an out-of-network provider for an urgent or emergent healthcare condition. Out-of-network claims result in higher than expected claims expense for the service provided. A high incidence of out-of-network provider visits is usually an indication that there are access issues. These access issues can be impacted through network restructuring. Improved in-network usage can be accomplished by limiting coverage for out-of-network services.

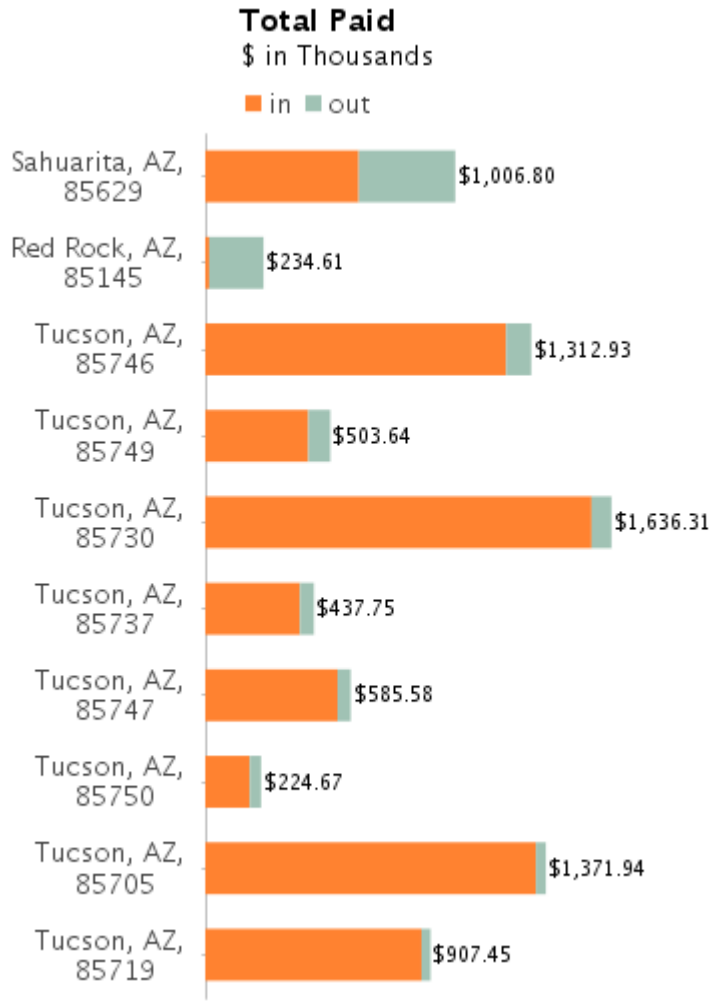
Table 3.1.1 Carrier Discounts and Network Utilization [17]

Network	Total					
	Claims Billed	Claims Allowed	Claims Paid	Employee Contribution	Network Discount	% Discount
ARIZONA (MULTI SITE) MC	$77,735,412	$25,010,509	$17,113,533	$7,204,457	$44,200,344	56.9%
11173	$9,983,836	$2,882,058	$2,442,210	$364,119	$5,395,732	54.0%
PIMA COUNTY CPII	$7,820,156	$2,452,668	$1,908,572	$509,034	$4,354,207	55.7%
VER-MONT-FIRSTHEALTH POSII	$3,678,791	$782,159	$587,645	$191,306	$2,637,119	71.7%
LOS ANGELES, CA (MC)	$729,032	$336,715	$319,776	$16,939	($80,688)	-11.1%
HAWAII - MDX HAWAII POSII	$1,274,959	$313,518	$173,215	$140,253	$829,991	65.1%
FAIRBANKS, AK MC/ NAP	$242,490	$56,236	$51,864	$4,372	$171,088	70.6%
OKLAHOMA CITY (MC)	$82,418	$39,022	$38,885	$138	$42,713	51.8%
ATLANTA (MC)	$75,048	$49,252	$36,383	$13,095	$23,692	31.6%
NATIONAL CHOICE II	$101,861	$55,873	$34,900	$20,659	$38,981	38.3%
All Other Par (In Network)	**$1,436,692**	**$523,937**	**$326,483**	**$194,286**	**$769,611**	**53.6%**
All Non-Par (Out Of Network)	**$6,701,950**	**$2,309,993**	**$1,495,444**	**$809,221**	**$540,966**	**8.1%**
Total	**$109,862,644**	**$34,811,940**	**$24,528,909**	**$9,467,878**	**$58,923,757**	**53.6%**

17 **Note:** Refer to Table 5.2.6 in Appendix 5.2 for network summary.
Source: Medical Intelligence : Network Utilization Module / Discount

Figure 3.1.2 shows the cost distribution by city and state for the members utilizing out-of-network providers. Efforts to move utilization in-network should begin with an understanding of why members located in these cities are seeing out-of-network (OON) providers.

Figure 3.1.2 Top 10 Zip Codes for Out-of-Network Claims Paid [18]



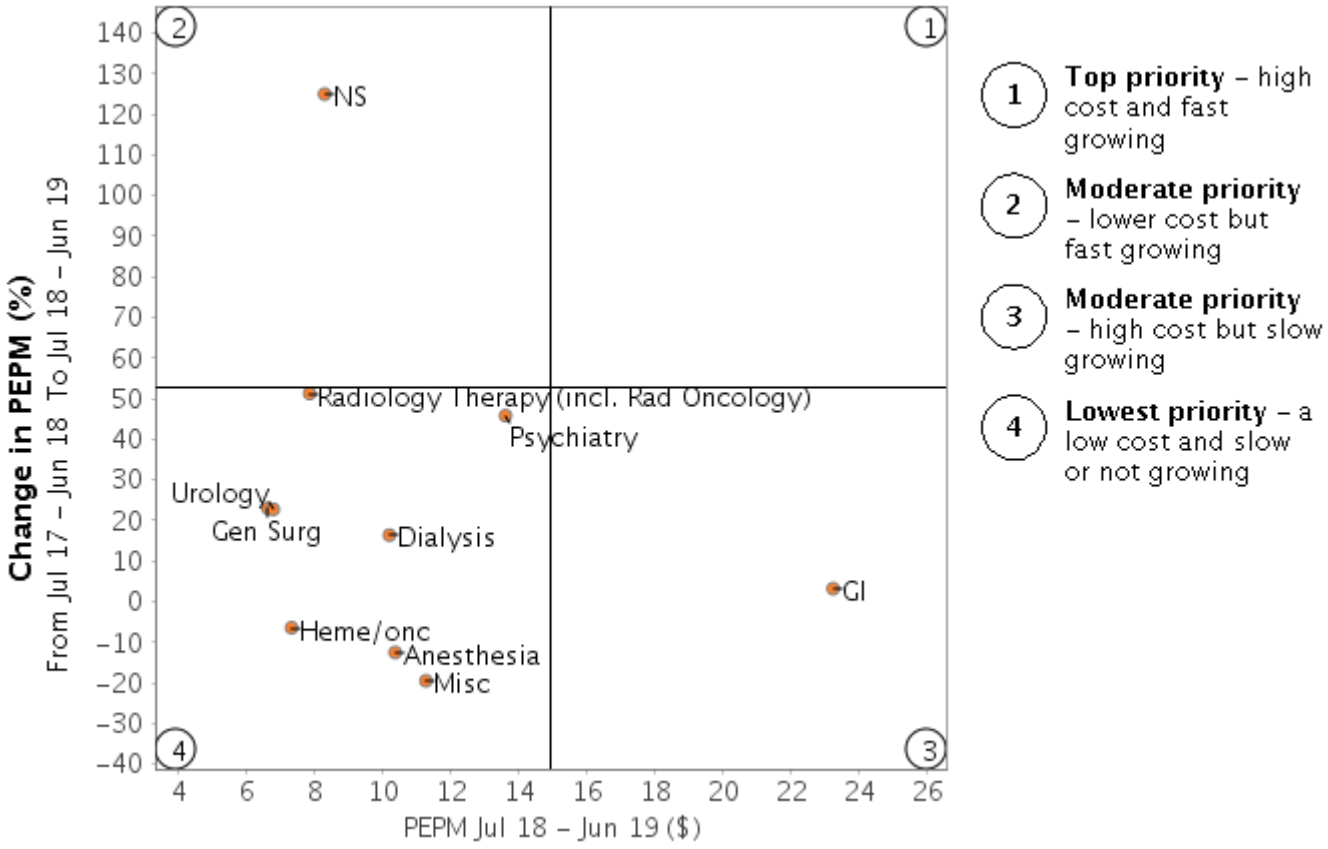
	OON Spend $ in Thousands	OON Spend	all OON Spend
Sahuarita, AZ, 85629	$388.44	38.6%	1.6%
Red Rock, AZ, 85145	$219.00	93.3%	0.9%
Tucson, AZ, 85746	$100.97	7.7%	0.4%
Tucson, AZ, 85749	$88.29	17.5%	0.4%
Tucson, AZ, 85730	$80.46	4.9%	0.3%
Tucson, AZ, 85737	$56.54	12.9%	0.2%
Tucson, AZ, 85747	$53.24	9.1%	0.2%
Tucson, AZ, 85750	$45.42	20.2%	0.2%
Tucson, AZ, 85705	$40.24	2.9%	0.2%
Tucson, AZ, 85719	$36.52	4.0%	0.1%
Total = $1.11 M			

18 Source: Medical Intelligence : Network Utilization Module / Drill by Zip / Top 10 Zip codes based on NON PAR Paid

3.1.2 Specialty procedures/consultations

Specialty procedures, and the consultations that lead to those procedures, are a common driver of excess utilization. The chart below shows what procedures are large and are growing fast. Moving left to right on the horizontal axis, total costs incurred get larger. Moving bottom to top on the vertical axis, growth from previous period through current period in costs increases. Therefore, specialties in the upper right corner are both large and growing fast.

Figure 3.1.3 Cost drivers: Areas of cost and cost growth for specialty procedures and consultations [19]



19 **Note:** Figure 3.1.3 is based on select categories of Cotiviti Procedure Groups which utilize CPT4 Procedure Codes.
Source: Medical Intelligence : Claims Module / Trend / Medical / drill by Plan Type / Zoom Fwd / drill by Procedure Group

The table below breaks down the cost driver for each category analyzed in the prior chart. This allows you to understand whether the changes in cost are driven by a change in pricing or a change in utilization. Also displayed is the average cost from the Cotiviti Normative Database, and the population's cost rank relative to the Norm.

Table 3.1.2 Cost drivers: Change in unit price and change in utilization breakout for specialty procedures and consultations [20, 21]

Specialty Procedures/ Consultations	Current PEPM	Change in PEPM	Change in Utilization per 1,000	Change in Unit Pricing	Norm value of PEPM
GI	$23.23	3.2%	-0.1%	3.3%	$39.07
Psychiatry	$13.61	45.8%	-8.0%	58.5%	$11.64
Misc	$11.27	-19.5%	-13.0%	-7.5%	$20.82
Anesthesia	$10.37	-12.5%	-6.4%	-6.6%	$22.52
Dialysis	$10.20	16.4%	-27.2%	59.9%	$7.24
NS	$8.29	125.0%	-5.1%	137.1%	$11.40
Radiology Therapy (incl. Rad Oncology)	$7.85	51.2%	16.6%	29.7%	$9.50
Heme/onc	$7.32	-6.4%	4.3%	-10.3%	$13.87
Urology	$6.78	22.7%	-11.0%	37.9%	$8.18
Gen Surg	$6.64	23.0%	4.7%	17.4%	$12.43

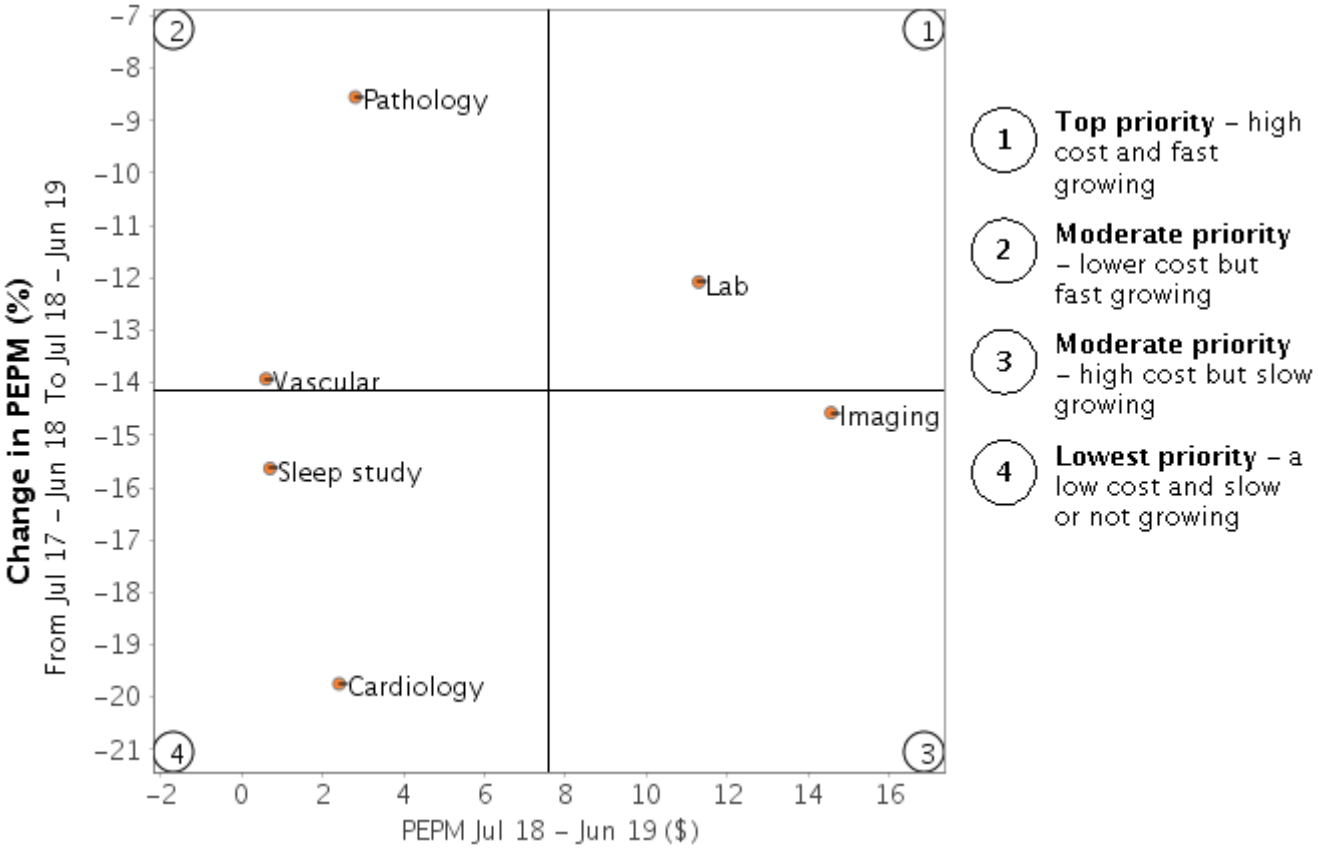
20 **Note:** Table 3.1.2 is based on select categories of Cotiviti Procedure Groups which utilize CPT4 Procedure Codes.
Source: Medical Intelligence : Claims Module / Trend / Medical / drill by Plan Type / Zoom Fwd / drill by Procedure Group

21 Norm in this report refers to the values from Cotiviti's Commercial Normative database.

3.1.3 Diagnostic Testing

The chart below shows what diagnostic tests are large and are growing fast. Moving left to right on the horizontal axis, total costs incurred get larger. Moving bottom to top on the vertical axis, growth from previous period through current period in costs increases. Therefore, tests in the upper right corner are both large and growing fast.

Figure 3.1.4 Cost drivers: Areas of cost and cost growth for diagnostic tests [22]



22 **Note:** Figure 3.1.4 is based on select categories of Cotiviti Procedure Groups which utilize CPT4 Procedure Codes.
Source: Medical Intelligence : Claims Module / Trend / Medical / drill by Plan Type / Zoom Fwd / drill by Procedure Group

The table below breaks down the cost driver for each category analyzed in the prior chart. This allows you to understand whether the changes in cost are driven by a change in pricing or changes in utilization. Also displayed is the average cost from the Cotiviti Normative Database, and the population's cost rank relative to the Norm.

Table 3.1.3 Cost drivers: Change in unit price and change in utilization breakout for diagnostic tests [23, 24]

Testing Category	Subcategory	Current PEPM	Change in PEPM	Change in utilization per 1,000	Change in Unit pricing	Norm value of PEPM
Cardiology	All	$2.41	-19.7%	-12.0%	-63.5%	$7.91
	Ultrasound/Doppler	$1.37	1.2%	-10.5%	13.2%	$4.21
	Cardiography	$0.93	-3.7%	-12.1%	9.6%	$2.94
	Electrophysiology	$0.11	-84.2%	-22.2%	-79.7%	$0.76
Imaging	All	$14.56	-14.6%	-10.3%	-21.0%	$47.45
	MRI	$4.30	-9.0%	-8.8%	-0.1%	$11.97
	CT	$4.27	-16.1%	-9.2%	-7.5%	$13.59
	Plain film	$2.31	3.6%	-14.3%	20.8%	$6.58
	US	$1.59	-25.6%	-8.4%	-18.8%	$7.46
	Radiology Diagnostic (incl. Cardiology)	$1.53	-15.9%	46.8%	-42.7%	$4.50
	Not classified	$0.55	-46.9%	-11.8%	-39.8%	$3.34
Lab	All	$11.29	-12.1%	-9.2%	-3.1%	$33.40
Pathology	All	$2.81	-8.5%	-12.8%	4.9%	$6.93
Sleep study	All	$0.70	-15.6%	-11.2%	-5.0%	$2.19
Vascular	All	$0.61	-13.9%	2.8%	-16.3%	$1.74

23 **Note:** Table 3.1.3 is based on select categories of Cotiviti Procedure Groups which utilize CPT4 Procedure Codes.
Source: Medical Intelligence : Claims Module / Trend / Medical / drill by Plan Type / Zoom Fwd / drill by Procedure Group

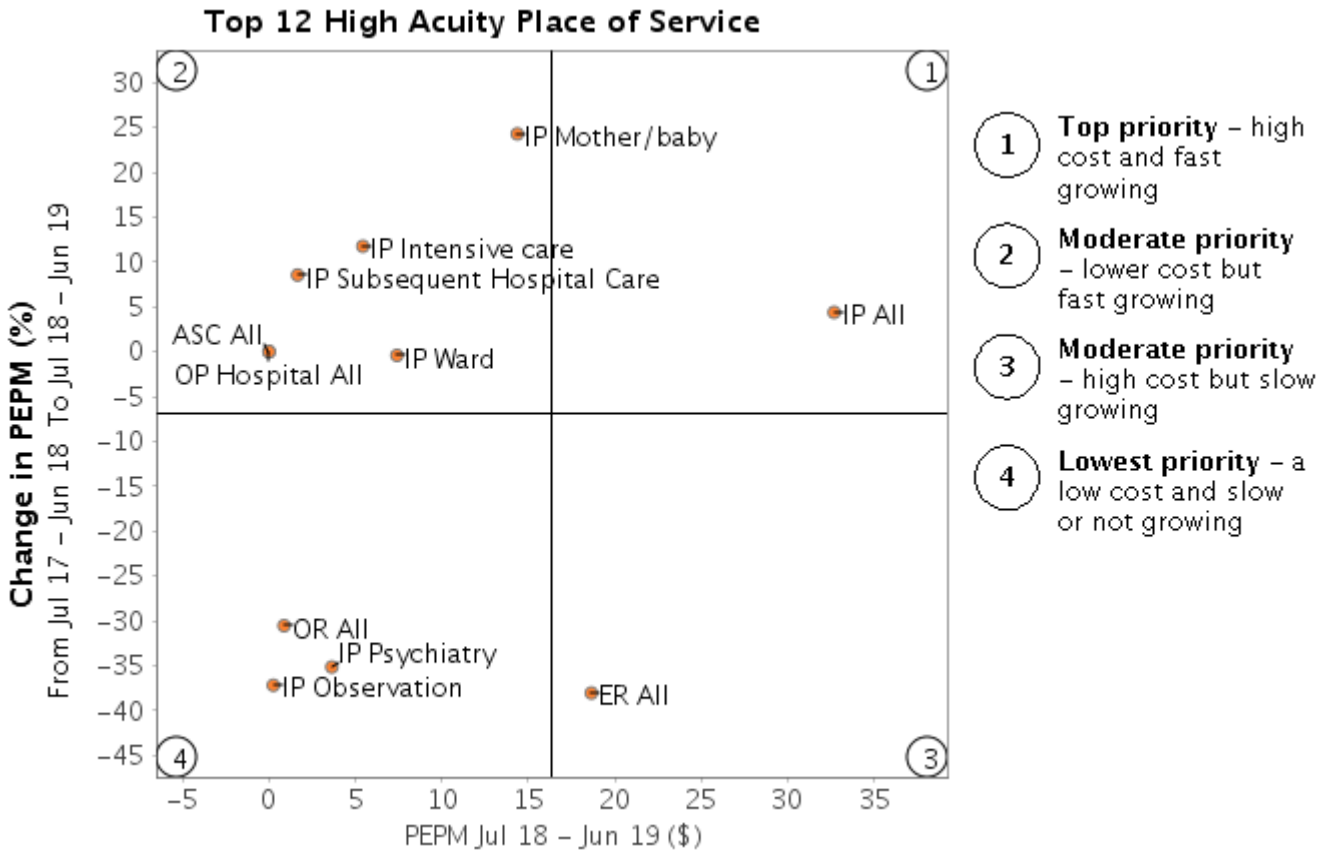
24 Norm in this report refers to the values from Cotiviti's Commercial Normative database.

3.1.4 Place of service - Inpatient and high acuity

Monitoring the utilization patterns for chronic conditions offers valuable insight into benefit design and/or case and disease management program performance. In general, high utilization rates for such measures as inpatient admissions and emergency room services in these conditions bring into question the adequacy of outpatient care, plan design incentives to encourage outpatient care, and medical management performance.

The chart below shows which inpatient and high acuity places of service are large and are growing fast. Moving left to right on the horizontal axis, total costs incurred get larger. Moving bottom to top on the vertical axis, growth from previous period through current period in costs increases. Therefore, locations in the upper right corner are both large and growing fast.

Figure 3.1.5 Cost drivers: Areas of cost and cost growth for hospital and ASC based utilization [25]



25 **Note:** Figure 3.1.5 is based on select categories of Cotiviti Procedure Groups which utilize CPT4 Procedure Codes.
Source: Medical Intelligence : Claims Module / Trend / Medical / drill by Plan Type / Zoom Fwd / drill by Procedure Group

The table below breaks down the cost driver for each category analyzed in the prior chart. This allows you to understand whether the changes in cost are driven by a change in pricing or a change in utilization. Also displayed is the average cost from the Normative Database, and the population's cost rank relative to the Norm.

Table 3.1.4 Cost drivers: Change in unit price and change in utilization breakout for Inpatient and high acuity locations of care [26, 27]

Category	Subcategory	Current PEPM	Change in PEPM	Change in utilization per 1,000	Change in Unit pricing	Norm value of PEPM
ASC	All	$0.00	0.0%	0.0%	0.0%	$1.36
ER	All	$18.65	-38.0%	-13.9%	-28.1%	$30.57
IP	All	$32.69	4.4%	-1.9%	38.5%	$60.28
	Mother/baby	$14.36	24.3%	32.0%	-5.9%	$22.25
	Ward	$7.40	-0.4%	-2.3%	2.0%	$19.53
	Intensive care	$5.42	11.8%	-25.2%	49.4%	$9.60
	Psychiatry	$3.62	-35.1%	-58.9%	57.8%	$4.62
	Subsequent Hospital Care	$1.64	8.5%	-2.9%	11.8%	$2.71
	Observation	$0.24	-37.2%	-24.1%	-17.2%	$1.56
OP Hospital	All	$0.00	0.0%	193.9%	0.0%	$0.10
OR	All	$0.86	-30.5%	-14.6%	-18.7%	$6.62

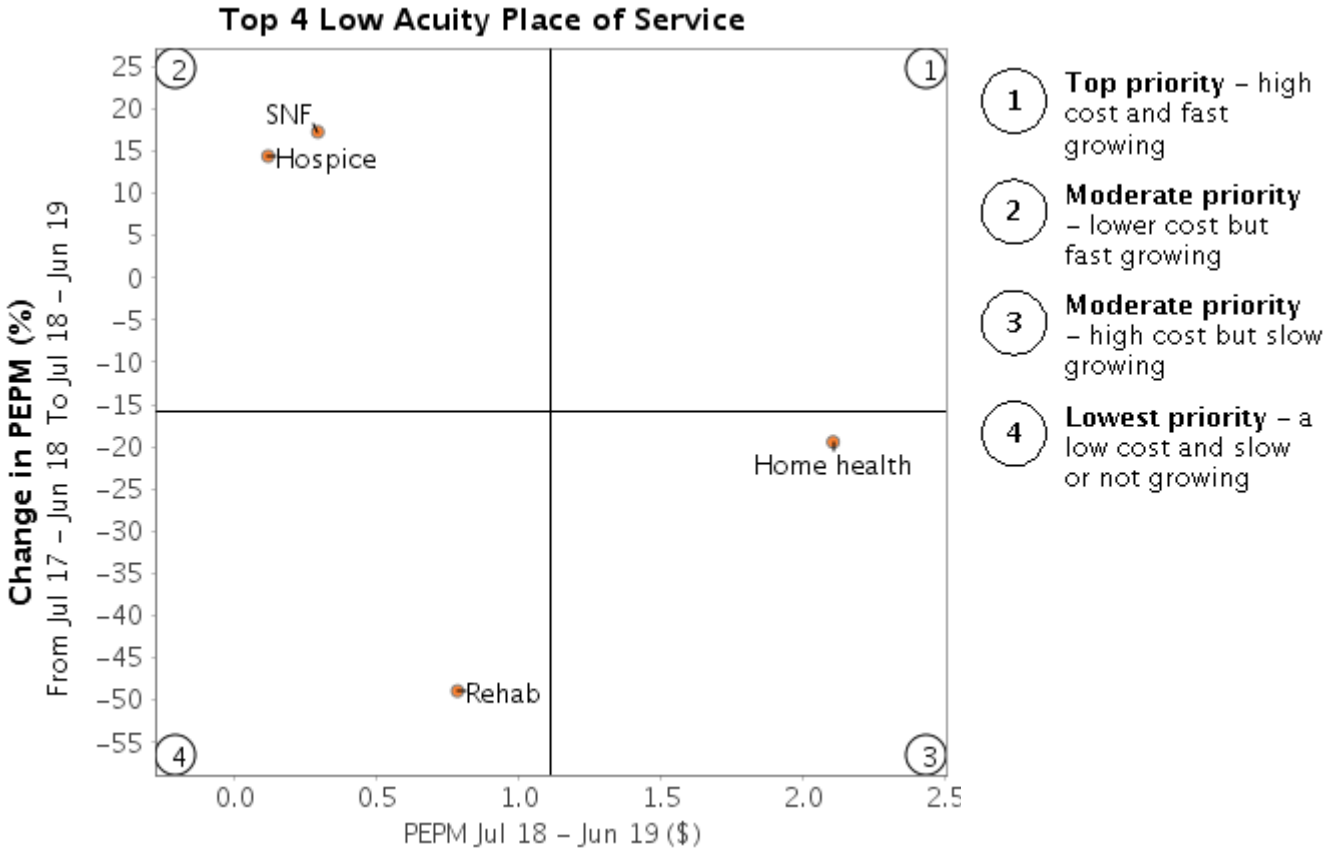
26 **Note:** Table 3.1.4 is based on select categories of Cotiviti Procedure Groups which utilize CPT4 Procedure Codes.
Source: Medical Intelligence : Claims Module / Trend / Medical / drill by Plan Type / Zoom Fwd / drill by Procedure Group

27 Norm in this report refers to the values from Cotiviti's Commercial Normative database.

3.1.5 Place of service - Outpatient and low acuity (excluding office visits)

The chart below shows which outpatient and low-acuity places of service are large and are growing fast. Moving left to right on the horizontal axis, costs incurred by location get larger. Moving bottom to top on the vertical axis, growth from previous period through current period in costs increases. Therefore, locations in the upper right corner are both large and growing fast.

Figure 3.1.6 Cost drivers: Areas of cost and cost growth for outpatient and community based utilization (excluding office visits) [28]



28 **Note:** Figure 3.1.6 is based on select categories of Cotiviti Procedure Groups which utilize CPT4 Procedure Codes.
Source: Medical Intelligence : Claims Module / Trend / Medical / drill by Plan Type / Zoom Fwd / drill by Procedure Group

The table below breaks down the cost driver for each category analyzed in the prior chart. This allows you to understand whether the change in cost seen in chart 3.1.1 is driven by a change in unit price or a change in utilization. Also displayed is the average cost from the Normative Database and the population's cost rank relative to the Norm.

Table 3.1.5 Cost drivers: Change in unit price and change in utilization breakout for Outpatient and low acuity care (excluding office visits) 29, 30

Category	Current PEPM	Change in PEPM	Change in Utilization per 1,000	Change in Unit Pricing	Norm value of PEPM
Home health	$2.11	-19.4%	-10.9%	-9.6%	$2.68
Rehab	$0.78	-48.9%	-74.9%	103.4%	$1.61
SNF	$0.29	17.3%	-60.8%	199.0%	$0.76
Hospice	$0.12	14.4%	32.3%	-13.5%	$0.30

29 **Note:** Table 3.1.5 is based on select categories of Cotiviti Procedure Groups which utilize CPT4 Procedure Codes.
Source: Medical Intelligence : Claims Module / Trend / Medical / drill by Plan Type / Zoom Fwd / drill by Procedure Group

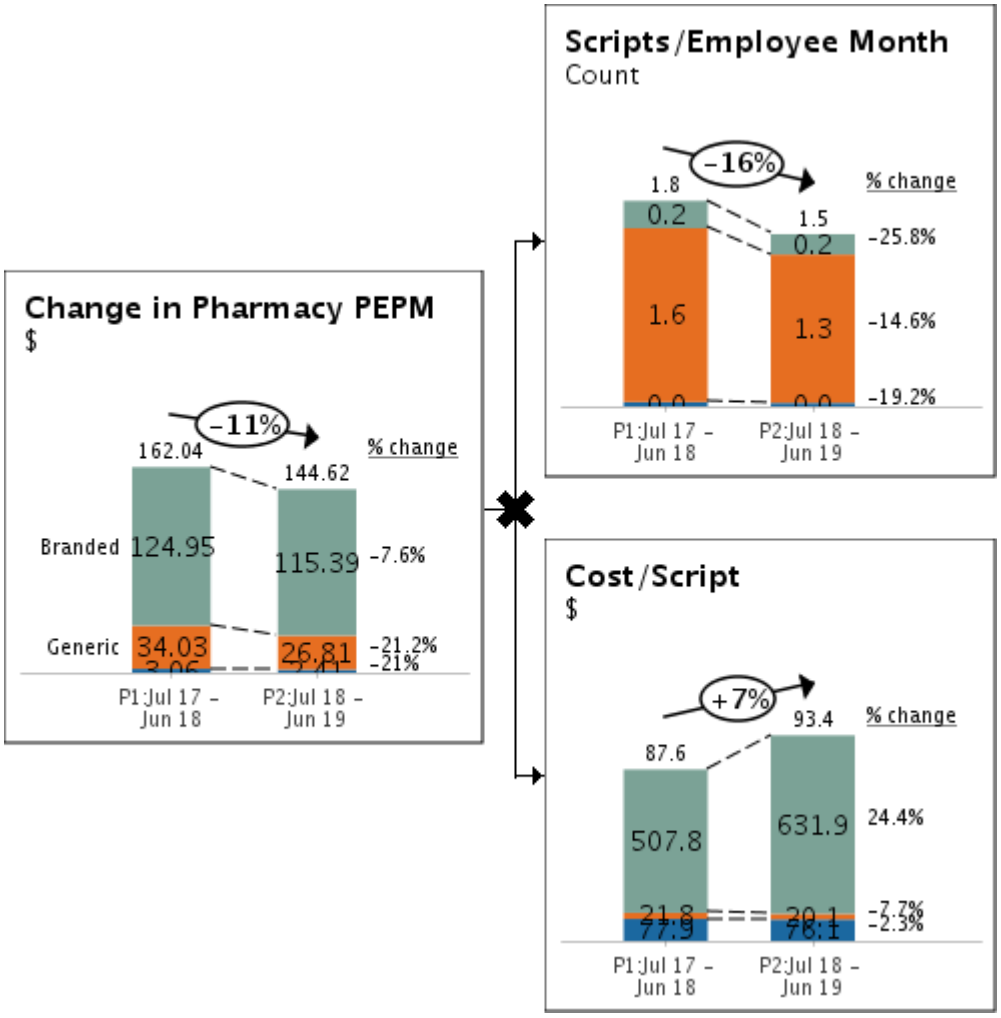
30 Norm in this report refers to the values from Cotiviti's Commercial Normative database.

3.2 Pharmacy Economics

Growth from previous period through current period in pharmacy expenses can be attributed to changes in Employee Months and pharmacy PEPM cost , as shown in chart 2.2.1 .

Increase or decrease of pharmacy PEPM is caused by changes in the number of prescriptions written per Employee Month and changes in the cost per prescription.

Figure 3.2.1 Pharmacy Expenses (Refer to Figure 2.2.1) [31]



Changes in scripts per member reflect overall intensity of care and member compliance. Overall trends in volume are less important than the change on the ratios between branded and generic drugs.

Changes in cost/ script reflect overall pharmaceutical industry pricing trends. This cost driver is best controlled through strong PBM contracting and tight formulary control.

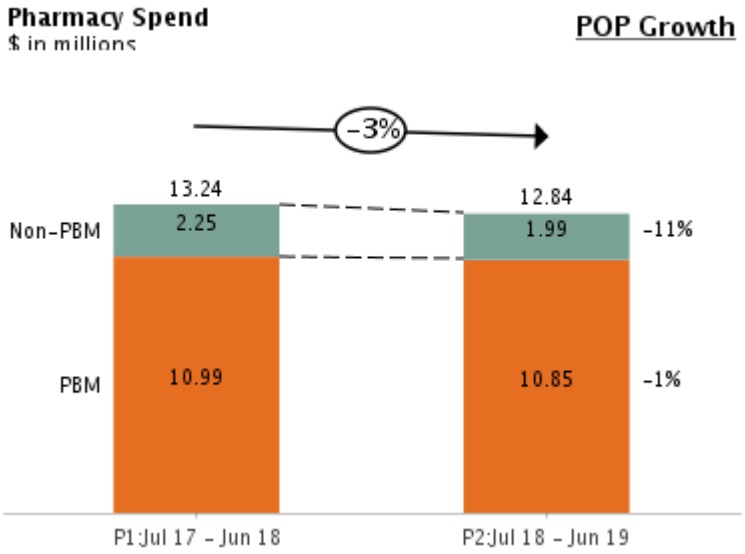
31 **Note:** Pharmacy PEPM totals reflect branded, generic and non-drug costs. Non-drug costs include items like diabetic supplies and syringes which typically have low PMPM costs. Within the Medical Intelligence application, non-drug charges are located within the non-generic category.
Source: Medical Intelligence : Claims Module / Pharmacy / Plan Type

3.2.1 Non-PBM Drug Spend

Non-PBM spend on pharmaceuticals is paid by Health Plan, not the PBM. It is therefore included in medical expenses and usually includes the J-Codes. However, many non-PBM drugs are exceptionally expensive and deserve special attention. Non-PBM drug spend is often best controlled through the use of contracting Specialty Pharmacy networks.

Figure 3.2.2 shows the total pharmacy spend as seen in chart 3.2.1, now with the non-PBM spend added in.

Figure 3.2.2 Distribution of Pharmacy Spend (Refer to Figure 3.2.1) [32]



The top 10 drugs driving non-PBM spend are listed in table 3.2.1, with unit price and utilization values broken out.

Table 3.2.1 Top 10 drugs driving non-PBM spend [33, 34]

Drug	Current PEPM	Change in PEPM	Change in # Scripts	Change in Unit Pricing	Norm value of PEPM
Agalsidase Beta Injection	$3.48	-31.4%	-3.0%	-21.8%	$0.24
Injection, ocrelizumab, 1 mg	$3.02	330.3%	700.0%	-40.5%	-
Bevacizumab Injection	$2.19	3,334.5%	35.5%	2,703.4%	$1.87
INJECTION TREPROSTINIL 1 MG	$1.89	-24.0%	-42.4%	46.0%	$0.09
Infliximab not biosimil 10mg	$1.76	28.7%	-49.1%	179.3%	$4.25
Botulinum Toxin a Per Unit	$1.05	-1.8%	13.2%	-4.0%	$0.52
Injection, Pegfilgrastim, 6 Mg	$0.98	52.3%	142.9%	-30.7%	$2.50
Inj trastuzumab excl biosimi	$0.96	56.2%	12.5%	53.5%	-
Injection, Octreotide, Depot Form for Intra-	$0.70	-67.8%	-14.3%	-58.4%	$0.43

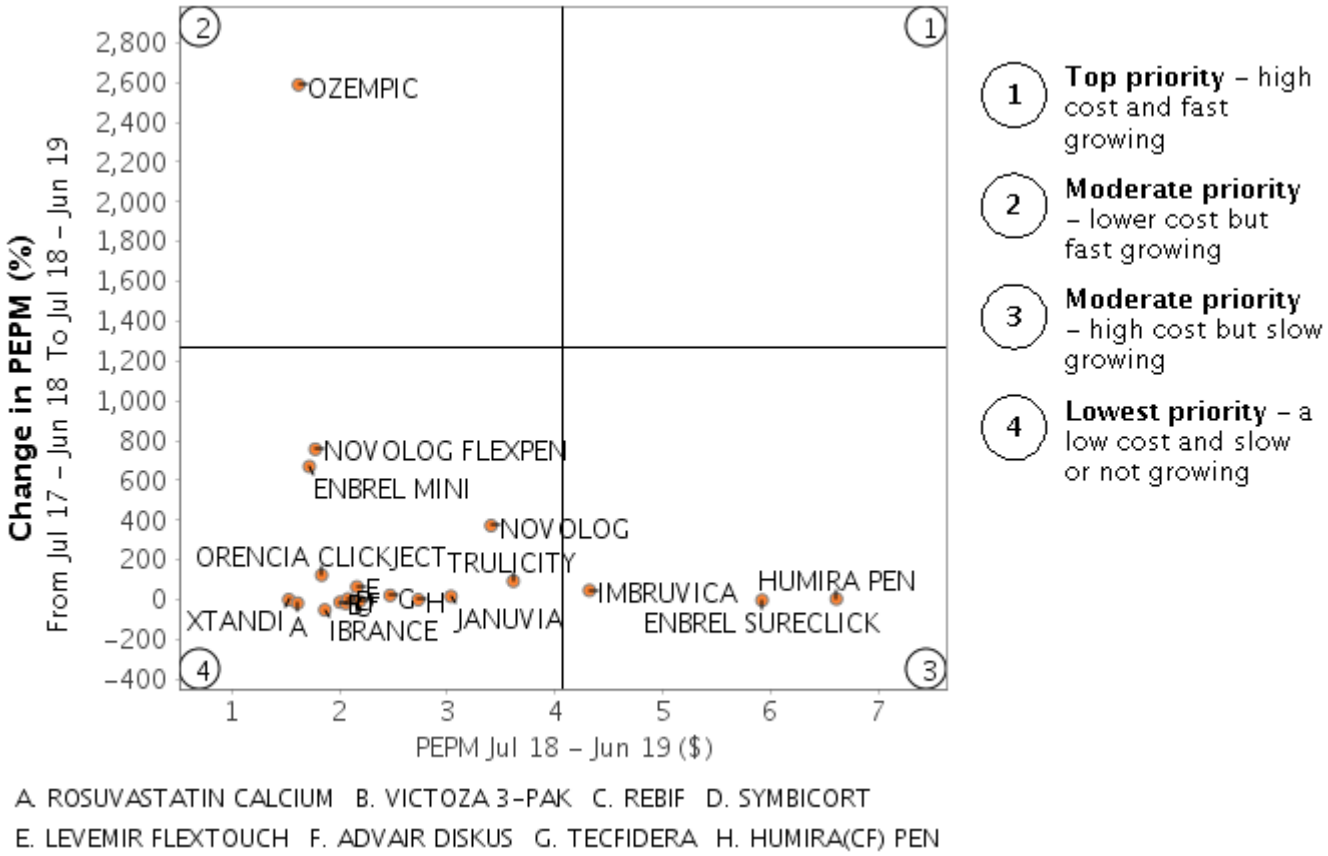
32 Source: Medical Intelligence : PBM Cost: Claims Module / Pharmacy
Non PBM Cost: Claims Module / Medical / drill by Plan Type / Zoom Forward / drill by Procedure Group / Non-PBM Drug
33 Source: Medical Intelligence : Claims module / Medical / Plan Type / Zoom Forward / drill by Procedure Group / Non-PBM Drug / Source
34 Norm in this report refers to the values from Cotiviti's Commercial Normative database.

Drug	Current PEPM	Change in PEPM	Change in # Scripts	Change in Unit Pricing	Norm value of PEPM
muscular Injection, 1 Mg					
Rituximab Cancer Treatment	$0.67	-56.1%	-62.5%	29.6%	$1.77

3.2.2 PBM drug spend

The chart below shows which drugs are large and are growing fast. Moving left to right on the horizontal axis, total costs incurred by drug get larger. Moving bottom to top on the vertical axis, growth from previous period through current period in costs increases. Therefore, locations in the upper right corner are both large and growing fast. In general, drugs that do not have generic or branded substitutes will typically have the highest rates of cost inflation, but lower overall absolute costs.

Figure 3.2.3 Cost drivers: Areas of cost and cost growth by drug [35]



35 Source: Medical Intelligence : Claims module / Trend / Pharmacy / drill by Plan Type / Zoom Forward / drill by Rx Class / drill by Drug

Table 3.2.2 Top 20 Drugs [36, 37]

Drugs	Branded to Generic ratio	Current PEPM	Change in PEPM	Change in # Scripts	Change in Unit Pricing	Norm value of PEPM
HUMIRA PEN	0.00	$6.61	3.3%	-5.6%	21.0%	$8.57
ENBREL SURECLICK	0.00	$5.92	-2.6%	11.0%	-3.0%	$3.88
IMBRUVICA	0.00	$4.32	46.1%	61.1%	0.3%	$0.34
TRULICITY	0.00	$3.61	93.1%	84.7%	15.6%	$0.61
NOVOLOG	0.00	$3.41	372.5%	635.1%	-28.9%	$1.18
JANUVIA	0.00	$3.03	16.6%	12.2%	15.0%	$1.47
HUMIRA(CF) PEN	0.00	$2.73	0.0%	0.0%	0.0%	-
TECFIDERA	0.00	$2.47	21.3%	22.7%	9.3%	$2.65
ADVAIR DISKUS	0.00	$2.18	-7.2%	-4.0%	6.8%	$1.36
LEVEMIR FLEXTOUCH	0.00	$2.16	64.2%	54.3%	17.6%	$0.97
SYMBICORT	0.00	$2.08	3.4%	4.4%	9.6%	$0.71
REBIF	0.00	$2.06	-18.7%	-8.0%	-2.3%	$0.70
VICTOZA 3-PAK	0.00	$2.00	-12.1%	-9.9%	7.9%	$1.37
IBRANCE	0.00	$1.86	-52.0%	-45.8%	-2.0%	$0.61
ORENCIA CLICKJECT	0.00	$1.83	123.2%	146.7%	0.1%	$0.01
NOVOLOG FLEXPEN	0.00	$1.77	756.8%	715.4%	16.2%	$1.14
ENBREL MINI	0.00	$1.72	668.8%	866.7%	-12.0%	-
OZEMPIC	0.00	$1.62	2,588.8%	2,450.0%	16.6%	-
ROSUVASTATIN CALCIUM	N/A	$1.61	-17.6%	5.5%	-13.7%	$0.41
XTANDI	0.00	$1.53	0.0%	0.0%	0.0%	$0.17

36 Source: Medical Intelligence : Claims module / Trend / Pharmacy / drill by Plan Type / Zoom Forward / drill by Rx Class / drill by Drug
37 Norm in this report refers to the values from Cotiviti's Commercial Normative database.

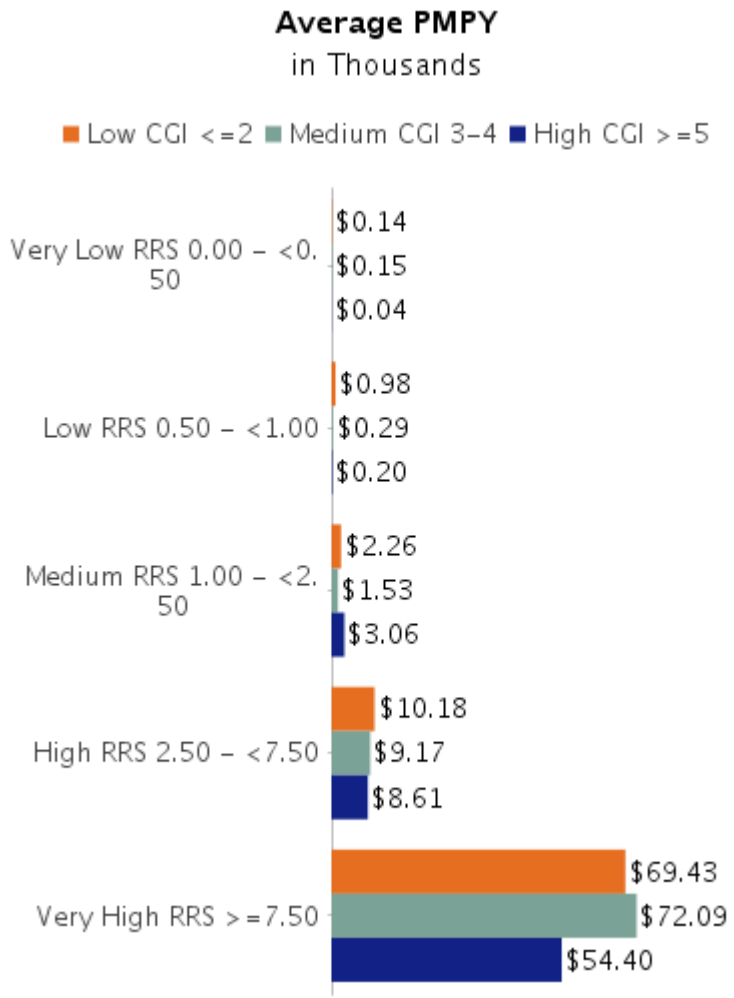
4 CLINICAL DEEP DIVES

4.1 General Clinical Quality Performance and Economic Opportunity

The Relative Risk Score (RRS) is a quantitative assessment of disease and risk burden at a population level. The Care Gap Index (CGI) quantifies the gaps identified for a population. Cotiviti utilizes these two factors to understand the association between disease burden, quality, and cost.

In figure 4.1.1, members are grouped by RRS, and then by CGI. The RRS categories are DxCG Aggregate Diagnostic Cost Groups (ADCG). ADCG categories allow for easy stratification of members into different ranges of risk and indicate the absolute level of predicted expenses at the individual level. By categorizing members with risk scores higher than 7.50 as "very high" you are able to stratify the riskiest members of your population from other members who are not as costly. For each RRS bucket, corresponding decreases in care gaps (and the CGI) are associated with decreases in the total medical spend.

Figure 4.1.1 Member costs by Risk and CGI buckets [38]

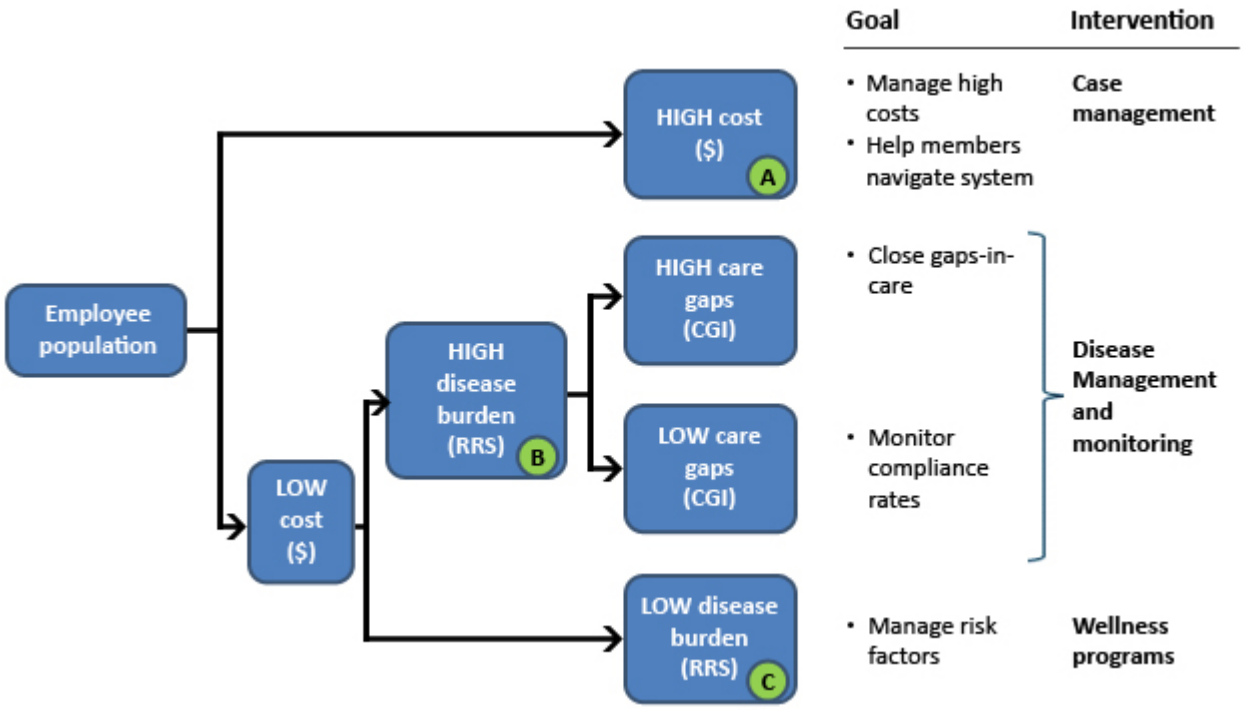


	Members Count	**Total Spend** $ in Millions
Very Low RRS 0.00 - <0.50	8,437	1.19
	481	0.07
	146	0.01
Low RRS 0.50 - <1.00	2,427	2.26
	859	0.25
	271	0.06
Medium RRS 1.00 - <2.50	1,947	4.29
	819	1.25
	565	1.73
High RRS 2.50 - <7.50	650	6.5
	261	2.39
	298	2.57
Very High RRS >=7.50	87	5.82
	36	2.6
	62	3.37
	17,346	**34.34**

38 **Note:** Refer to Table 5.5.1 in Appendix 5.5 for further detail about RRS buckets.

To stratify a total population for health management, we use the RRS (disease burden), the CGI (gaps in clinical care), and cost. Using these factors, any population can be comprehensively categorized into the mutually exclusive categories, each with specific interventions. Below is a graphical representation of the Cotiviti recommended classification approach. Sections 4.2 through 4.4 correspond to the recommended category-based interventions.

Figure 4.1.2 Framework for Population based Health Management [39]



A: Case Management opportunities:
Members with annual total spend greater than $25,000 are considered high cost and should be managed closely. The cut-off value of $25,000 can be modified while doing stratification within Medical Intelligence; we recommend choosing a cutoff point that is consistent with ones individual reinsurance threshold.

B: Disease Management opportunities:
Members with annual spending less than $25,000 are considered low cost. Of the low cost members, those with a disease burden greater than 95% of the population are considered high disease burden, and should be addressed through Disease Management monitoring and intervention. (As with the total cost cutoff, the disease burden cutoff that is chosen can be modified in Medical Intelligence).

Those with a high disease burden and numerous gaps in care (a high CGI) require disease management to reduce gaps and prevent high cost claims. On the other hand, members with high compliance rates - as manifest by a low care gap index should be monitored for continued compliance.

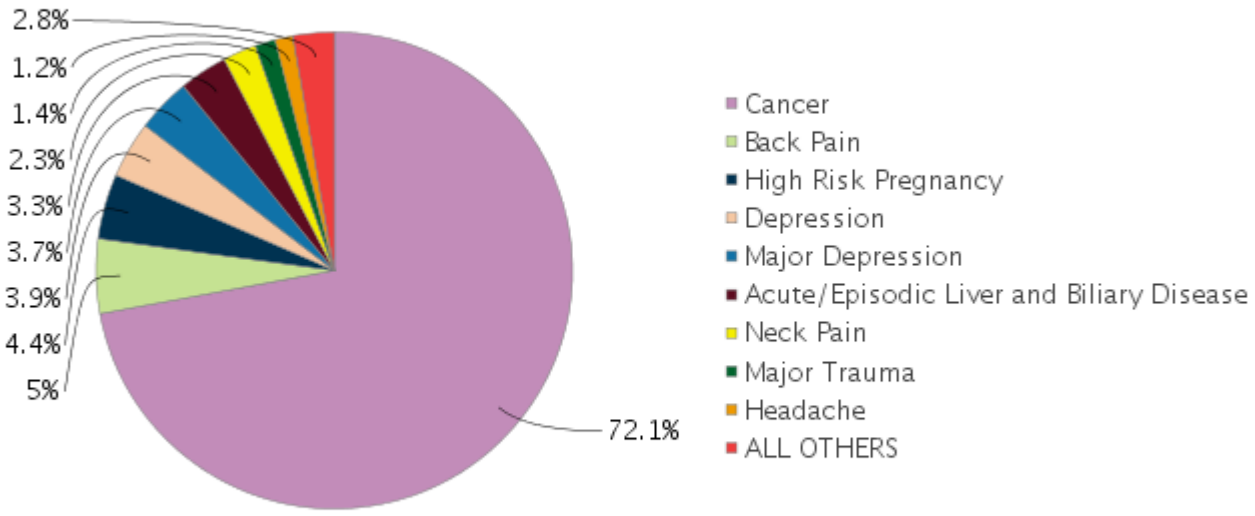
C: Wellness opportunities:
Members with low cost and low disease burden should be primarily addressed through Wellness Programs that reduce the risk factors for developing chronic diseases.

39 Source: Medical Intelligence : Individuals module / filter on RRS, CGI and Total Paid

4.2 Case Management Opportunities

As discussed in Figure 4.1.2, Cotiviti uses the RRS, CGI and total cost to stratify a population for Disease Management. Patients who have incurred a high total spend (>$25,000 PMPY) will generally benefit from Case Management. This corresponds to Category "A" in Figure 4.1.2. If the data is sent to Cotiviti, Medical Intelligence can be used to assess what proportion of high-cost members is currently enrolled in Case Management.

Figure 4.2.1 Highest paid amount distribution across diseases for high cost members (PMPY>$25,000)



4.3 Disease Management Opportunities

As discussed in Figure 4.1.2, Cotiviti uses the RRS, CGI and total cost to stratify a population for Disease management. Patients who are low cost, have a high RRS, and have a numerous addressable gaps in care (i.e., have a high CGI) will generally benefit from Disease Management. This corresponds to Category "B" in Figure 4.1.2.

Table 4.3.1 synthesizes the 'clinical condition'/disease severity and the associated Care Gap Index for the entire population across key 'clinical condition'/disease categories into a "heat map". Focused intervention (e.g. an initiative to increase compliance with ace-inhibitors and beta-blockers in patients with heart failure) based on this information can significantly improve health plan performance over time. These Quality & Risk Measures can become the basis for identification and stratification of plan participants for disease management and case management program participation.

Table 4.3.1 Cotiviti Quality & Risk Measures [40, 41]

	Comparison to Norm	
Clinical Condition	**Risk Variance**	**Care Gap Variance**
Asthma	-19.4%	245.9%
Behavioral Health	-	394.5%
Cardiac	-69.8%	454.2%
COPD	-29.6%	754.4%
Diabetes	-11.1%	126.4%
Geriatric	-	21.8%
Pediatric	306.6%	-
Pregnancy	9.2%	-60.5%

Performance Relative to Norms	Ranges for Risk Variance	Ranges for Care Gap Variance
Good	<=-10%	<=-5%
Average	>-10% and <10%	>-5% and <5%
Poor	>=10%	>=5%

Risk Variance - Weighted % variance between "Actual % individuals with Risk" and "Norm % individuals with Risk" for all risk related QRMs within a specific clinical condition

Care Gap Variance - Weighted % variance between "Actual % individuals with Care Gap" and "Norm % individuals with Care Gap" for all care gap related QRMs within a specific clinical condition

Please Note: If the underlying CPT codes for each laboratory test or panel are not submitted to Cotiviti in the medical claims then the compliance in the Quality and Risk Measures will appear lower than they actually are.

40 **Note:** Refer to Table 5.5.3 and 5.5.4 in Appendix 5.5 for further detail.

1. The Risk Variance and Care Gap Variance values are calculated for the members who are eligible on the last day of the custom time period and whether or not they are in a QRM is calculated on the members' full cycle data
2. The results displayed in this table are based on members who were eligible on the last day of the custom time period selected for the group specified by the user (selection on business levels)
3. COPD: Chronic Obstructive Pulmonary Disease

41 Norm in this report refers to the values from Cotiviti's Commercial Normative database.

Table 4.3.2 identifies the top 25 QRMs that have the highest variance between 'Actual' value and 'Norm' value for '% of Individual with Care Gap'. These QRMs indicate opportunities for better disease management to reduce gaps and prevent high cost claims.

Table 4.3.2 Top 25 QRMs for Gaps in Care [42]

Gaps in Care				% of Individual with Gap/Risk	
Clinical Condition		Members with Condition	Description	Actual	Norm
Cardiac	MI	67	Members without beta-blocker medications in the last 12 months	58.21%	21.54%
Gen	All Members	16,630	Members without any claims in the last 12 months	42.42%	11.19%
Misc	Rheumatoid Arthritis	87	Members not on DMARDs for Rheumatoid Arthritis in the last 12 months	49.43%	21.05%
Cardiac	Atrial Fibrillation	96	Members without comprehensive office visit in the last 12 months	30.21%	2.13%
Cardiac	MI	67	Members without statin medications in the last 12 months	47.76%	20.39%
COPD	COPD	124	Members without a comprehensive office visit in the last 12 months	28.23%	1.78%
Misc	Stroke/TIA	84	Members without a comprehensive office visit in the last 12 months	27.38%	1.77%
Cardiac	CAD	299	Members who are not taking Beta-blockers, ACE/ARB, or Statins in the last 12 months	36.79%	12.21%
DM	Diabetes	907	Diabetics without a comprehensive office visit in the last 12 months	26.79%	2.54%
Cardiac	CAD	299	Members without a comprehensive office visit in the last 12 months	26.09%	1.99%
DM	Diabetes	907	Members without serum creatinine in the last 12 months	37.82%	14.36%
DM	Diabetes	907	Members without HbA1c test in the last 12 months	38.04%	14.72%
Cardiac	CAD	309	Members without antihyperlipidemic medications in the last 12 months	47.57%	24.34%
Cardiac	CAD and Hypertension	233	Members without antihypertensive medications in the last 12 months	31.76%	8.90%
Cardiac	CAD	299	Members without lipid profile test in the last 12 months	48.49%	26.01%
Cardiac	Hypertension	2,239	Members without any office visit in the last 12 months	24.83%	2.66%
DM	Diabetes	907	Members without lipid profile test in the last 12 months	43.66%	22.60%
Cardiac	CHF	75	Members without LDL-C or lipid profile test in the last 12 months	57.33%	36.66%

42 **Note:** Excluding QRMs related to flu shots and pneumonia and the ones having members with condition less than 5.

Gaps in Care				% of Individual with Gap/Risk	
Clinical Condition		**Members with Condition**	**Description**	**Actual**	**Norm**
Asthma	Asthma	945	Members without a comprehensive office visit in the last 12 months	23.60%	2.98%
Cardiac	CHF	75	Members without a comprehensive office visit in the last 12 months	22.67%	2.09%
Cardiac	CAD and Diabetes	98	Members with CAD and Diabetes without ACE or ARB in the last 12 months	46.94%	26.79%
Cardiac	Anti-Hyperlipidemic Agents	1,591	Members without laboratory tests in the last 12 months	28.47%	10.15%
Asthma	Asthma	945	Members without inhaled corticosteroids or leukotriene inhibitors in the last 12 months	65.50%	48.44%
Misc	Rheumatoid Arthritis	87	Members without a comprehensive office visit in the last 12 months	17.24%	0.36%
Cardiac	CHF	75	Members without beta-blockers in the last 12 months	44.00%	28.62%

4.4 Wellness Management Opportunities

As discussed in Figure 4.1.2,Cotiviti uses the RRS, CGI and total cost to stratify a population for Disease management. Patients who are well are most efficiently addressed through Wellness Programs. This corresponds to Category "C" in Figure 4.1.2.

Table 4.4.1 details screening and preventative tests - and the associated compliance with these tests - for the entire population. These data are benchmarked against the Cotiviti Commercial Norm. Wellness programs (e.g. an initiative to increase mammogram compliance rates) based on this information can significantly improve health plan performance on these measures.

Table 4.4.1 Preventative Measures [43, 44]

Performance Relative to Norms	
Good	<=-5%
Average	>-5% and <5%
Poor	>=5%

Group	Condition	Screening/Preventive	Variation from Norm
Both	All Members	Members without a comprehensive office visit in the last 12 months	123.2%
	Emergency Room Visit	Members having ER visit without office visit in the last 12 months	2.4%
	>=50 years old	Members without any colorectal cancer screening in the last 24 months	2.2%
Male	Men >50 years old	Men without PSA level in the last 2 years	24.9%
Female	Women ages 45-54 years old (ACS)	Women without mammogram in the last 12 months	1.9%
	Women between 21 and 29 years	Women between 21 and 29 years without a Pap test every 3 years (ACOG)	7.0%
	Women >20 y/o	Women aged 20 years or greater without Pap test in the last two years	29.0%

Please Note: If the underlying CPT codes for each laboratory test or panel are not submitted to Cotiviti in the medical claims then the compliance in the Quality and Risk Measures will appear lower than they actually are.

*(E) = Enrollment criterion is applied to the Quality and Risk Measure and its Condition

43 **Note:** Refer to Table 5.5.2 in Appendix 5.5 for further detail.

1. The percentage of members for a specific Group, Condition and Screening combination are calculated for the members who are eligible on the last day of the custom time period and whether or not they are in a particular Screening is calculated on the members' full cycle data
2. The results displayed in this table are based on members who were eligible on the last day of the custom time period selected for the group specified by the user (selection on business levels)

44 Norm in this report refers to the values from Cotiviti's Commercial Normative database.

5 APPENDIX

5.1 Demographics

Table 5.1.1 Breakdown of membership by relationship

	Avg. Age	Members		Total Amount Billed	Employee Paid	Member Expenses	
		Total	Current			Total	% of Total
Employee	46.8	6,768	6,494	$68,532,845	$5,615,251	$20,423,401	57.7%
Spouse	49.3	4,037	3,972	$34,161,142	$2,827,038	$9,365,185	26.5%
Dependent	16.5	7,264	7,134	$19,381,126	$2,409,708	$5,590,328	15.8%
Unknown	5.6	7	2	$30,221	$0	$532	0.0%
Total	**35.1**	**18,076**	**17,602**	**$122,105,335**	**$10,851,996**	**$35,379,447**	**100.0%**

5.2 Financial Analyses [45]

Table 5.2.1 Medical and Pharmacy Claims by Month (Jul 17 - Jun 18)

Service Date	Category					
	Medical	Medical PEPM	Pharmacy	Pharmacy PEPM	Total	Total PEPM
Jul-17	$1,276,438	$237	$556,728	$103	$1,833,167	$340
Aug-17	$1,850,368	$340	$805,975	$148	$2,656,344	$489
Sep-17	$2,016,634	$367	$765,398	$139	$2,782,031	$506
Oct-17	$1,730,729	$312	$851,017	$154	$2,581,746	$466
Nov-17	$1,674,113	$299	$825,591	$147	$2,499,704	$446
Dec-17	$1,961,796	$347	$892,790	$158	$2,854,586	$505
Jan-18	$1,821,113	$320	$1,021,999	$180	$2,843,111	$499
Feb-18	$1,919,646	$335	$930,597	$163	$2,850,242	$498
Mar-18	$2,555,464	$445	$982,175	$171	$3,537,639	$615
Apr-18	$2,330,513	$402	$1,081,816	$186	$3,412,329	$588
May-18	$2,527,201	$432	$1,201,496	$206	$3,728,698	$638
Jun-18	$2,627,899	$445	$1,077,892	$183	$3,705,791	$628
Total	$24,291,913	$358	$10,993,475	$162	$35,285,387	$520

Table 5.2.2 Medical and Pharmacy Claims by Month (Jul 18 - Jun 19)

Service Date	Category					
	Medical	Medical PEPM	Pharmacy	Pharmacy PEPM	Total	Total PEPM
Jul-18	$1,101,755	$184	$525,705	$88	$1,627,460	$271
Aug-18	$1,856,283	$307	$777,235	$129	$2,633,517	$436
Sep-18	$1,454,734	$239	$735,272	$121	$2,190,006	$359
Oct-18	$2,603,443	$424	$880,664	$143	$3,484,107	$567
Nov-18	$2,530,811	$408	$843,506	$136	$3,374,317	$545
Dec-18	$2,034,611	$326	$843,909	$135	$2,878,520	$461
Jan-19	$2,408,631	$384	$946,361	$151	$3,354,992	$534
Feb-19	$2,363,545	$375	$869,226	$138	$3,232,771	$513
Mar-19	$2,281,963	$359	$1,018,994	$160	$3,300,958	$519
Apr-19	$2,300,993	$360	$1,135,907	$178	$3,436,900	$537
May-19	$2,353,289	$364	$1,145,942	$177	$3,499,232	$541
Jun-19	$1,238,851	$191	$1,127,816	$174	$2,366,668	$364
Total	$24,528,909	$327	$10,850,538	$145	$35,379,447	$472

45 **Note:** In any of the months or 'Total' column, when Medical MM is not equal to Rx MM in one or both time period(s) (current or prior), Total PEPM is not equal to sum of Medical PEPM and Rx PEPM for that/ those time period(s).
Medical PEPM includes Non-PBM drug spend (J-Codes).

Table 5.2.3 Expense Distribution [46]

Band	# Members	Total Member Expenses	Avg. Expense per Member	% Total Paid	
				Actual	Norm
1%	181	$16,414,935	$90,690	46.4%	31.7%
2-5%	723	$11,003,592	$15,219	31.1%	28.8%
6-15%	1,807	$5,920,725	$3,277	16.7%	21.9%
16-30%	2,712	$1,613,812	$595	4.6%	11.1%
31-60%	5,423	$426,382	$79	1.2%	5.8%
61-100%	7,230	$0	$0	0.0%	0.6%
Total	**18,076**	**$35,379,447**	**$1,957**	**100.0%**	**100.0%**

46 Norm in this report refers to the values from Cotiviti's Commercial Normative database.

This table shows medical claim payments in relation to the date when the claims were incurred (date of service). The table is useful for developing completion factors which allow forward projections of monthly payments and for estimating incurred but not reported (IBNR) claims.

Table 5.2.4 Medical Claim Lag Report [47]

Paid Date	Service Date													
	All Prior	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Total
Jul-18	**$1,721,850**	$403,091												**$2,124,941**
Aug-18	**$679,030**	$372,512	$534,642											**$1,586,184**
Sep-18	**$265,406**	$175,045	$797,212	$479,705										**$1,717,367**
Oct-18	**$323,024**	$51,238	$246,810	$407,319	$597,134									**$1,625,524**
Nov-18	**$81,225**	$7,866	$112,738	$296,447	$629,688	$646,979								**$1,774,943**
Dec-18	**$49,938**	$24,214	$39,709	$131,246	$567,048	$647,522	$713,751							**$2,173,428**
Jan-19	**$55,855**	$16,058	$26,883	$67,629	$220,837	$990,222	$832,101	$794,688						**$3,004,275**
Feb-19	**$8,937**	$7,894	$90,210	$30,358	$176,376	$141,133	$318,039	$904,602	$913,077					**$2,590,626**
Mar-19	**$118,629**	$33,046	$2,243	$16,562	$151,790	$7,862	$101,415	$543,534	$986,218	$1,122,468				**$3,083,766**
Apr-19	**$14,372**	$5,910	$964	$16,437	$252,696	$74,484	$2,808	$72,074	$299,529	$846,181	$1,230,178			**$2,815,633**
May-19	**$34,962**	$2,538	$3,764	$5,721	$2,969	$37,384	$65,590	$71,389	$143,404	$175,620	$746,946	$1,239,860		**$2,530,146**
Jun-19	**$8,901**	$2,343	$1,109	$3,310	$4,904	($14,774)	$906	$22,344	$21,317	$137,696	$323,870	$1,113,429	$1,238,851	**$2,864,207**
Total Plan Paid Medical	**$3,362,130**	**$1,101,755**	**$1,856,283**	**$1,454,734**	**$2,603,443**	**$2,530,811**	**$2,034,611**	**$2,408,631**	**$2,363,545**	**$2,281,963**	**$2,300,993**	**$2,353,289**	**$1,238,851**	**$27,891,039**

47 **Note:**

1. Utilization metrics are always calculated on an incurred basis.
2. The last two or three months of the year will show decreased values due to 'claims lag', and should be interpreted with caution.

Table 5.2.5: Medical Claim Lag Report and IBNR

Paid	Incurred													Monthly Paid			Lag	
	0Mths	1Mths	2Mths	3Mths	4Mths	5Mths	6Mths	7Mths	8Mths	9Mths	10Mths	11Mths	12+ Mths	Total	Current 12Mths	Prior 12Mths	Mthly	Qtly
Jul-18	$403,091	$924,689	$405,329	$137,978	$72,330	$63,867	$32,708	$34,047	$13,309	$6,427	$23,437	$3,079	$4,649	$2,124,941	$403,091	$1,721,850	1.73	
Aug-18	$534,642	$372,512	$238,432	$64,404	$34,454	$79,179	$86,550	$29,240	$39,460	$36,778	$280	$3,673	$66,581	$1,586,184	$907,154	$679,030	2.39	
Sep-18	$479,705	$797,212	$175,045	$99,537	$20,407	$28,245	$27,188	$9,213	$31,813	$17,620	$9,452	$2,992	$18,939	$1,717,367	$1,451,961	$265,406	1.55	1.87
Oct-18	$597,134	$407,319	$246,810	$51,238	$123,957	$129,268	$50,497	$8,808	$4,331	($2,456)	$1,346	$4,370	$2,903	$1,625,524	$1,302,500	$323,024	1.64	
Nov-18	$646,979	$629,688	$296,447	$112,738	$7,866	$19,005	($2,192)	($341)	$7,623	$10,326	$5,295	$4,459	$37,050	$1,774,943	$1,693,718	$81,225	1.34	
Dec-18	$713,751	$647,522	$567,048	$131,246	$39,709	$24,214	$11,229	($13,175)	$8,556	$4,253	($1,299)	$16,829	$23,545	$2,173,428	$2,123,490	$49,938	1.38	1.44
Jan-19	$794,688	$832,101	$990,222	$220,837	$67,629	$26,883	$16,058	($3,294)	$30,705	$12,079	$10,522	$2,879	$2,965	$3,004,275	$2,948,419	$55,855	1.49	
Feb-19	$913,077	$904,602	$318,039	$141,133	$176,376	$30,358	$90,210	$7,894	$8,234	($11,794)	$1,843	$19,924	($9,270)	$2,590,626	$2,581,689	$8,937	1.35	
Mar-19	$1,122,468	$986,218	$543,534	$101,415	$7,862	$151,790	$16,562	$2,243	$33,046	($1,921)	$22,160	$537	$97,853	$3,083,766	$2,965,137	$118,629	1.60	1.49
Apr-19	$1,230,178	$846,181	$299,529	$72,074	$2,808	$74,484	$252,696	$16,437	$964	$5,910	($319)	($183)	$14,874	$2,815,633	$2,801,261	$14,372	1.39	
May-19	$1,239,860	$746,946	$175,620	$143,404	$71,389	$65,590	$37,384	$2,969	$5,721	$3,764	$2,538	$1,456	$33,506	$2,530,146	$2,495,184	$34,962	1.15	
Jun-19	$1,238,851	$1,113,429	$323,870	$137,696	$21,317	$22,344	$906	($14,774)	$4,904	$3,310	$1,109	$2,343	$8,901	$2,864,207	$2,855,306	$8,901	0.87	1.13
Total														**$27,891,039**	**$24,528,909**	**$3,362,130**		
Average Monthly Paid														**$2,324,253**				
IBNR in Months																	**1.45**	

	Projected IBNR Based on Last Month's Lag	Projected IBNR Based on Last Quarter's Lag	Projected IBNR Based on Last Year's Average Lag
Incurred and Paid in Current Period	$24,528,909	$24,528,909	$24,528,909
Lag Factor	0.87	1.13	1.45
Incurred and Paid as a % of Total	0.93	0.91	0.88
Total Incurred	$26,441,371	$27,087,731	$27,895,353
Projected IBNR	$1,912,462	$2,558,822	$3,366,444

Table 5.2.6 Network Utilization and Contract Discount Summary

Network	Total					
	Claims Billed	Claims Allowed	Claims Paid	Employee Contribution	Network Discount	% Discount
All In Network	$103,160,694	$32,501,947	$23,033,465	$8,658,657	$58,382,791	56.6%
All Out-of-Network	$6,701,950	$2,309,993	$1,495,444	$809,221	$540,966	8.1%
Total	**$109,862,644**	**$34,811,940**	**$24,528,909**	**$9,467,878**	**$58,923,757**	**53.6%**

5.3 Disease Fingerprint

Table 5.3.1 presents utilization patterns of members with chronic conditions, ranked by number of members, for total office visits, emergency room visits and hospital admissions.

Table 5.3.1 Chronic Conditions Utilization Summary

Chronic Condition	# of Members	Members per 1000	Office Visits per 1000	ER Visits per 1000	Admissions per 1000	PMPY
Hyperlipidemia	2,667	156.1	5,037.5	240.2	61.7	$6,322.49
Hypertension	2,457	143.8	5,067.6	287.7	80.2	$7,489.88
Asthma	1,071	62.7	5,246.9	349.7	65.6	$5,715.38
Osteoarthritis	1,057	61.9	7,313.3	336.9	98.5	$8,774.50
Diabetes	1,037	60.7	5,343.3	308.1	81.0	$8,649.70
Congenital Anomalies	639	37.4	7,556.5	462.9	196.8	$13,024.79
Chronic Liver and Biliary Disease	384	22.5	6,759.6	550.5	201.1	$12,139.17
Coronary Artery Disease (incl. MI)	329	19.3	6,882.9	548.1	152.6	$13,547.65
Chronic Renal Failure	218	12.8	8,310.2	615.7	258.5	$25,253.04
Cerebrovascular Disease	183	10.7	6,238.7	443.6	168.5	$13,161.79
Immune Disorders	168	9.8	10,330.6	719.8	369.0	$34,481.81
Bipolar Disorder	159	9.3	7,855.8	329.2	148.5	$7,445.08
Coagulopathy	157	9.2	6,468.0	671.3	348.6	$25,532.55
Osteoporosis	157	9.2	5,240.3	218.9	45.1	$6,163.27
Chronic Obstructive Pulmonary Disease	154	9.0	7,623.1	747.1	337.2	$21,509.09
Rheumatoid Arthritis	134	7.8	7,327.4	311.0	91.0	$17,517.90
Atrial Fibrillation	124	7.3	6,435.8	537.7	187.4	$15,332.66
Congestive Heart Failure	79	4.6	7,600.0	890.3	348.4	$24,989.79
Inflammatory Bowel Diseases	58	3.4	5,312.0	121.9	121.9	$11,791.69
Cirrhosis	48	2.8	5,507.1	814.3	385.7	$21,086.55
Demyelinating Diseases	40	2.3	8,589.7	435.9	51.3	$33,639.01
Ulcerative Colitis	39	2.3	4,577.6	129.3	103.4	$10,527.43
Schizophrenia	22	1.3	6,136.4	318.2	409.1	$22,582.88
HIV/Aids	18	1.1	5,878.8	606.1	0.0	$37,310.52
Major Organ Transplant	17	1.0	11,875.0	562.5	750.0	$82,693.36
Chronic Pancreatitis	10	0.6	9,900.0	400.0	300.0	$21,486.57
Parkinson's Disease	9	0.5	10,500.0	576.9	115.4	$9,483.79
Hemophilia	7	0.4	14,714.3	1,285.7	142.9	$28,242.73
Sickle Cell Anemia	3	0.2	3,333.3	1,000.0	0.0	$525.69
Cystic Fibrosis	1	0.1	0.0	0.0	0.0	$0.00
Gaucher's Disease	1	0.1	18,000.0	1,000.0	0.0	$65,165.60

Note:

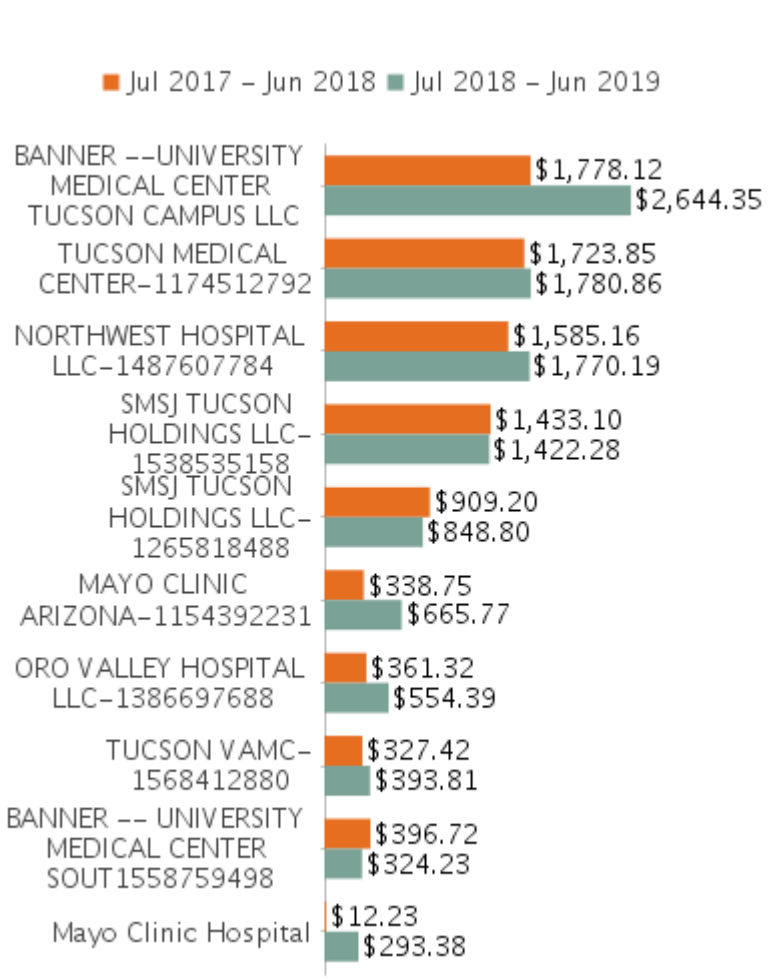
1. In this table a member can have multiple chronic conditions.
2. The results displayed in this table are based on claims incurred.

5.4 "Top 10" Analysis

5.4.1 Providers

Table 5.4.1 shows the top 10 providers, based on medical claim expenses, providing services to the members of your population. The providers generating the most claim expenses are usually institutional. Network changes or changes in provider reimbursement strategy may cause previous period to current period percentage changes.

Table 5.4.1 Total Plan Paid ($K) by Providers



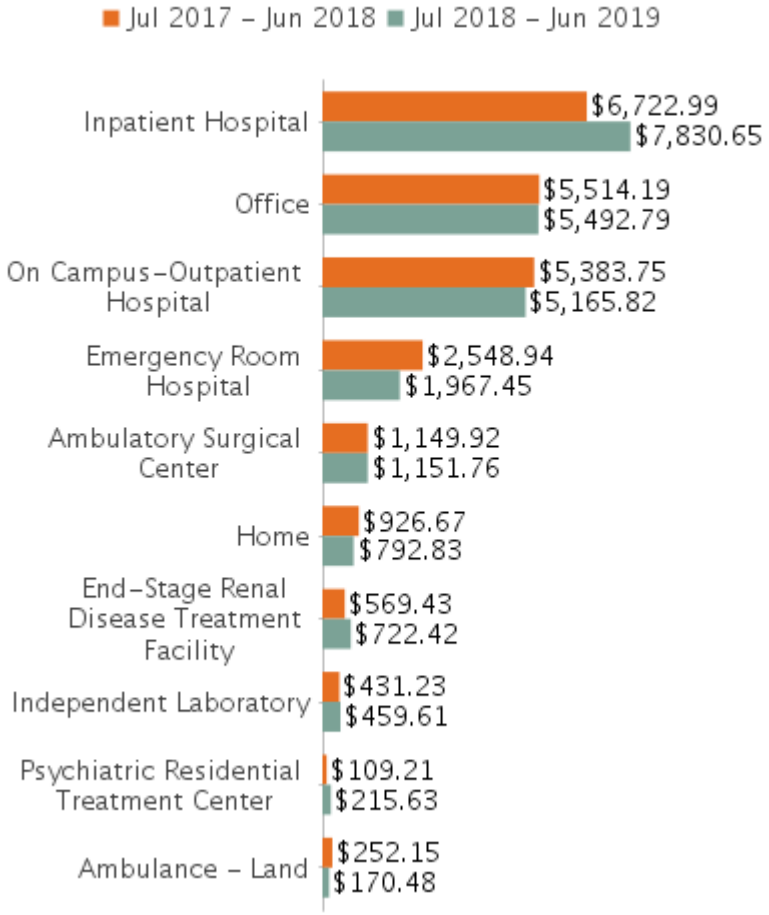
% of Total Plan Paid Jul 2018 - Jun 2019	% Change in Plan Paid
10.8%	**48.7%**
7.3%	**3.3%**
7.2%	**11.7%**
5.8%	**-0.8%**
3.5%	**-6.6%**
2.7%	**96.5%**
2.3%	**53.4%**
1.6%	**20.3%**
1.3%	**-18.3%**
1.2%	**2,297.9%**

Provider	Jul 2017 - Jun 2018		Jul 2018 - Jun 2019		% Change in Plan Paid
	Plan Paid	% of Total Plan Paid	Plan Paid	% of Total Plan Paid	
Subtotal	$8,865,883	36.5%	$10,698,063	43.6%	20.7%
All Others	$15,426,029	63.5%	$13,830,846	56.4%	-10.3%
Total	$24,291,913	100.0%	$24,528,909	100.0%	1.0%

5.4.2 Places of Service

Table 5.4.2 shows places of service ranked according to medical claim expenses. Previous period to current period percentage changes in Place of Service can be helpful when investigating changes in utilization patterns or when trying to understand the impact of plan design change. Increases in some categories may be appropriate. For example, outpatient hospital experience and office visits may increase as inpatient hospital services are more efficiently provided in the outpatient setting. Places of service experiencing large increases for many employers are Emergency Room, Outpatient Hospital, and Laboratory services.

Table 5.4.2 Total Plan Paid ($K) by Place of Service



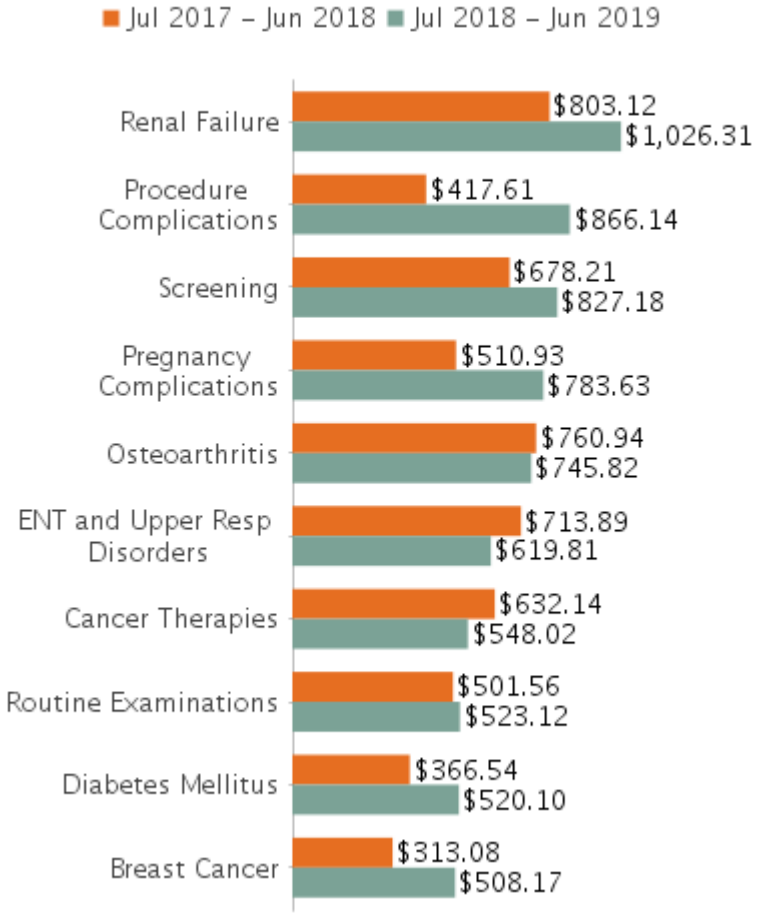
% of Total Plan Paid Jul 2018 - Jun 2019	% Change in Plan Paid
31.9%	**16.5%**
22.4%	**-0.4%**
21.1%	**-4.0%**
8.0%	**-22.8%**
4.7%	**0.2%**
3.2%	**-14.4%**
2.9%	**26.9%**
1.9%	**6.6%**
0.9%	**97.4%**
0.7%	**-32.4%**

Service	Jul 2017 - Jun 2018		Jul 2018 - Jun 2019		% Change in Plan Paid
	Plan Paid	% of Total Plan Paid	Plan Paid	% of Total Plan Paid	
Subtotal	$23,608,480	97.2%	$23,969,448	97.7%	1.5%
All Others	$683,432	2.8%	$559,461	2.3%	-18.1%
Total	$24,291,913	100.0%	$24,528,909	100.0%	1.0%

5.4.3 Diagnostic groups

Table 5.4.3 shows the top 10 diagnostic groups ranked according to medical claim expenses. Grouping of data into broad diagnostic categories assists in the identification of illness patterns that are unique to your population. Diagnostic groups with significant previous period to current period increases should be examined in more detail. The distribution will be different depending on whether the group in question is Medicaid, Medicare or commercial. For a commercial population, diagnostic groups usually at or near the top of the list include ENT and upper respiratory disorders, gynecological disorders, and musculoskeletal conditions.

Table 5.4.3 Total Plan Paid ($K) by Diagnostic Groups



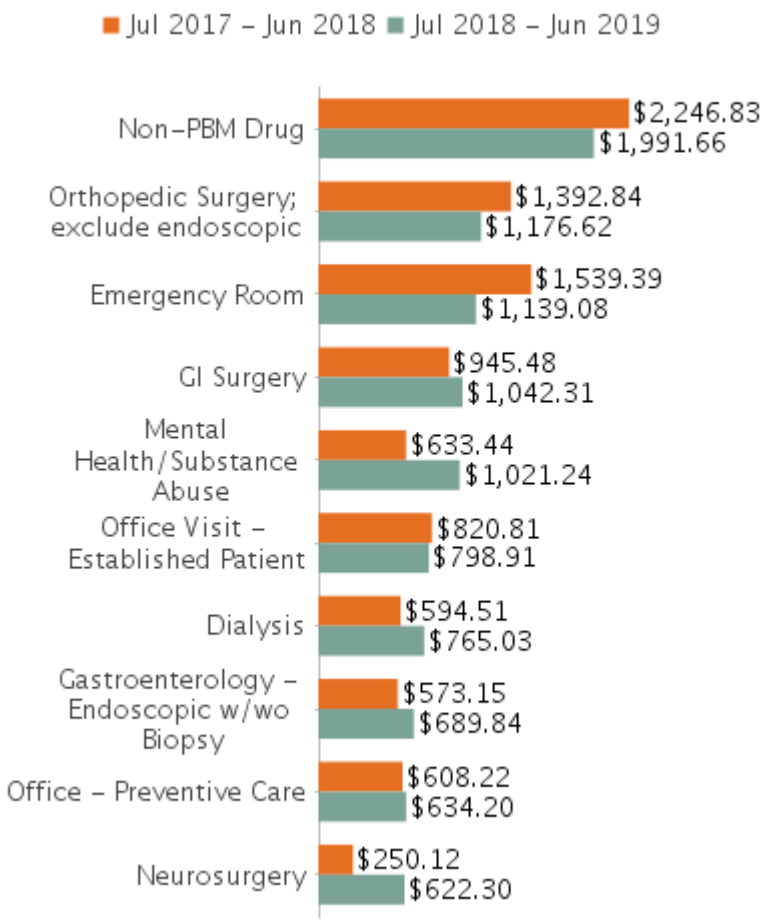
% of Total Plan Paid Jul 2018 - Jun 2019	% Change in Plan Paid
4.2%	**27.8%**
3.5%	**107.4%**
3.4%	**22.0%**
3.2%	**53.4%**
3.0%	**-2.0%**
2.5%	**-13.2%**
2.2%	**-13.3%**
2.1%	**4.3%**
2.1%	**41.9%**
2.1%	**62.3%**

Diagnostic Group	Jul 2017 - Jun 2018		Jul 2018 - Jun 2019		% Change in Plan Paid
	Plan Paid	% of Total Plan Paid	Plan Paid	% of Total Plan Paid	
Subtotal	$5,698,022	23.5%	$6,968,283	28.4%	22.3%
All Others	$18,593,891	76.5%	$17,560,627	71.6%	-5.6%
Total	$24,291,913	100.0%	$24,528,909	100.0%	1%

5.4.4 Procedure groups

Table 5.4.4 shows the top 10 procedures, ranked according to medical claim expenses. For purposes of health plan analysis, previous period to current period percentage changes may be more important than absolute dollars. Changes in membership must be considered when any such analysis is performed. Many employers are considering contracting with free-standing lab/x-ray facilities to better manage the growth in these areas.

Table 5.4.4 Total Plan Paid ($K) by Procedure Groups



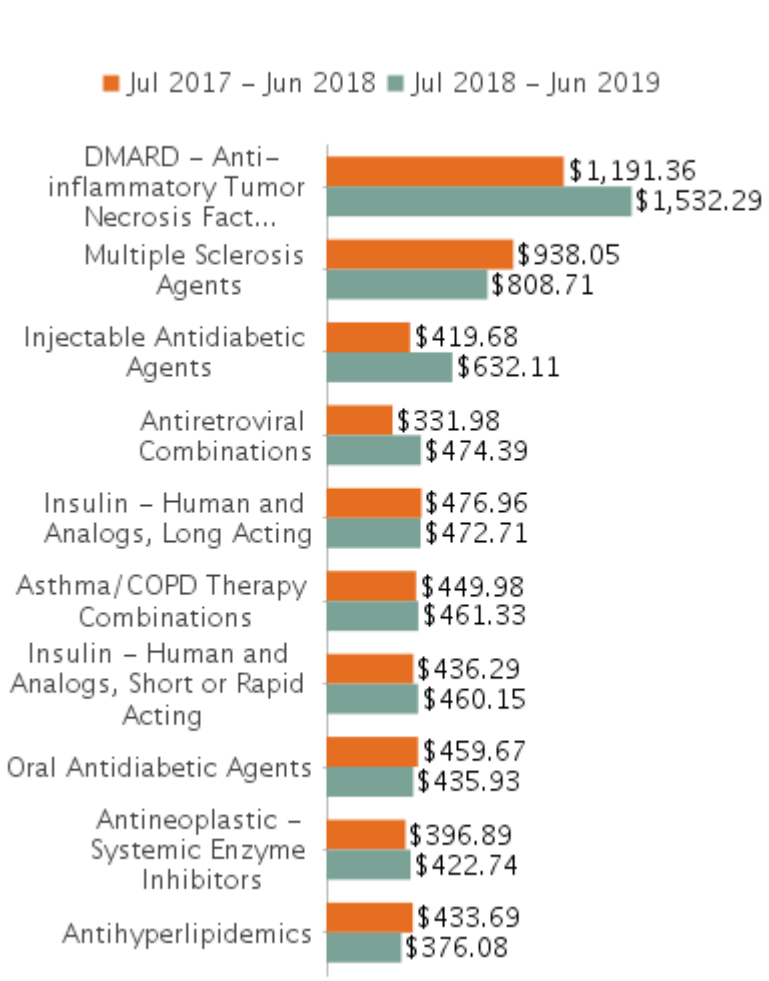
% of Total Plan Paid Jul 2018 - Jun 2019	% Change in Plan Paid
8.1%	**-11.4%**
4.8%	**-15.5%**
4.6%	**-26.0%**
4.2%	**10.2%**
4.2%	**61.2%**
3.3%	**-2.7%**
3.1%	**28.7%**
2.8%	**20.4%**
2.6%	**4.3%**
2.5%	**148.8%**

Proce-dure Group	Jul 2017 - Jun 2018		Jul 2018 - Jun 2019		% Change in Plan Paid
	Plan Paid	% of Total Plan Paid	Plan Paid	% of Total Plan Paid	
Subtotal	$9,604,800	39.5%	$9,881,183	40.3%	2.9%
All Others	$14,687,112	60.5%	$14,647,726	59.7%	-0.3%
Total	$24,291,913	100.0%	$24,528,909	100.0%	1.0%

5.4.5 Therapeutic classes

Table 5.4.5 shows the top 10 therapeutic drug classes ranked according to pharmacy claim expenses. For a commercial population, antihyperlipidemics, antidepressants, and gastrointestinal drugs are usually the three most expensive therapeutic classes. The anticonvulsants class is of particular interest because of the increasing use of certain anticonvulsants for pain control. If the anticonvulsants fall in the top 10, institution of a drug utilization review program should be considered.

Table 5.4.5 Total Plan Paid ($K) by Therapeutic Class



% of Total Plan Paid Jul 2018 - Jun 2019	% Change in Plan Paid
14.1%	**28.6%**
7.5%	**-13.8%**
5.8%	**50.6%**
4.4%	**42.9%**
4.4%	**-0.9%**
4.3%	**2.5%**
4.2%	**5.5%**
4.0%	**-5.2%**
3.9%	**6.5%**
3.5%	**-13.3%**

Therapeutic Class	Jul 2017 - Jun 2018		Jul 2018 - Jun 2019		% Change in Plan Paid
	Plan Paid	% of Total Plan Paid	Plan Paid	% of Total Plan Paid	
Subtotal	$5,534,547	50.3%	$6,076,430	56.0%	9.8%
All Others	$5,458,928	49.7%	$4,774,108	44.0%	-12.5%
Total	$10,993,475	100.0%	$10,850,538	100.0%	-1.3%

5.5 Clinical Quality Performance and Measures

Table 5.5.1 DxCG RRS Bands based on ADCG Categories [48]

RRS Band	RRS Range	% of Individuals	Average Age	Predicted cost of individuals in each RRS Band
Very Low	0.00 - <0.50	52.3%	24.28	Extremely low expected cost; individuals typically have few services and/ or are focused on preventive care.
Low	0.50 - <1.00	20.5%	41.32	Slightly lower than average expected cost; individuals may be good candidates for ongoing regular preventive care and/ or disease management programs.
Medium	1.00 - <2.50	19.2%	50.66	Greater than average cost; disease management is important to individuals' understanding and managing their care.
High	2.50 - <7.50	7.0%	52.68	Much greater than average cost; individuals may benefit from chronic care management programs and activities.
Very High	>=7.50	1.1%	54.01	Extremely high cost; individuals typically need individual case management and support to navigate the healthcare system.

48 **Note:**

1. This table includes all individuals with eligibility (with or without claims) in user selected time period. Risk bands are based on the model selected during report generation
2. RRS Model used - 26 (All Medical Predicting Prospective Total Risk)

Please Note: If the underlying CPT codes for each laboratory test or panel are not submitted to Cotiviti in the medical claims then the compliance in the Quality and Risk Measures will appear lower than they actually are.
*(E) = Enrollment criterion is applied to the Quality and Risk Measure and its Condition
Norm in this report refers to the values from Cotiviti's Commercial Normative database.

Table 5.5.2 Wellness Measures

Screening/Preventative				% of Individual with Gap/Risk	
Group	**Condition**	**Members with Condition**	**Description**	**Actual**	**Norm**
Both	>=50 years old	4,456	Members without any colorectal cancer screening in the last 24 months	77.20%	69.45%
	All Members	16,630	Members without a comprehensive office visit in the last 12 months	50.82%	19.08%
	Emergency Room Visit	1,370	Members having ER visit without office visit in the last 12 months	10.95%	7.88%
Male	Men >50 years old	1,950	Men without PSA level in the last 2 years	56.31%	45.07%
Female	Women >20 y/o	5,898	Women aged 20 years or greater without Pap test in the last two years	71.36%	50.38%
	Women ages 45-54 years old (ACS)	1,242	Women without mammogram in the last 12 months	63.04%	55.94%
	Women between 21 and 29 years	1,323	Women between 21 and 29 years without a Pap test every 3 years (ACOG)	69.01%	47.73%

Table 5.5.3 Gaps in Care

Gaps in Care				% of Individual with Gap/Risk	
Clinical Condition		**Members with Condition**	**Description**	**Actual**	**Norm**
Asthma	Asthma	945	Members without a comprehensive office visit in the last 12 months	23.60%	2.98%
		945	Members without inhaled corticosteroids or leukotriene inhibitors in the last 12 months	65.50%	48.44%
		945	Members without spirometry test in the last 12 months	88.04%	73.37%
	Asthma taking salmeterol in the last 12 months	48	Members at risk by taking Salmeterol without other inhalers in the last 12 months	35.42%	22.91%
Behavioral Health	Depression	1,038	Members without a comprehensive office visit in the last 24 months	9.15%	1.11%
		857	Members without antidepressants in the most recent 5 months of the analysis period	51.81%	38.29%

Gaps in Care				% of Individual with Gap/Risk	
Clinical Condition		Members with Condition	Description	Actual	Norm
	Depression-related admission	55	Members without a comprehensive office visit within 7 days after discharge in the analysis period	65.45%	72.65%
	Patients >=18 y/o with bipolar disorder on SSRI in the last 12 months	27	Members without a mood stabilizer in the last 12 months	100.00%	87.35%
	Substance abuse-related admission in the last 3 months	3	Members without a comprehensive office visit during the last three months	33.33%	29.22%
Cardiac	Anti-Hyperlipidemic Agents	1,591	Members without laboratory tests in the last 12 months	28.47%	10.15%
	Atrial Fibrillation	96	Members without comprehensive office visit in the last 12 months	30.21%	2.13%
	CAD	299	Members who are not taking Beta-blockers, ACE/ARB, or Statins in the last 12 months	36.79%	12.21%
		299	Members who are taking only one of these agents: Beta-blockers, ACE/ARB, or Statins in the last 12 months	17.39%	18.73%
		299	Members who are taking only two of these agents: Beta-blockers, ACE/ARB, or Statins in the last 12 months	25.08%	33.33%
		299	Members without a comprehensive office visit in the last 12 months	26.09%	1.99%
		309	Members without antihyperlipidemic medications in the last 12 months	47.57%	24.34%
		299	Members without lipid profile test in the last 12 months	48.49%	26.01%
	CAD and Diabetes	98	Members with CAD and Diabetes without ACE or ARB in the last 12 months	46.94%	26.79%
	CAD and Hypertension	233	Members without antihypertensive medications in the last 12 months	31.76%	8.90%
	CAD-related admission	24	Members with recent CAD/MI related hospitalization and without office visit in the last 12 months	8.33%	1.51%
	CHF	75	Members without a comprehensive office visit in the last 12 months	22.67%	2.09%
		75	Members without beta-blockers in the last 12 months	44.00%	28.62%
		75	Members without LDL-C or lipid profile test in the last 12 months	57.33%	36.66%

Gaps in Care				% of Individual with Gap/Risk	
Clinical Condition		Members with Condition	Description	Actual	Norm
	CHF-related admission	9	Members with readmission within 30 days of CHF-related hospital discharge	11.11%	7.95%
	Hypertension	2,239	Members without any office visit in the last 12 months	24.83%	2.66%
	MI	67	Members without beta-blocker medications in the last 12 months	58.21%	21.54%
		67	Members without statin medications in the last 12 months	47.76%	20.39%
COPD	COPD	124	Members without a comprehensive office visit in the last 12 months	28.23%	1.78%
		124	Members without spirometry testing in the last 12 months	80.65%	65.33%
Diabetes	Diabetes	907	Diabetics without a comprehensive office visit in the last 12 months	26.79%	2.54%
		833	Members taking insulin and sulfonylureas at the same time	4.68%	4.60%
		907	Members without ACE inhibitor or ARB medications in the last 12 months	54.80%	39.86%
		907	Members without HbA1c test in the last 12 months	38.04%	14.72%
		907	Members without lipid profile test in the last 12 months	43.66%	22.60%
		907	Members without retinal eye exam in the last 12 months	71.89%	71.35%
		907	Members without screening for albumin in the urine in the last 12 months	60.97%	51.98%
		866	Members without semiannual HbA1c test in the last 24 months	81.99%	68.44%
		907	Members without serum creatinine in the last 12 months	37.82%	14.36%
		907	Members without statin medications in the last 12 months	59.76%	44.71%
	Diabetes >18 y/o	901	Members hospitalized due to short-term complications related to diabetes in the last 12 months	0.11%	0.58%
	Diabetes taking insulin in the last 12 months	129	Members without home glucose measurement devices in the last 12 months	4.65%	12.63%
General	All Members	16,630	Members without any claims in the last 12 months	42.42%	11.19%
	All patients with an emergency visit for anaphy-	3	Members who did not fill a script for an epinephrine pen at any time during the last 24 months	0.00%	22.69%

Gaps in Care				% of Individual with Gap/Risk	
Clinical Condition		**Members with Condition**	**Description**	**Actual**	**Norm**
	laxis in the last 24 months				
	Hospitalization	343	Members without a comprehensive office visit within 7 days after hospital discharge in the last 12 months	71.14%	74.10%
	Narcotic use	2,294	Members taking > 2 different and overlapping opioid preparations, excluding hospice and cancer, in the analysis period	0.52%	0.42%
Geriatric	>= 65 years old with osteoporosis	32	Members not taking medications for osteoporosis in the last 12 months	75.00%	61.58%
Misc.	All Members	16,630	Members without flu vaccination in the last 12 months	80.10%	82.39%
	Low back pain (new diagnosis)	589	Members with CT or MRI within 6 weeks of initial diagnosis of low back pain	10.53%	9.44%
		589	Members with lumbar spine surgery within 3 months of initial diagnosis of low back pain	1.36%	0.79%
	Pain Control/Substance Abuse	174	Use of Opioids at high dosage, from multiple providers, and filled at multiple pharmacies in persons without cancer - Medicaid	0.00%	0.00%
		174	Use of Opioids from multiple providers and filled at multiple pharmacies in persons without cancer - Commercial and Medicare	1.15%	0.00%
	Rheumatoid Arthritis	87	Members not on DMARDs for Rheumatoid Arthritis in the last 12 months	49.43%	21.05%
		87	Members without a comprehensive office visit in the last 12 months	17.24%	0.36%
	Rheumatoid arthritis on hydroxychloroquine in the last 12 months	11	Members taking Hydroxychloroquine without retinal eye exam in the last 12 months	36.36%	53.90%
	Stroke/TIA	84	Members without a comprehensive office visit in the last 12 months	27.38%	1.77%
Pregnancy	Gestational Diabetes	32	Women with gestational diabetes, who were not tested for diabetes within 4-12 weeks postpartum (ADA)	28.12%	71.25%

Table 5.5.4 Risk Measures

Risk Measures				% of Individual with Gap/Risk	
Clinical Condition		Members with Condition	Description	Actual	Norm
Asthma	Asthma	945	Members with asthma-related ER visit in the last 12 months	9.10%	11.29%
Cardiac	CAD	299	Members with antiplatelets (excluding aspirin) in the last 12 months	10.37%	28.21%
	MI	65	Members with subsequent cardiac-related hospitalization in the analysis period	0.00%	2.23%
COPD	COPD	124	Members with COPD-related ER visit in the last 12 months	12.90%	14.36%
		124	Members with COPD-related hospitalization in the last 12 months	1.61%	3.59%
		114	Members with home oxygen in the analysis period	8.77%	10.81%
		124	Members with more than one hospitalization in the last 12 months	5.65%	8.50%
Diabetes	Diabetes	833	Diabetes with CHF, CAD, or Stroke	15.01%	13.09%
		907	Members with antiplatelet agent in the last 12 months	1.98%	4.21%
		907	Members with complicated lipid disorders in the analysis period	7.61%	11.02%
		833	Members with dialysis in the analysis period	0.72%	0.63%
		907	Members with hyperlipidemia	68.03%	65.69%
General	All Members	16,630	Members with hospice care claims in the last 12 months	0.04%	0.02%
	Pain Syndrome	247	Members with Pain Syndrome and >10 Opiate RX, excluding hospice and cancer, in the last 12 months	16.60%	35.77%
	Utilization Issue	3,418	Members with >4 ER Visits in last 12 months	0.64%	1.30%
Misc.	Hospital Admissions	343	Members who were hospitalized and did not have any office visits in the last 12 months	7.87%	4.82%
		343	Members with > 1 hospitalization in the last 12 months	18.66%	13.28%
	Obstructive Sleep Apnea	0	Members aged 18 years and older with a diagnosis of moderate or severe obstructive sleep apnea who were not prescribed positive airway pressure therapy (MIPS 278)	0.00%	44.44%
	Rheumatoid Arthritis	87	Members with biologic agents for rheumatoid arthritis in the last 12 months	19.54%	32.20%

Risk Measures				% of Individual with Gap/Risk	
Clinical Condition		Members with Condition	Description	Actual	Norm
Osteoarthritis	Osteoarthritis	847	Members with continuous use of opiates across the last 12 months	7.32%	13.17%
Pediatric	Children <=17 y/o	2,833	Children with a diagnosis of obesity in the analysis period	0.35%	0.09%
Pregnancy	Pregnancy	237	Women with high-risk pregnancy	78.90%	72.24%