

STATE OF WEST VIRGINIA



PUBLIC EMPLOYEES INSURANCE AGENCY

Fiscal Year 2017

Detailed Medical and Prescription Drugs Claim Trend Report

December 2017

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West Virginia Public Employees Insurance Agency Report of Independent Actuary

Fiscal Year 2017 Detailed Medical & Prescription Drugs Claim Trend Report

OVERVIEW

Continuing Care Actuaries was engaged by the West Virginia Public Employees Insurance Agency (“PEIA”) to assist the Finance Board in monitoring the plan experience for fiscal year ending June 30, 2017 on a quarterly basis and the forecasting of Fiscal Years 2018 through 2022. This annual trend report to the Finance Board generally serves as the basis for projecting medical and drugs claims through Fiscal Year 2022 in the development of the Financial Plan to be approved the PEIA Finance Board in December 2017. This report is intended for the sole use of the Finance Board and management team. Any other use requires written approval by Continuing Care Actuaries.

Continuing Care Actuaries has collected and reviewed the medical and drugs claims experience using Allowed Non-Medicare claims incurred and paid through August 2017. Effective July 1, 2012, West Virginia Retiree Health Benefit Trust Fund (“Trust Fund” or “RHBT”) had contracted with Humana to provide a Medicare Advantage Plan (“Humana MAPD”) benefit to Medicare-eligible retired employees and their Medicare-eligible dependents. Under this arrangement, Humana has assumed the financial risk of providing comprehensive medical and drugs coverage with limited copayments. Non-Medicare retirees will continue enrollment in PEIA's Preferred Provider Benefit or the Managed Care Option.

While the majority of Medicare coverages are transferred to Humana, all newly eligible Medicare enrollees are initially covered by the RHBT on a secondary self-insured basis with Medicare being the primary coverage. These Medicare coverages are transferred on the following January from a self-insured secondary basis by RHBT to the Humana MAPD plan. While Continuing Care Actuaries monitors the cost trends of these Medicare coverages, for the purposes of this report we have not reviewed the Medicare claims experience in this report due to relatively small number of these coverages and the resulting lack of credibility of Medicare claims where RHBT is secondary.

Since July 1, 2000, HealthSmart Holding Inc. (“HealthSmart”), has been the administrator of the plan’s medical claims and has provided reports for both medical and prescription drugs claims. The analysis utilized claim data supplied from HealthSmart as a primary source of claims data for this report and PEIA has separately provided enrollment information.

Trends were developed by category for the 24-month, 36-month and 48-month credible periods ending June 2017. Our analysis for medical claims do not include incurred claims for the months after June 2017, since the claim experience for these months is largely non-credible with substantial reserves as part of the projected monthly incurred amount. The claim information supplied by HealthSmart for the purposes of this analysis was compared to PEIA’s general ledger system to ensure accuracy of aggregate reporting. In an effort to assure accuracy, the claim information provided by HealthSmart and used in this analysis was reconciled and balanced to the PEIA general ledger amounts as of August 2017.

KEY FINDINGS - MEDICAL

- The 24-month, 36-month and 48-month methodologies resulted in similar observed utilization and unit cost trends, and we chose the 24-month as the methodology that is most likely to produce accurate future trends and will allow PEIA to develop a Financial Plan that will reasonably result in long term financial solvency over the five year projection period. It is noteworthy the overall medical trend decreased from 7.9% in last year's analysis to 2.8% in Fiscal Year 2017 using a 24-month study period. Using the 24-month analysis, PEIA experienced a 3.9% utilization increase and a -1.1% unit cost decrease, resulting in an aggregate trend of 2.8%. The 36-month shows a lower trend of 2.4% and 48-month shows a higher trend of 4.1% respectively.

These results compare similarly to the 24-month trend calculated since Fiscal Year 2002.

West Virginia PEIA Non-Medicare Total 24-Month Trend Analysis-Allowed Claims			
	<u>Utilization</u>	<u>Cost/Service</u>	<u>Total Trend</u>
2002	4.1%	3.6%	7.8%
2003	9.8%	-3.0%	6.5%
2004	11.7%	-6.8%	4.0%
2005	2.8%	-1.1%	1.7%
2006	2.9%	1.0%	4.0%
2007	7.2%	-2.0%	5.1%
2008	2.9%	3.9%	6.9%
2009	2.5%	2.6%	5.1%
2010	2.5%	1.8%	4.4%
2011	4.2%	3.5%	7.8%
2012	5.1%	0.1%	5.3%
2013	2.6%	-1.6%	0.9%
2014	-0.4%	4.5%	4.1%
2015	0.7%	5.6%	6.3%
2016	8.6%	-0.7%	7.9%
2017	3.9%	-1.1%	2.8%

- Overall PEIA and RHBT Fiscal Year 2017 24-month detail trends are summarized below. Note that these trend have not been adjusted for changes in benefit design:

Fiscal Year 2017 Claim Type	Medical	Drugs
PEIA – Active Local	6.5%	17.8%
PEIA – State	2.0%	15.0%
PEIA – Total	2.8%	15.5%
RHBT – Non-Medicare	2.6%	48.7%
Grand Total	2.7%	20.4%

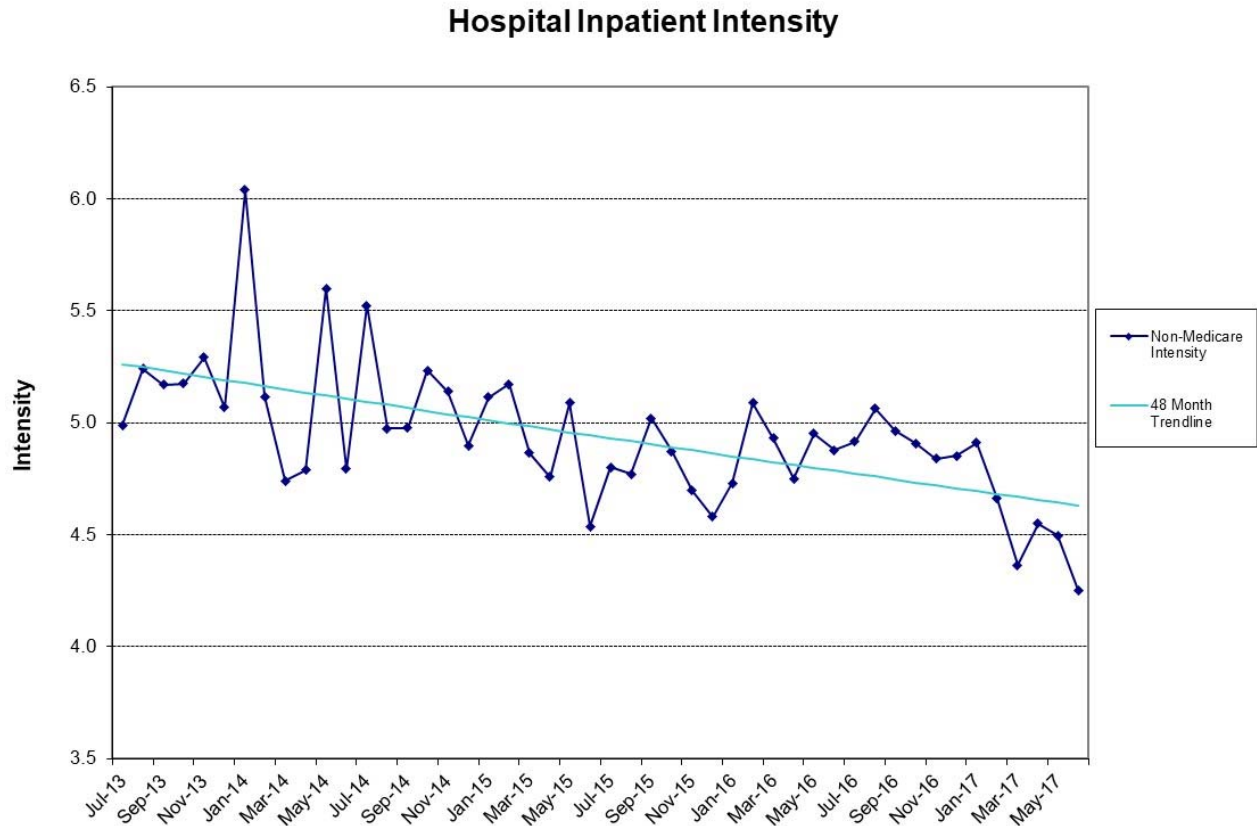
- Overall, In-State services show higher trends than Out-of-State services for Non-Medicare coverages in the 24-month analysis, with higher trend increases for all four categories: HI, HO, PS and O provided in the In-State. A comparison of Non-Medicare medical trends for In-State claims versus Out-of-State claims over the 24-month period analysis reveals an aggregate In-State trend of 6.7% and an Out-of-State trend of -6.5%..

Both the In-State utilization trend and the cost per service trend have been higher compared to Out-of-State. The In-State utilization trend for Non-Medicare was 5.2%, while the Out-of-State trend was -5.2%. The In-State cost per service trend for Non-Medicare was 1.5%, while the Out-of-State trend was -1.3%.

Within the In-State medical categories, the 3 highest trend subcategories were observed for Physician Services' Lab & Pathology, Physician Services' Outpatient Surgery, and Other' Other Services categories which experienced unfavorable upward trends of 12.4%, 12.2% and 82.8%, respectively.

- Using the 24-month analysis, Hospital Inpatient services (“HI”) represent approximately 19% of all medical services and experienced a total trend of 3.4%. The overall trend was the product of a 1.8% increase in utilization and a 1.6% increase in unit cost. It is noteworthy that In-State HI claims showed a 5.5% overall trend, while Out-of-State HI claims experienced a -3.6% overall trend.
- Using the 24-month analysis, Hospital Outpatient services (“HO”) represent approximately 34% of all medical services and experienced a total trend of 0.4%. The overall trend was the product of a 5.5% increase in utilization and a -4.9% reduction in unit cost. It is noteworthy that In-State HO claims showed a 5.5% overall trend, while Out-of-State HO claims experienced a -12.8% overall trend.
- Using the 24-month analysis, Physician Services (“PS”) represent approximately 43% of all medical services and experienced a total trend of 3.5%. The overall trend was the product of a 3.6% increase in utilization of these services and a 0.0% increase in unit cost. It is noteworthy that In-State PS claims showed a 6.2% overall trend, while Out-of-State PS claims experienced a -5.8% overall trend.
- Using the 24-month analysis, Other services (“O”), which are services that are principally Durable Medical Services and Ambulance, represent only 4% of all medical services and experienced the least favorable trend of the broader claim categories with a total trend of 11.5%. The overall trend was the product of a 2.1% increase in utilization of these services and a 9.2% increase in unit cost. It is noteworthy that In-State O claims showed a 26.9% overall trend, while Out-of-State O claims experienced a -0.9% overall trend.
- As noted above, the Out-of-State trends were more favorable than the In-State trends. This is contrary to the trend reports produced in the past.

- A component of the cost per service trend for hospital inpatient is the length of stay, or intensity. The chart below shows the average length of stay by number of days over the last four years. Over the 48-month analysis, the intensity for Non-Medicare hospital stays has an annual trend of -3.9%, which compares favorably to -1.4% last year. The lower intensity of hospital visits has contributed to our recent favorable medical trends, as illustrated in the chart below.



The table below presents the overall Non-Medicare Hospital Inpatient trend showing the three components of visits, days per visit, and cost per day.

West Virginia PEIA Non-Medicare Hospital Inpatient Trend Analysis			
	<u>24-Month</u>	<u>36-Month</u>	<u>48-Month</u>
Visits	-3.9%	-1.5%	-1.5%
Intensity	-5.2%	-4.6%	-3.9%
<u>Cost/Day</u>	<u>13.5%</u>	<u>5.9%</u>	<u>7.8%</u>
Total	3.4%	-0.6%	2.0%

Continuing Care Actuaries has included an additional analysis of utilization and cost on an incurred basis over the last 12 months. This analysis can be found on Page 14 and analyzes the distribution of services based on services provided in West Virginia and services provided elsewhere.

In the 12-month period ending June 2017, approximately 81.8% of medical services were provided in the State of West Virginia and 18.2% of services were provided outside the State. From a cost perspective 70.9% of allowed charges were incurred in the State of West Virginia and 29.1% of allowed charges were provided outside the State, illustrating the higher cost and intensity of out-of-state service.

By major medical category, approximately 85.7% of Hospital Inpatient services were provided in the State of West Virginia representing approximately 45.3% of the total allowed charges for Hospital Inpatient. Conversely, approximately 14.3% of Hospital Inpatient services were provided out of the State of West Virginia and those charges represented 54.7% of the total allowed charges for Hospital Inpatient.

By major medical category, approximately 93.3% of Hospital Outpatient services were provided in the State of West Virginia representing approximately 74.6% of the total allowed charges for Hospital Outpatient. Conversely, approximately 6.7% of Hospital Outpatient services were provided out of the State of West Virginia and those charges represented 25.4% of the total allowed charges for Hospital Outpatient.

By major medical category, approximately 81.3% of Physician Services were provided in the State of West Virginia representing approximately 80.4% of the total allowed charges for Physician Services. Conversely, approximately 18.7% of Physician Services were provided out of the State of West Virginia and those charges represented 19.6% of the total allowed charges for Physician Services.

By major medical category, approximately 52.1% of Other Services were provided in the State of West Virginia representing approximately 59.9% of the total allowed charges for Other Services. Conversely, approximately 47.9% of Other Services were provided out of the State of West Virginia and those charges represented 40.1% of the total allowed charges for Other Services.

KEY FINDINGS - DRUGS

Overall, prescription drugs trends for Non-Medicare coverages have increased significantly compared to 2.6% last year. Using the 24-month analysis, we observed a -2.0% utilization decrease and a 17.8% prescription cost increase, resulting in an aggregate trend of 15.5%. The 24-month overall trend is higher than both the 36-month and 48-month analysis, reflecting the emergence of prescription drug costs and specialty drugs.

West Virginia PEIA Prescription Drugs Total 24-Month Trend Analysis-Allowed Claims			
	<u>Utilization</u>	<u>Cost/Prescription</u>	<u>Total Trend</u>
FY 2017	-2.0%	17.8%	15.5%

METHODOLOGY

HealthSmart provided allowed and paid claim information for Non-Medicare and Medicare eligibility from July 2001 through August 2017. This data set was analyzed on Non-Medicare claims that were incurred from July 2013 through June 2017 for the 48-month credible period. This claim data was consolidated into 24 categories for Hospital Inpatient, Hospital Outpatient, Physician Services and Other. In addition, claim experience was analyzed based on the state of service as defined by HealthSmart. HealthSmart provides the information based on the location that the service was performed, rather than the billing location of the provider. Continuing Care Actuaries verified that the HealthSmart information balanced in total to previously produced claim lag reports that PEIA personnel have balanced to the PEIA ledger accounts.

The trend analysis includes assumptions with respect to the completeness of the claim information to reflect and adjust for unreported claims. There was no adjustment to reflect the various reductions and changes in benefit design as affected by the Finance Board over the analysis period, such as the reduction in hospital inpatient reimbursement rates. In developing aggregate claim trends, individual claim categories were weighted by claims paid for each category over the last 24, 36 and 48 months, respectively depending on the analysis. The following chart summarizes the amount of allowed dollars by category for each paid fiscal year.

The calculated trends for utilization, unit cost and in aggregate were based on a least squares methodology in defining the regression trend line. We manually adjusted these trend lines where the results appeared to be less credible.

Consistent with prior reports, the trends published in this report for Non-Medicare medical claims are based on the allowed amount in order to neutralize the impact of deductibles and copayments that have a varying impact on paid amounts depending on the month of the year. Paid claim trends are higher over the study period, since cost-sharing provisions of the plan have had minimal changes over the four year period.

A summary of the annual Non-Medicare data provided by HealthSmart by Hospital Inpatient (HI), Hospital Outpatient (HO), Physician Services (PS), and Other Services (O) is detailed below.

<u>Non-Medicare Claims</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>
Hospital Inpatient	\$109,502,055	\$120,015,620	\$114,395,418	\$109,751,127
Hospital Outpatient	183,918,167	199,194,256	210,944,905	193,064,799
Physician Services	234,084,604	248,399,943	259,164,990	245,560,589
Other Services	19,484,784	23,046,752	21,514,053	20,822,384
Total	\$546,989,610	\$590,656,571	\$606,019,365	\$569,198,898

Certain categories in the data provided by HealthSmart were consolidated to provide the following summary table for Non-Medicare claims.

<u>Non-Medicare Claims</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>
HI Maternity	\$3,828,243	\$4,902,662	\$3,418,111	\$2,902,140
HI Medical/Surgical	100,801,487	110,988,356	107,679,659	104,197,888
HI Psychiatric/Substance Abuse	4,872,324	4,124,601	3,297,648	2,651,098
HO Emergency Room	29,839,385	33,759,878	31,239,952	29,631,604
HO Medical/Surgical	92,194,470	97,537,847	106,579,594	97,268,632
HO Other Services	59,684,150	65,657,587	70,105,514	64,534,480
HO Psychiatric/Substance Abuse	2,200,163	2,238,944	3,019,845	1,630,083
PS Anesthesia	11,500,310	12,102,641	12,526,900	11,879,114
PS Chemotherapy/Radiation	3,964,967	3,482,537	3,900,335	3,486,961
PS Emergency Room	5,774,024	6,509,378	6,517,718	6,018,439
PS Immunizations/Allergy	7,272,392	7,793,779	8,475,885	8,728,211
PS Inpatient Surgery	8,561,825	8,692,985	8,251,956	7,780,780
PS Inpatient Visits	6,851,786	6,748,557	6,770,864	6,811,610
PS Lab & Pathology	17,115,684	18,775,524	18,896,886	16,935,258
PS Maternity	4,319,809	5,446,495	5,014,619	4,417,821
PS Office Visits	66,856,370	67,264,250	68,016,679	67,151,601
PS Other Services	49,549,802	56,967,989	66,450,685	60,049,161
PS Outpatient Surgery	16,802,728	18,148,953	18,282,748	17,612,078
PS Psychiatric/Substance Abuse	12,008,982	12,730,376	13,416,274	12,738,190
PS Radiology	15,261,530	14,988,802	13,622,989	12,995,153
PS Therapy/Rehab	8,244,396	8,747,677	9,020,450	8,956,211
O Ambulance	3,609,996	4,361,883	4,605,762	4,598,826
O Durable Medical Equipment	8,382,415	8,884,684	9,032,376	8,588,799
O Other Services	7,492,373	9,800,185	7,875,915	7,634,759

TREND COMPARISON USING ALLOWED VERSUS PAID METHODOLOGY

The trend analysis has been developed throughout the report on an allowed basis for Non-Medicare claims to neutralize the impact of deductibles and co-payments that have a varying impact on paid amounts depending on the month of the year. The employees' annual deductible and cost sharing for medical expenses have not changed materially over the last six years.

We have examined the trends utilizing paid claims as opposed to allowed claims. The following table summarizes the trends on a paid basis for the Fiscal Years 2014 through 2017 and on an allowed basis for Non-Medicare medical claims. This exercise is important since interim monthly trend updates provided to PEIA throughout the year are based on paid claims.

**West Virginia PEIA Non-Medicare Medical
Total Trend Analysis**

	<u>Paid Basis</u>	<u>Allowed Basis</u>
24-Month Trend	6.1%	2.8%
36-Month Trend	2.6%	2.4%
48-Month Trend	4.0%	4.1%

TOP 5 CATEGORIES

The following tables give detail on the top 5 increases by utilization, cost per service, and cost per capita. Notably, O-Appiances (DME) experienced the highest increase in utilization. O-Other Services experienced the highest increase in cost per service and in cost per capita.

Top 5 Highest Percentage in Utilization Increases			
	2016 Average	2017 Average	Top 5
Category	Utilization	Utilization	Highest %
O-Appiances (DME)	0.03309	0.03810	15.2%
HO-Other Services	0.12978	0.14667	13.0%
PS-Outpatient Surgery	0.02506	0.02719	8.5%
PS-Office Visits	0.32257	0.34614	7.3%
PS-Lab & Pathology	0.34755	0.36872	6.1%

Top 5 Highest Percentage in Cost / Service Increases			
	2016 Average	2017 Average	Top 5
Category	Cost / Service	Cost / Service	Highest %
O-Other Services	\$221.64	\$295.91	33.5%
PS-Immunizations / Injections / Allergy	41.94	48.83	16.4%
PS-Radiology	48.52	53.90	11.1%
O-Ambulance	367.08	397.12	8.2%
HI-Maternity	2,558.50	2,737.56	7.0%

Top 5 Highest Percentage in Cost / Capita Increases			
	2016 Average	2017 Average	Top 5
Category	Cost / Capita	Cost / Capita	Highest %
O-Other Services	\$3.37	\$4.13	22.6%
PS-Office Visits	30.92	33.94	9.8%
PS-Outpatient Surgery	8.25	8.98	8.9%
PS-Therapies	4.13	4.50	8.9%
PS-Anesthesia	5.68	6.06	6.6%

SUMMARY

The following tables and sections summarize the information and findings of the trend analysis. The tables and charts on the next several pages include separate analysis of utilization and unit cost trends for Non-Medicare coverages. The charts show the breakdown between the different study periods and for In-State and Out-of-State charges.

Recent experience has shown that the Non-Medicare medical claim trends are lower than the current trend assumption of 7.5% for FY 2018. However, the 48-Month trend has reflected a more modest 4.1% trend. Consequently, at this time we believe it is appropriate to keep the FY 2018 medical claim trend assumption for Non-Medicare medical as 7.5%. Recent experience has also shown that Non-Medicare drugs claim trends are higher than the current trend assumption. We also expect specialty drug costs, which currently account for approximately 30% of PEIA drug spend, and grew by more than 50% this past year, to double in the next four to five years. We believe it is appropriate to keep the FY 2018 drugs claim trend assumption to 11.5% for Non-Medicare drugs.

The update of the trend assumptions for FY 2018 is shown below.

Claim Type	Fiscal Year 2018 Trends		
	Previous Assumption	Updated Assumption	Change
Non-Medicare – Medical	7.5%	7.5%	0.0%
Non-Medicare – Prescription Drugs	11.5%	11.5%	0.0%

In the past, claim trends for the financial plan included a 0.5% margin in future years. It should be noted that we have assumed the medical and drugs claim trends for the financial projection will increase by 0.5% in FY 2019 and in each successive fiscal year. We will continue to monitor the claim trend experience and incorporate changes as necessary throughout the fiscal year based on the relatively volatile nature of recent trend experience at PEIA.

Respectfully,



Dave Bond, F.S.A., F.C.A., M.A.A.A.

Managing Partner



Chris Borcik, F.S.A., F.C.A., M.A.A.A.

Principal

**West Virginia PEIA Non-Medicare Total
Study Period of July 2013 to June 2017
(Allowed Claims)**

Trends Summary - Excludes Drugs

	24 Month Trends Summary				36 Month Trends Summary				48 Month Trends Summary			
	<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>	<u>Weight</u>	<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>	<u>Weight</u>	<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>	<u>Weight</u>
HOSPITAL INPATIENT												
Maternity	-21.0%	7.0%	-15.4%	0.5%	-20.8%	0.2%	-20.6%	0.6%	-9.4%	1.3%	-8.3%	0.7%
Medical / Surgical	2.9%	1.6%	4.6%	17.9%	4.8%	-4.0%	0.6%	18.2%	2.3%	0.7%	3.0%	18.3%
Psychiatric / Substance Abuse	-13.2%	-3.8%	-16.5%	0.5%	-20.8%	1.1%	-19.9%	0.6%	-18.3%	2.0%	-16.6%	0.6%
TOTAL	1.8%	1.6%	3.4%	19.0%	3.3%	-3.7%	-0.6%	19.4%	1.2%	0.8%	2.0%	19.6%
HOSPITAL OUTPATIENT												
Emergency Room	-3.8%	0.7%	-3.1%	5.2%	-3.3%	-0.7%	-4.1%	5.4%	-1.6%	2.4%	0.8%	5.4%
Medical / Surgical	4.0%	-2.3%	1.6%	17.4%	6.7%	-2.0%	4.6%	17.1%	5.3%	0.2%	5.6%	17.0%
Other Services	13.0%	-10.9%	0.7%	11.5%	9.3%	-4.9%	3.9%	11.4%	6.8%	-0.6%	6.1%	11.3%
Psychiatric / Substance Abuse	-19.9%	-18.9%	-35.1%	0.4%	-10.0%	-1.1%	-10.9%	0.4%	-3.7%	0.2%	-3.5%	0.4%
TOTAL	5.5%	-4.9%	0.4%	34.5%	5.8%	-2.7%	2.9%	34.2%	4.6%	0.3%	4.9%	34.1%
PHYSICIAN SERVICES												
Anesthesia	6.0%	0.6%	6.6%	2.1%	5.0%	-0.3%	4.7%	2.1%	4.4%	0.4%	4.8%	2.1%
Chemotherapy / Radiation	-7.0%	-1.6%	-8.5%	0.6%	-1.8%	3.0%	1.1%	0.6%	-1.0%	0.1%	-1.0%	0.6%
Emergency Room	-3.8%	-1.9%	-5.6%	1.1%	-1.6%	-0.3%	-1.9%	1.1%	1.3%	1.3%	2.7%	1.1%
Immunizations / Injections / Allergy	-20.7%	16.4%	-7.6%	1.5%	-8.8%	9.3%	-0.3%	1.4%	-4.3%	7.8%	3.2%	1.4%
Inpatient Surgery	4.4%	1.1%	5.6%	1.4%	4.4%	-5.1%	-0.9%	1.4%	2.4%	-2.3%	0.1%	1.4%
Inpatient Visits	-1.3%	4.7%	3.4%	1.2%	-2.2%	5.1%	2.7%	1.2%	-2.6%	4.6%	1.8%	1.2%
Lab & Pathology	6.1%	-3.1%	2.8%	3.1%	3.9%	-3.7%	0.1%	3.1%	3.4%	-0.6%	2.8%	3.1%
Maternity	-2.5%	-10.5%	-12.7%	0.8%	-1.2%	-7.7%	-8.8%	0.8%	4.5%	-3.9%	0.4%	0.8%
Office Visits	7.3%	2.3%	9.8%	11.5%	3.1%	1.3%	4.5%	11.5%	2.0%	1.0%	3.0%	11.6%
Other Services	6.1%	-7.5%	-1.9%	10.8%	5.5%	1.0%	6.5%	10.4%	5.1%	4.3%	9.6%	10.1%
Outpatient Surgery	8.5%	0.4%	8.9%	3.1%	7.2%	-2.9%	4.1%	3.1%	5.6%	-0.7%	4.9%	3.1%
Psychiatric / Substance Abuse	-5.2%	5.5%	0.1%	2.2%	-2.8%	5.5%	2.6%	2.2%	-0.2%	4.5%	4.3%	2.2%
Radiology	-6.6%	11.1%	3.8%	2.3%	-3.8%	0.5%	-3.3%	2.4%	-1.6%	-1.8%	-3.3%	2.5%
Therapies	5.8%	2.9%	8.9%	1.5%	4.3%	1.2%	5.6%	1.5%	3.8%	1.8%	5.7%	1.5%
TOTAL	3.6%	0.0%	3.5%	43.0%	2.7%	0.6%	3.4%	42.7%	2.6%	1.7%	4.3%	42.7%
OTHER												
Ambulance	-5.5%	8.2%	2.3%	0.8%	0.5%	4.2%	4.8%	0.8%	0.5%	8.8%	9.4%	0.7%
Appliances (DME)	15.2%	-11.7%	1.7%	1.5%	12.1%	-8.6%	2.6%	1.5%	8.4%	-3.5%	4.6%	1.5%
Other Services	-8.2%	33.5%	22.6%	1.3%	-9.8%	9.3%	-1.4%	1.4%	-7.2%	12.2%	4.2%	1.4%
TOTAL	2.1%	9.2%	11.5%	3.6%	1.2%	1.0%	2.3%	3.7%	0.8%	5.1%	5.9%	3.7%
GRAND TOTAL	3.9%	-1.1%	2.8%	100.0%	3.8%	-1.3%	2.4%	100.0%	3.0%	1.1%	4.1%	100.0%

**West Virginia PEIA Non-Medicare Total
Study Period of July 2015 to June 2017
(Allowed Claims)**

24 Month Trends Summary - Excludes Drugs

	In State			Out of State			Total			In State Weight	Out of State Weight	Total Weight
	Utilization	Cost / Service	Total Trend	Utilization	Cost / Service	Total Trend	Utilization	Cost / Service	Total Trend			
HOSPITAL INPATIENT												
Maternity	-21.2%	5.0%	-17.3%	-19.9%	0.5%	-19.4%	-21.0%	7.0%	-15.4%	0.6%	0.7%	0.5%
Medical / Surgical	4.3%	1.9%	6.3%	-4.5%	2.0%	-2.6%	2.9%	1.6%	4.6%	11.2%	33.2%	17.9%
Psychiatric / Substance Abuse	15.0%	-5.4%	8.7%	-65.7%	25.7%	-56.9%	-13.2%	-3.8%	-16.5%	0.5%	0.6%	0.5%
TOTAL	3.6%	1.7%	5.5%	-5.8%	2.3%	-3.6%	1.8%	1.6%	3.4%	12.3%	34.4%	19.0%
HOSPITAL OUTPATIENT												
Emergency Room	-2.7%	0.3%	-2.4%	-13.9%	9.9%	-5.4%	-3.8%	0.7%	-3.1%	5.9%	4.2%	5.2%
Medical / Surgical	5.5%	2.8%	8.4%	-9.4%	-4.5%	-13.4%	4.0%	-2.3%	1.6%	17.6%	16.4%	17.4%
Other Services	14.6%	-8.7%	4.7%	-9.7%	-2.6%	-12.0%	13.0%	-10.9%	0.7%	12.2%	9.7%	11.5%
Psychiatric / Substance Abuse	6.7%	-5.4%	1.0%	-45.7%	-3.0%	-47.4%	-19.9%	-18.9%	-35.1%	0.2%	0.9%	0.4%
TOTAL	7.2%	-1.6%	5.5%	-11.1%	-1.9%	-12.8%	5.5%	-4.9%	0.4%	35.8%	31.1%	34.5%
PHYSICIAN SERVICES												
Anesthesia	7.3%	0.4%	7.7%	-2.7%	5.7%	2.9%	6.0%	0.6%	6.6%	2.3%	1.6%	2.1%
Chemotherapy / Radiation	1.9%	-6.8%	-4.9%	-32.7%	19.3%	-19.8%	-7.0%	-1.6%	-8.5%	0.5%	0.9%	0.6%
Emergency Room	-2.1%	-2.6%	-4.7%	-20.4%	14.5%	-8.9%	-3.8%	-1.9%	-5.6%	1.3%	0.6%	1.1%
Immunizations / Injections / Allergy	-21.2%	16.5%	-8.2%	-12.2%	12.6%	-1.2%	-20.7%	16.4%	-7.6%	1.9%	0.5%	1.5%
Inpatient Surgery	5.3%	-1.5%	3.7%	0.9%	9.6%	10.6%	4.4%	1.1%	5.6%	1.4%	1.2%	1.4%
Inpatient Visits	-2.0%	4.0%	1.9%	1.9%	6.4%	8.4%	-1.3%	4.7%	3.4%	1.3%	0.9%	1.2%
Lab & Pathology	10.7%	1.6%	12.4%	1.9%	-5.3%	-3.5%	6.1%	-3.1%	2.8%	1.8%	5.8%	3.1%
Maternity	-9.6%	-3.5%	-12.7%	42.5%	-40.6%	-15.3%	-2.5%	-10.5%	-12.7%	1.1%	0.3%	0.8%
Office Visits	8.3%	2.7%	11.2%	-3.1%	2.1%	-1.1%	7.3%	2.3%	9.8%	14.8%	4.2%	11.5%
Other Services	7.4%	-5.0%	2.0%	-5.7%	-8.6%	-13.8%	6.1%	-7.5%	-1.9%	11.4%	8.6%	10.8%
Outpatient Surgery	10.3%	1.7%	12.2%	-2.3%	-0.6%	-2.9%	8.5%	0.4%	8.9%	3.5%	2.1%	3.1%
Psychiatric / Substance Abuse	5.3%	0.7%	6.0%	-49.7%	19.6%	-39.8%	-5.2%	5.5%	0.1%	2.8%	0.8%	2.2%
Radiology	-5.7%	12.4%	6.1%	-14.2%	12.1%	-3.8%	-6.6%	11.1%	3.8%	2.7%	1.6%	2.3%
Therapies	6.5%	3.0%	9.6%	-2.8%	-2.2%	-4.9%	5.8%	2.9%	8.9%	2.1%	0.2%	1.5%
TOTAL	5.0%	1.1%	6.2%	-5.2%	-0.6%	-5.8%	3.6%	0.0%	3.5%	49.0%	29.5%	43.0%
OTHER												
Ambulance	-4.0%	12.7%	8.2%	-20.3%	0.5%	-19.9%	-5.5%	8.2%	2.3%	0.9%	0.4%	0.8%
Appliances (DME)	-23.2%	-6.2%	-28.0%	65.8%	-27.0%	21.0%	15.2%	-11.7%	1.7%	0.8%	3.1%	1.5%
Other Services	-7.6%	97.8%	82.8%	-12.2%	-35.4%	-43.3%	-8.2%	33.5%	22.6%	1.2%	1.4%	1.3%
TOTAL	-10.8%	42.3%	26.9%	36.3%	-27.3%	-0.9%	2.1%	9.2%	11.5%	3.0%	4.9%	3.6%
GRAND TOTAL	5.2%	1.5%	6.7%	-5.2%	-1.3%	-6.5%	3.9%	-1.1%	2.8%	100.0%	100.0%	100.0%

**West Virginia PEIA Non-Medicare Total
Study Period of July 2014 to June 2017
(Allowed Claims)**

36 Month Trends Summary - Excludes Drugs

	In State			Out of State			Total			In State Weight	Out of State Weight	Total Weight
	Utilization	Cost / Service	Total Trend	Utilization	Cost / Service	Total Trend	Utilization	Cost / Service	Total Trend			
HOSPITAL INPATIENT												
Maternity	-20.1%	5.6%	-15.6%	-25.1%	-0.6%	-25.6%	-20.8%	0.2%	-20.6%	0.6%	0.8%	0.6%
Medical / Surgical	5.7%	0.8%	6.6%	0.1%	1.5%	1.6%	4.8%	-4.0%	0.6%	11.2%	33.4%	18.2%
Psychiatric / Substance Abuse	-13.5%	-1.6%	-14.9%	-31.1%	8.9%	-24.9%	-20.8%	1.1%	-19.9%	0.5%	0.6%	0.6%
TOTAL	3.7%	1.0%	4.7%	-1.0%	1.6%	0.5%	3.3%	-3.7%	-0.6%	12.3%	34.9%	19.4%
HOSPITAL OUTPATIENT												
Emergency Room	-2.7%	-0.3%	-3.0%	-9.4%	3.4%	-6.3%	-3.3%	-0.7%	-4.1%	5.9%	4.3%	5.4%
Medical / Surgical	7.5%	1.5%	9.1%	-0.1%	-5.3%	-5.4%	6.7%	-2.0%	4.6%	17.6%	16.1%	17.1%
Other Services	10.2%	-2.7%	7.3%	-3.9%	-2.3%	-6.2%	9.3%	-4.9%	3.9%	12.2%	9.6%	11.4%
Psychiatric / Substance Abuse	2.2%	-0.6%	1.7%	-22.1%	10.0%	-14.3%	-10.0%	-1.1%	-10.9%	0.2%	0.8%	0.4%
TOTAL	6.7%	-0.2%	6.5%	-3.2%	-2.8%	-5.9%	5.8%	-2.7%	2.9%	35.8%	30.8%	34.2%
PHYSICIAN SERVICES												
Anesthesia	5.7%	0.2%	6.0%	0.2%	0.7%	0.9%	5.0%	-0.3%	4.7%	2.3%	1.6%	2.1%
Chemotherapy / Radiation	-1.2%	-8.5%	-9.6%	-3.7%	28.3%	23.5%	-1.8%	3.0%	1.1%	0.5%	0.8%	0.6%
Emergency Room	-0.6%	-0.5%	-1.1%	-12.0%	8.8%	-4.2%	-1.6%	-0.3%	-1.9%	1.3%	0.6%	1.1%
Immunizations / Injections / Allergy	-9.0%	9.4%	-0.5%	-5.2%	7.4%	1.8%	-8.8%	9.3%	-0.3%	1.9%	0.4%	1.4%
Inpatient Surgery	5.4%	-0.4%	5.0%	0.7%	-14.4%	-13.8%	4.4%	-5.1%	-0.9%	1.4%	1.3%	1.4%
Inpatient Visits	-3.7%	3.6%	-0.2%	5.4%	7.0%	12.8%	-2.2%	5.1%	2.7%	1.3%	0.8%	1.2%
Lab & Pathology	6.2%	1.0%	7.3%	2.0%	-6.3%	-4.5%	3.9%	-3.7%	0.1%	1.8%	5.8%	3.1%
Maternity	-5.1%	-4.7%	-9.5%	26.6%	-17.7%	4.2%	-1.2%	-7.7%	-8.8%	1.1%	0.3%	0.8%
Office Visits	3.7%	1.8%	5.6%	-2.9%	-0.6%	-3.5%	3.1%	1.3%	4.5%	14.8%	4.2%	11.5%
Other Services	6.4%	2.0%	8.6%	-2.7%	2.7%	-0.1%	5.5%	1.0%	6.5%	11.4%	8.2%	10.4%
Outpatient Surgery	8.0%	0.3%	8.3%	2.1%	-11.3%	-9.4%	7.2%	-2.9%	4.1%	3.5%	2.2%	3.1%
Psychiatric / Substance Abuse	4.5%	1.6%	6.2%	-30.9%	20.6%	-16.7%	-2.8%	5.5%	2.6%	2.8%	0.8%	2.2%
Radiology	-3.1%	2.9%	-0.3%	-9.2%	-3.5%	-12.3%	-3.8%	0.5%	-3.3%	2.7%	1.7%	2.4%
Therapies	4.6%	2.1%	6.8%	0.8%	-15.0%	-14.4%	4.3%	1.2%	5.6%	2.1%	0.3%	1.5%
TOTAL	3.6%	1.7%	5.3%	-1.9%	-0.8%	-2.7%	2.7%	0.6%	3.4%	49.0%	29.1%	42.7%
OTHER												
Ambulance	1.0%	9.8%	10.9%	-4.2%	-14.7%	-18.3%	0.5%	4.2%	4.8%	0.9%	0.4%	0.8%
Appliances (DME)	-3.5%	-8.9%	-12.2%	31.7%	-6.4%	23.3%	12.1%	-8.6%	2.6%	0.8%	2.9%	1.5%
Other Services	-9.1%	52.9%	39.0%	-14.3%	-23.7%	-34.5%	-9.8%	9.3%	-1.4%	1.2%	1.9%	1.4%
TOTAL	-4.4%	22.2%	16.9%	12.3%	-13.3%	-2.6%	1.2%	1.0%	2.3%	3.0%	5.2%	3.7%
GRAND TOTAL	4.5%	1.5%	6.1%	-1.3%	-1.2%	-2.5%	3.8%	-1.3%	2.4%	100.0%	100.0%	100.0%

**West Virginia PEIA Non-Medicare Total
Study Period of July 2013 to June 2017
(Allowed Claims)**

48 Month Trends Summary - Excludes Drugs

	In State			Out of State			Total			In State Weight	Out of State Weight	Total Weight
	Utilization	Cost / Service	Total Trend	Utilization	Cost / Service	Total Trend	Utilization	Cost / Service	Total Trend			
HOSPITAL INPATIENT												
Maternity	-9.1%	4.8%	-4.8%	-11.3%	-0.8%	-12.0%	-9.4%	1.3%	-8.3%	0.6%	0.9%	0.7%
Medical / Surgical	2.8%	0.3%	3.1%	-0.4%	6.0%	5.6%	2.3%	0.7%	3.0%	11.4%	33.1%	18.3%
Psychiatric / Substance Abuse	-14.9%	1.2%	-13.9%	-24.4%	9.6%	-17.1%	-18.3%	2.0%	-16.6%	0.6%	0.7%	0.6%
TOTAL	1.4%	0.6%	2.0%	-1.1%	5.9%	4.7%	1.2%	0.8%	2.0%	12.6%	34.7%	19.6%
HOSPITAL OUTPATIENT												
Emergency Room	-1.4%	1.7%	0.2%	-3.3%	6.5%	3.0%	-1.6%	2.4%	0.8%	5.9%	4.2%	5.4%
Medical / Surgical	5.7%	1.5%	7.3%	2.2%	-1.0%	1.2%	5.3%	0.2%	5.6%	17.5%	16.0%	17.0%
Other Services	7.4%	0.4%	7.8%	-1.2%	1.6%	0.4%	6.8%	-0.6%	6.1%	12.0%	9.6%	11.3%
Psychiatric / Substance Abuse	1.8%	-1.1%	0.7%	-9.7%	7.2%	-3.1%	-3.7%	0.2%	-3.5%	0.2%	0.8%	0.4%
TOTAL	5.0%	1.2%	6.3%	0.1%	1.1%	1.1%	4.6%	0.3%	4.9%	35.7%	30.6%	34.1%
PHYSICIAN SERVICES												
Anesthesia	5.0%	0.5%	5.5%	0.6%	2.0%	2.6%	4.4%	0.4%	4.8%	2.3%	1.6%	2.1%
Chemotherapy / Radiation	-2.3%	-4.9%	-7.1%	3.3%	7.3%	10.8%	-1.0%	0.1%	-1.0%	0.6%	0.8%	0.6%
Emergency Room	1.7%	1.0%	2.7%	-2.3%	6.5%	4.0%	1.3%	1.3%	2.7%	1.3%	0.6%	1.1%
Immunizations / Injections / Allergy	-4.3%	8.0%	3.3%	-3.0%	5.6%	2.4%	-4.3%	7.8%	3.2%	1.8%	0.4%	1.4%
Inpatient Surgery	2.0%	-0.2%	1.9%	3.9%	-7.4%	-3.8%	2.4%	-2.3%	0.1%	1.5%	1.4%	1.4%
Inpatient Visits	-3.3%	3.6%	0.2%	1.0%	6.2%	7.3%	-2.6%	4.6%	1.8%	1.3%	0.8%	1.2%
Lab & Pathology	4.8%	1.7%	6.5%	2.2%	-1.8%	0.3%	3.4%	-0.6%	2.8%	1.8%	5.9%	3.1%
Maternity	2.5%	-2.8%	-0.4%	19.5%	-6.2%	12.1%	4.5%	-3.9%	0.4%	1.1%	0.3%	0.8%
Office Visits	2.4%	1.2%	3.5%	-1.4%	0.5%	-0.9%	2.0%	1.0%	3.0%	15.0%	4.3%	11.6%
Other Services	5.8%	5.6%	11.7%	-0.6%	4.1%	3.5%	5.1%	4.3%	9.6%	11.0%	8.2%	10.1%
Outpatient Surgery	6.1%	0.4%	6.5%	2.6%	-3.1%	-0.6%	5.6%	-0.7%	4.9%	3.5%	2.2%	3.1%
Psychiatric / Substance Abuse	4.4%	1.9%	6.4%	-16.8%	16.0%	-3.4%	-0.2%	4.5%	4.3%	2.8%	0.9%	2.2%
Radiology	-1.3%	-0.9%	-2.3%	-3.6%	-3.2%	-6.7%	-1.6%	-1.8%	-3.3%	2.8%	1.8%	2.5%
Therapies	4.0%	2.2%	6.2%	1.6%	-5.0%	-3.5%	3.8%	1.8%	5.7%	2.1%	0.3%	1.5%
TOTAL	3.1%	2.2%	5.3%	0.0%	1.1%	1.2%	2.6%	1.7%	4.3%	48.8%	29.4%	42.7%
OTHER												
Ambulance	0.8%	11.8%	12.7%	-2.8%	-0.1%	-2.9%	0.5%	8.8%	9.4%	0.9%	0.4%	0.7%
Appliances (DME)	1.4%	-5.3%	-4.0%	16.3%	0.9%	17.4%	8.4%	-3.5%	4.6%	0.8%	2.9%	1.5%
Other Services	-8.0%	43.3%	31.8%	-2.3%	-16.8%	-18.7%	-7.2%	12.2%	4.2%	1.1%	2.0%	1.4%
TOTAL	-2.5%	19.3%	16.3%	7.9%	-5.8%	1.7%	0.8%	5.1%	5.9%	2.9%	5.3%	3.7%
GRAND TOTAL	3.4%	2.1%	5.6%	0.1%	2.4%	2.4%	3.0%	1.1%	4.1%	100.0%	100.0%	100.0%

**West Virginia PEIA Non-Medicare Total
Study Period of July 2016 to June 2017
(Allowed Claims)**

12 Month Summary - Excludes Drugs

	Number of Visits					Total Allowed Cost				
	<u>In State</u>	<u>Out of State</u>	<u>Total</u>	<u>In State %</u>	<u>Out of State %</u>	<u>In State</u>	<u>Out of State</u>	<u>Total</u>	<u>In State %</u>	<u>Out of State %</u>
HOSPITAL INPATIENT										
Maternity	950	119	1,069	88.9%	11.1%	1,785,073	1,137,238	2,922,311	61.1%	38.9%
Medical / Surgical	8,988	1,521	10,509	85.5%	14.5%	46,155,538	58,433,316	104,588,854	44.1%	55.9%
Psychiatric / Substance Abuse	349	74	423	82.5%	17.5%	2,029,279	647,232	2,676,511	75.8%	24.2%
TOTAL	10,287	1,713	12,001	85.7%	14.3%	49,969,891	60,217,786	110,187,676	45.3%	54.7%
HOSPITAL OUTPATIENT										
Emergency Room	38,830	3,542	42,372	91.6%	8.4%	22,191,289	7,441,657	29,632,946	74.9%	25.1%
Medical / Surgical	102,866	9,676	112,542	91.4%	8.6%	72,069,237	25,373,737	97,442,974	74.0%	26.0%
Other Services	276,010	15,435	291,444	94.7%	5.3%	49,022,515	15,517,381	64,539,896	76.0%	24.0%
Psychiatric / Substance Abuse	5,498	1,968	7,466	73.6%	26.4%	815,070	809,908	1,624,979	50.2%	49.8%
TOTAL	423,203	30,621	453,824	93.3%	6.7%	144,098,110	49,142,684	193,240,795	74.6%	25.4%
PHYSICIAN SERVICES										
Anesthesia	41,008	5,402	46,410	88.4%	11.6%	9,208,095	2,705,210	11,913,306	77.3%	22.7%
Chemotherapy / Radiation	8,650	2,186	10,835	79.8%	20.2%	1,934,055	1,551,695	3,485,750	55.5%	44.5%
Emergency Room	36,562	2,784	39,347	92.9%	7.1%	4,952,535	1,055,709	6,008,243	82.4%	17.6%
Immunizations / Injections / Allergy	204,190	13,941	218,131	93.6%	6.4%	7,878,535	819,345	8,697,880	90.6%	9.4%
Inpatient Surgery	9,061	2,236	11,297	80.2%	19.8%	5,622,637	2,176,137	7,798,774	72.1%	27.9%
Inpatient Visits	48,219	9,643	57,862	83.3%	16.7%	5,151,960	1,651,442	6,803,402	75.7%	24.3%
Lab & Pathology	352,307	366,111	718,418	49.0%	51.0%	7,350,544	9,616,681	16,967,224	43.3%	56.7%
Maternity	3,842	960	4,802	80.0%	20.0%	3,830,732	569,586	4,400,318	87.1%	12.9%
Office Visits	633,541	54,353	687,895	92.1%	7.9%	60,209,902	7,061,522	67,271,424	89.5%	10.5%
Other Services	562,114	54,882	616,996	91.1%	8.9%	46,666,213	13,396,643	60,062,856	77.7%	22.3%
Outpatient Surgery	46,977	6,793	53,770	87.4%	12.6%	14,190,071	3,475,305	17,665,376	80.3%	19.7%
Psychiatric / Substance Abuse	121,800	11,605	133,405	91.3%	8.7%	11,750,958	982,841	12,733,799	92.3%	7.7%
Radiology	221,807	24,163	245,970	90.2%	9.8%	10,384,999	2,632,793	13,017,792	79.8%	20.2%
Therapies	171,441	11,613	183,054	93.7%	6.3%	8,545,841	429,308	8,975,148	95.2%	4.8%
TOTAL	2,461,518	566,674	3,028,192	81.3%	18.7%	197,677,077	48,124,217	245,801,295	80.4%	19.6%
OTHER										
Ambulance	10,622	842	11,464	92.7%	7.3%	4,030,797	550,115	4,580,912	88.0%	12.0%
Appliances (DME)	25,508	50,874	76,383	33.4%	66.6%	2,511,658	6,059,361	8,571,019	29.3%	70.7%
Other Services	24,172	3,701	27,873	86.7%	13.3%	5,951,938	1,770,114	7,722,051	77.1%	22.9%
TOTAL	60,302	55,417	115,719	52.1%	47.9%	12,494,392	8,379,591	20,873,983	59.9%	40.1%
GRAND TOTAL	2,959,301	657,213	3,616,513	81.8%	18.2%	404,239,471	165,864,278	570,103,748	70.9%	29.1%

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**West Virginia PEIA Non-Medicare Prescription Drugs Total
Study Period of July 2013 to June 2017
(Paid Claims)**

24 Month Trends Summary

	<u>Utilization</u>	<u>Cost / Prescription</u>	<u>Total Trend</u>
Non-Medicare	-2.0%	17.8%	15.5%

36 Month Trends Summary

	<u>Utilization</u>	<u>Cost / Prescription</u>	<u>Total Trend</u>
Non-Medicare	-0.1%	9.5%	9.4%

48 Month Trends Summary

	<u>Utilization</u>	<u>Cost / Prescription</u>	<u>Total Trend</u>
Non-Medicare	0.9%	7.7%	8.7%

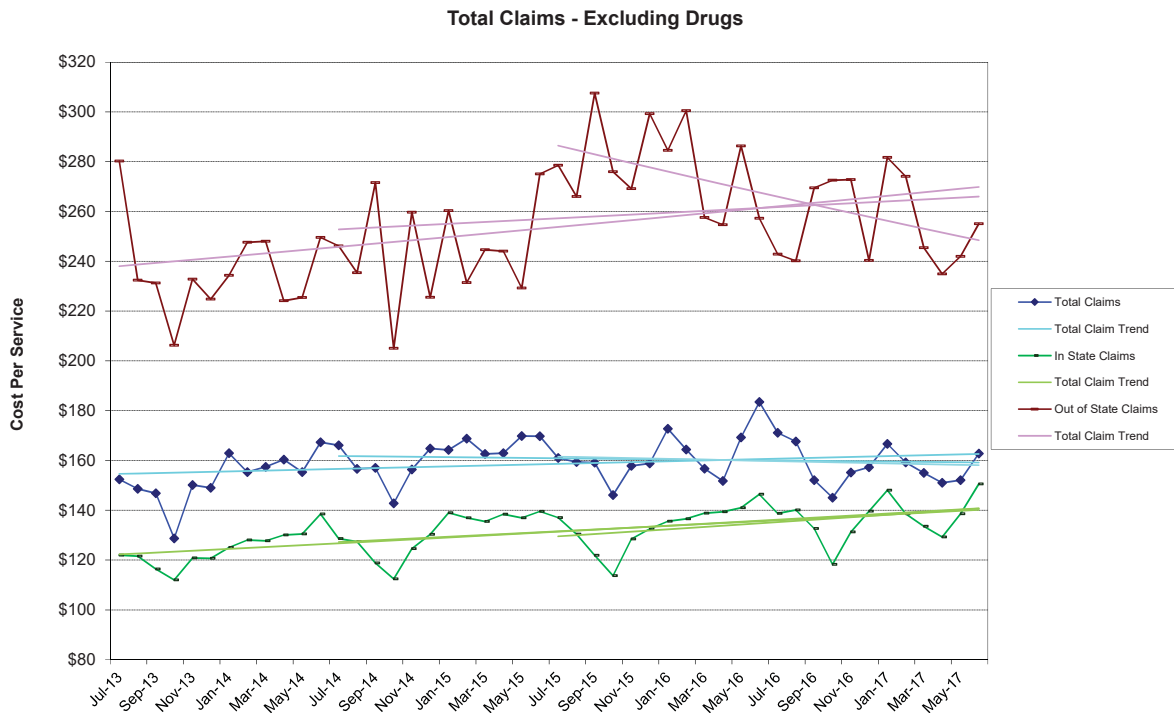
Appendix A

**NON-MEDICARE CLAIMS
Excluding Drugs
GRAND TOTAL**

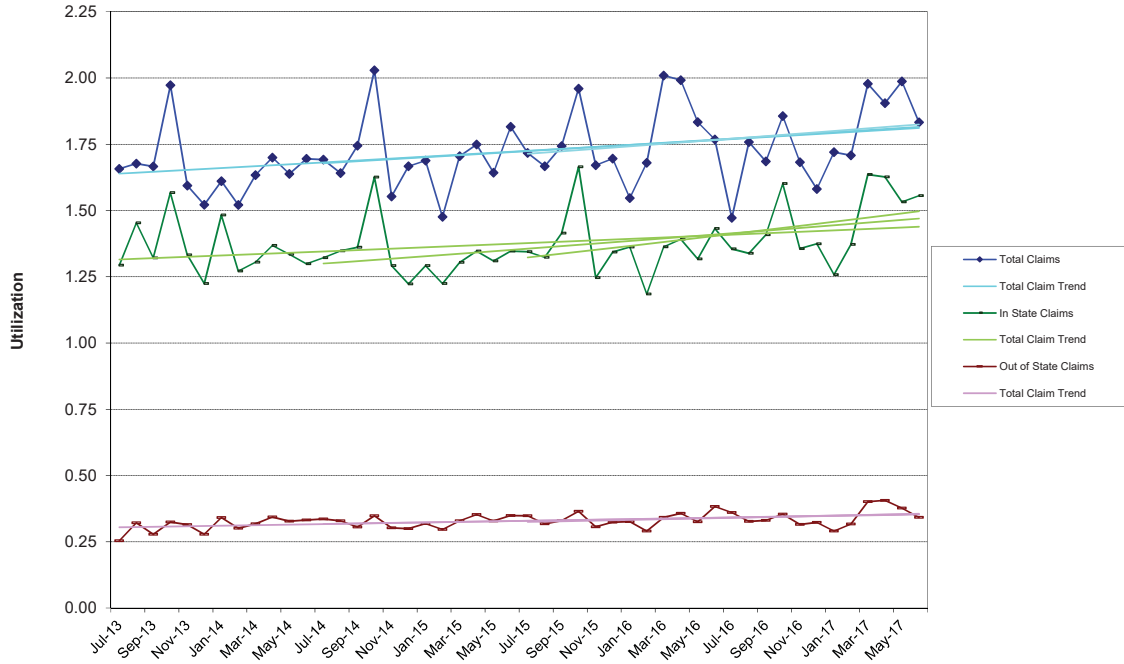
24-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
3.9%	-1.1%	2.8%

36-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
3.8%	-1.3%	2.4%

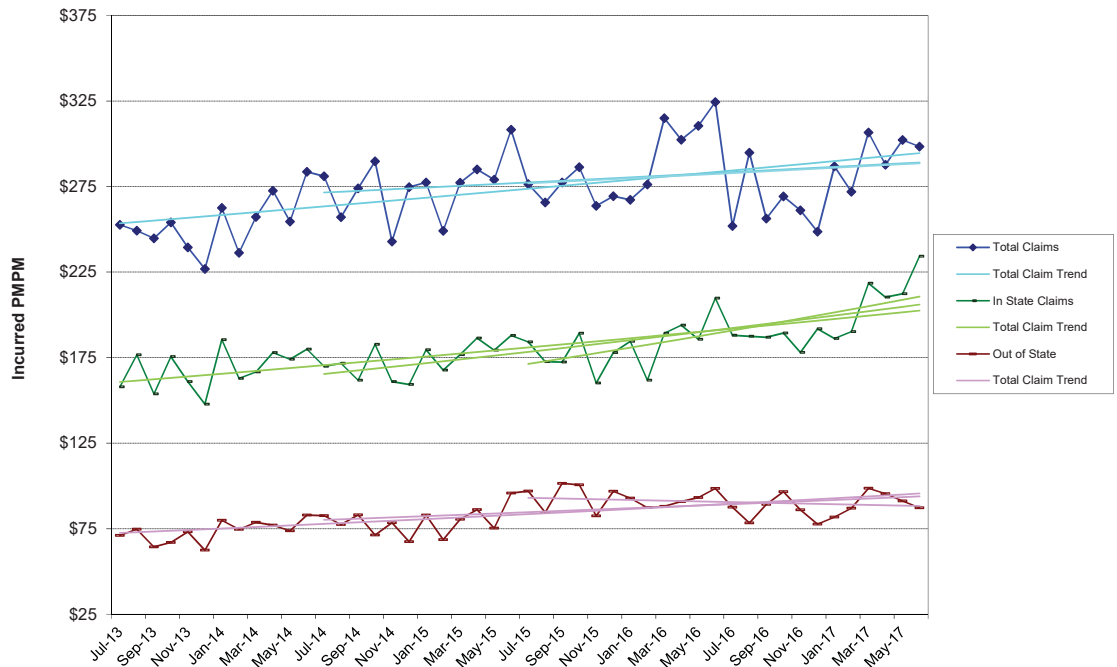
48-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
3.0%	1.1%	4.1%



Total Claims - Excluding Drugs



Total Claims - Excluding Drugs



**NON-MEDICARE CLAIMS
Excluding Drugs**

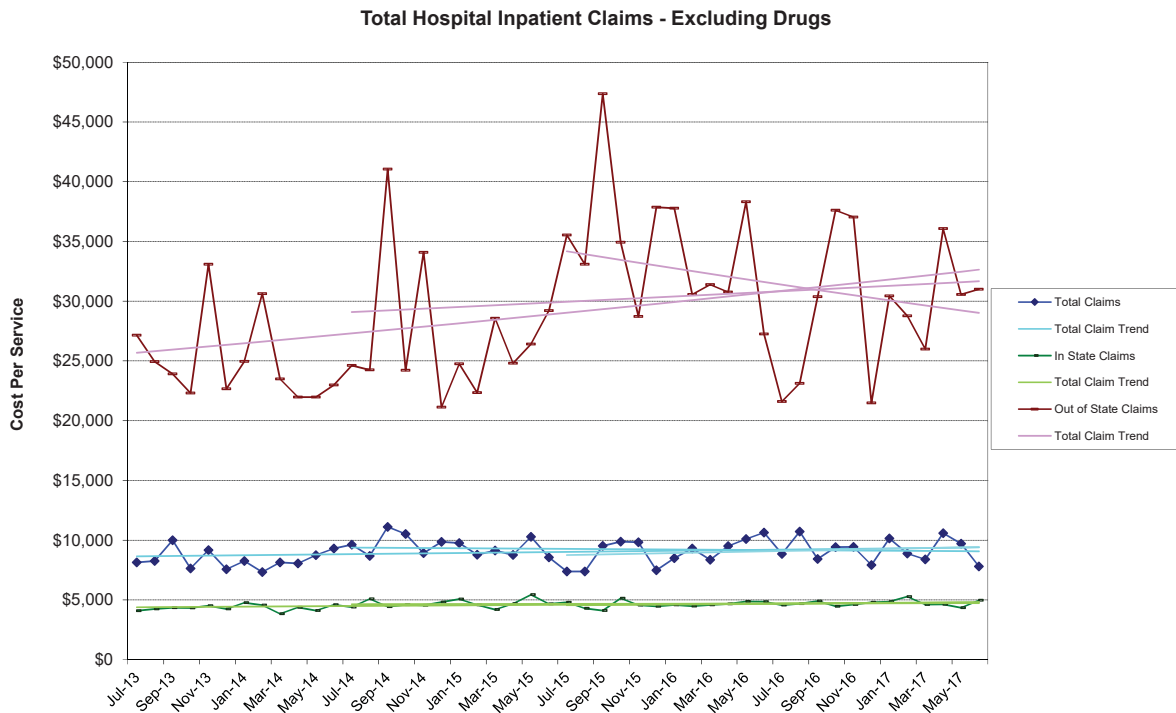
HOSPITAL INPATIENT

TOTAL

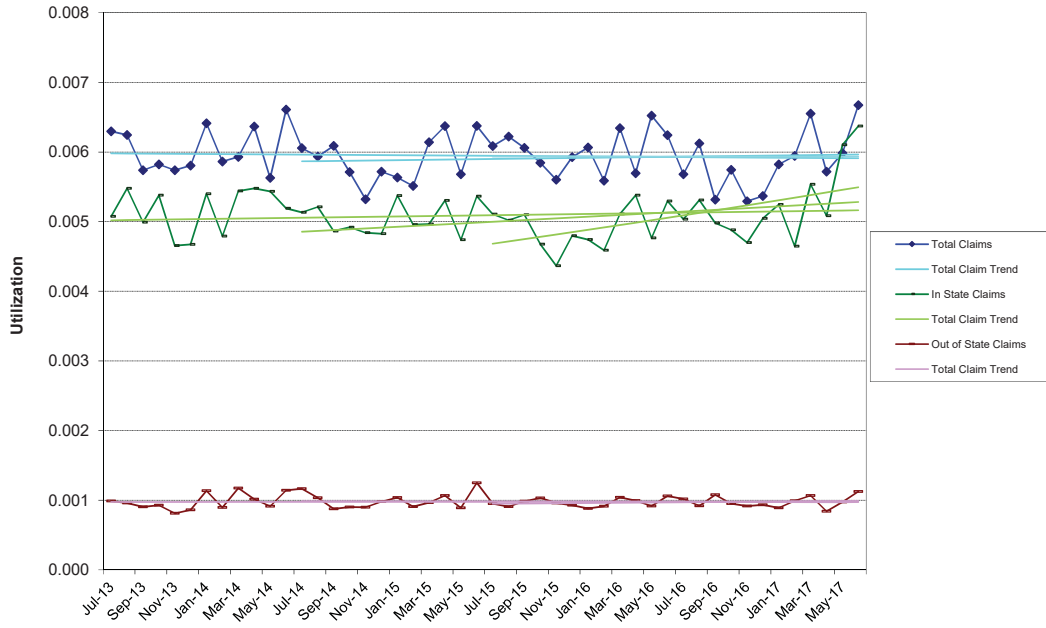
24-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
1.8%	1.6%	3.4%

36-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
3.3%	-3.7%	-0.6%

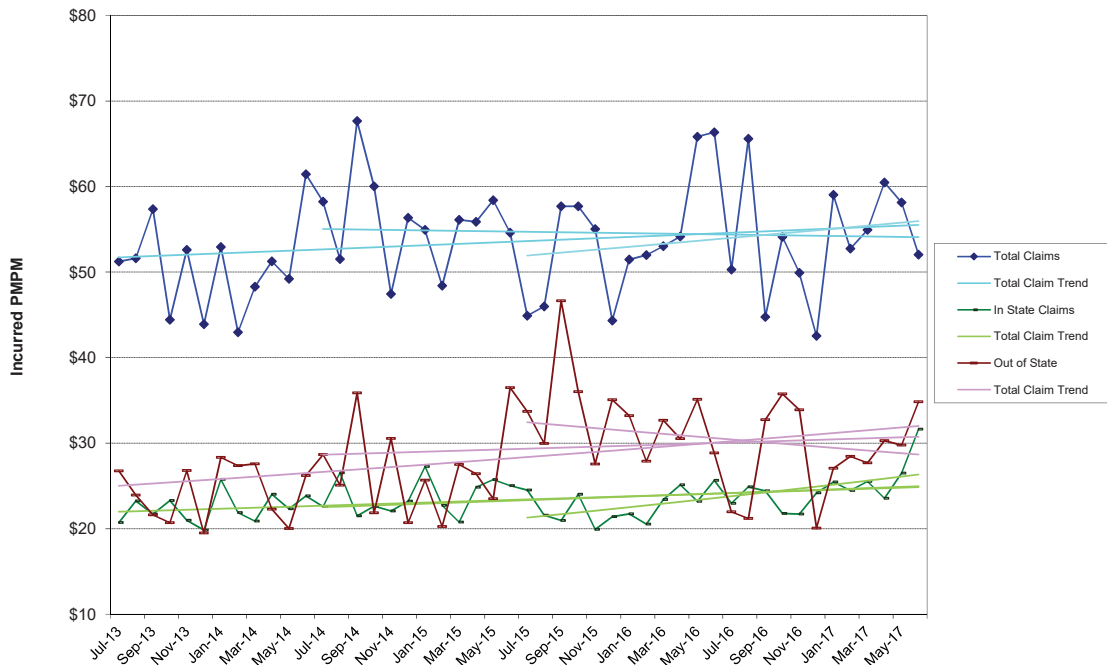
48-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
1.2%	0.8%	2.0%



Total Hospital Inpatient Claims - Excluding Drugs



Total Hospital Inpatient Claims - Excluding Drugs



**NON-MEDICARE CLAIMS
Excluding Drugs**

HOSPITAL OUTPATIENT

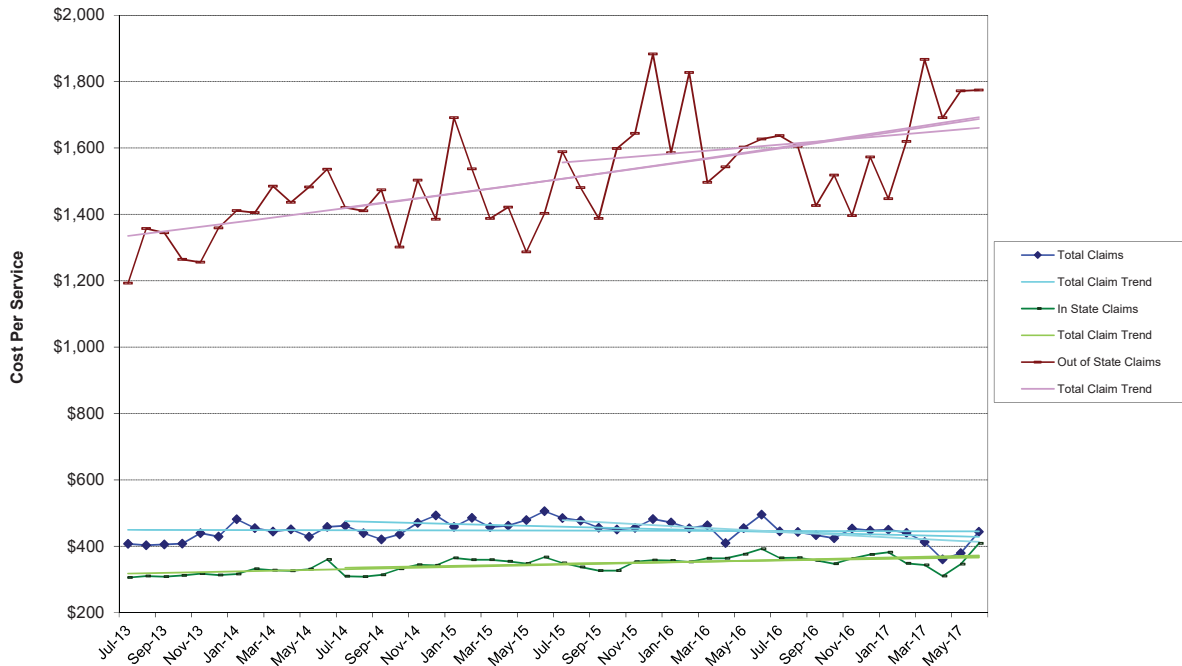
TOTAL

24-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
5.5%	-4.9%	0.4%

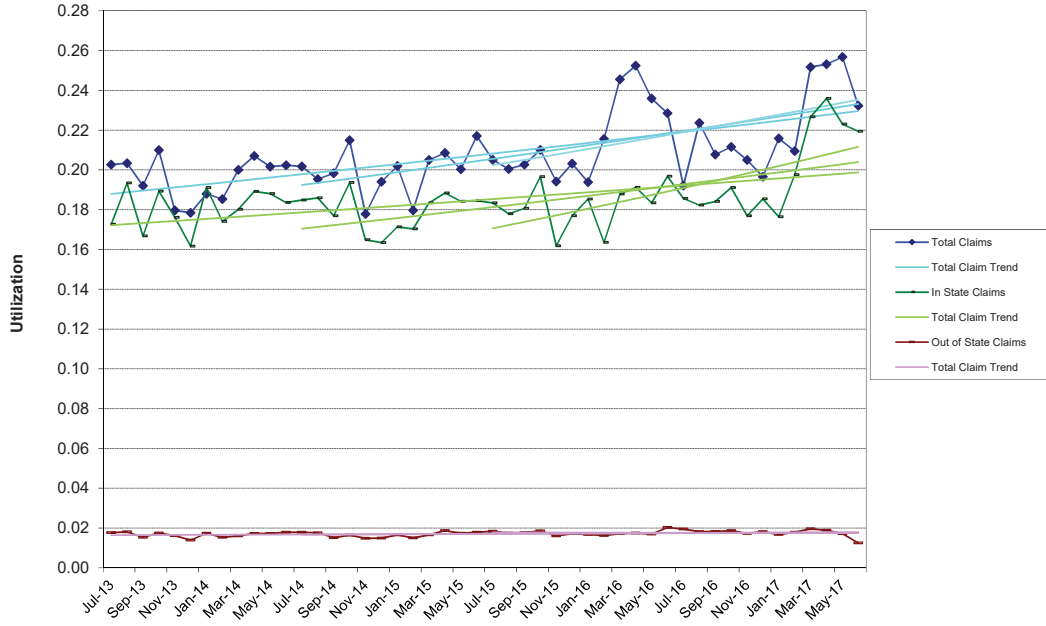
36-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
5.8%	-2.7%	2.9%

48-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
4.6%	0.3%	4.9%

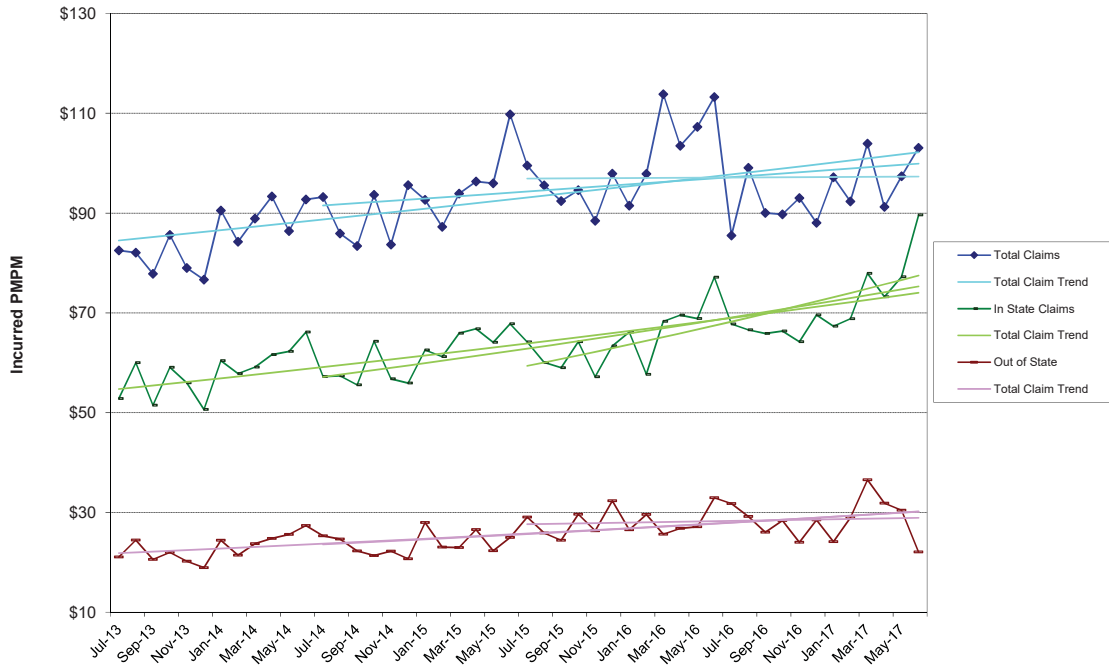
Total Hospital Outpatient Claims - Excluding Drugs



Total Hospital Outpatient Claims - Excluding Drugs



Total Hospital Outpatient Claims - Excluding Drugs



**NON-MEDICARE CLAIMS
Excluding Drugs**

PHYSICIAN SERVICES

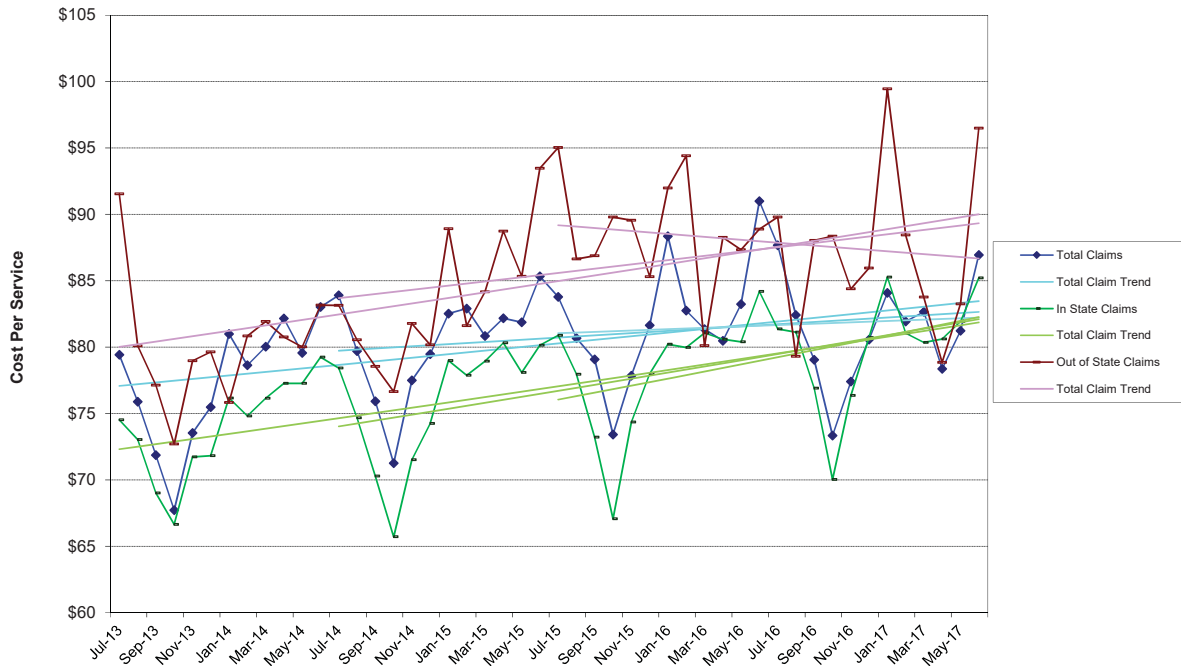
TOTAL

24-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
3.6%	0.0%	3.5%

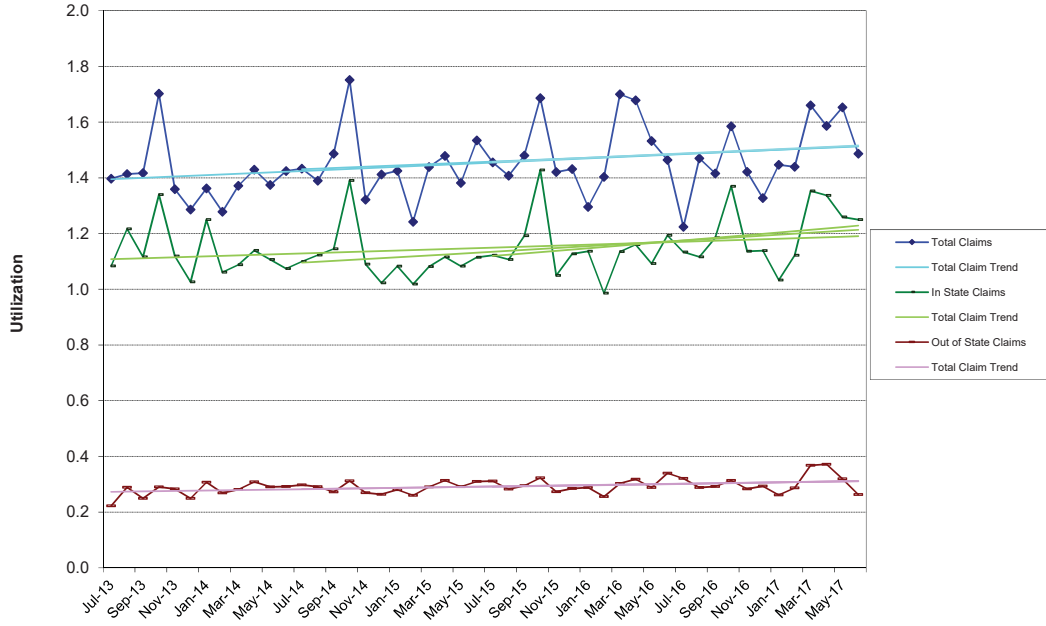
36-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
2.7%	0.6%	3.4%

48-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
2.6%	1.7%	4.3%

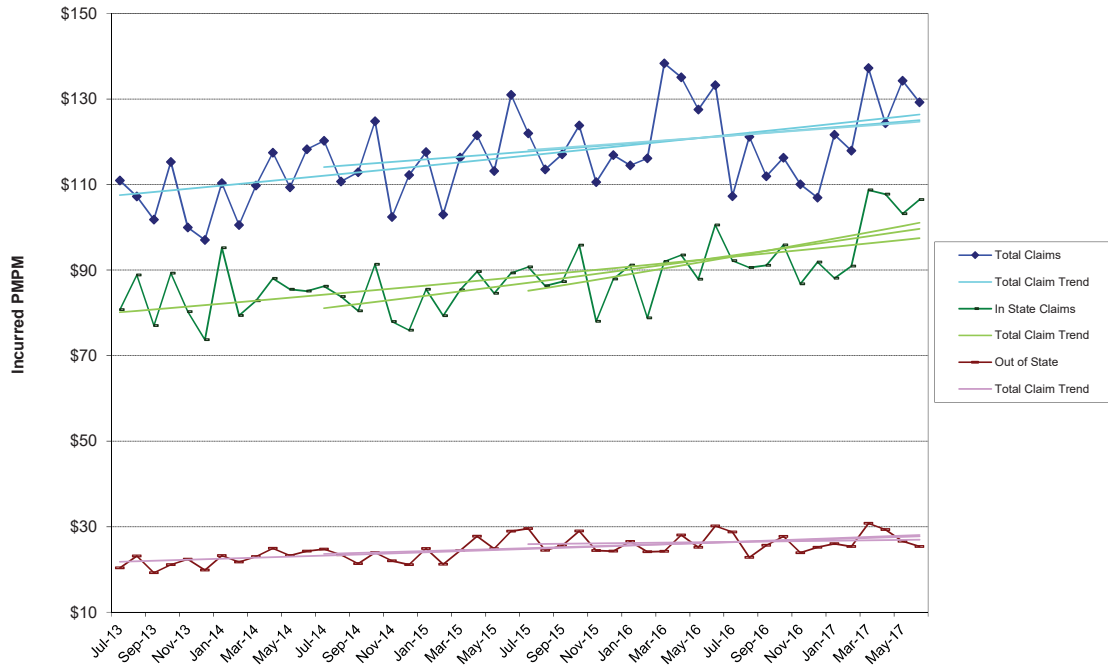
Total Physician Services Claims - Excluding Drugs



Total Physician Services Claims - Excluding Drugs



Total Physician Services Claims - Excluding Drugs



**NON-MEDICARE CLAIMS
Excluding Drugs**

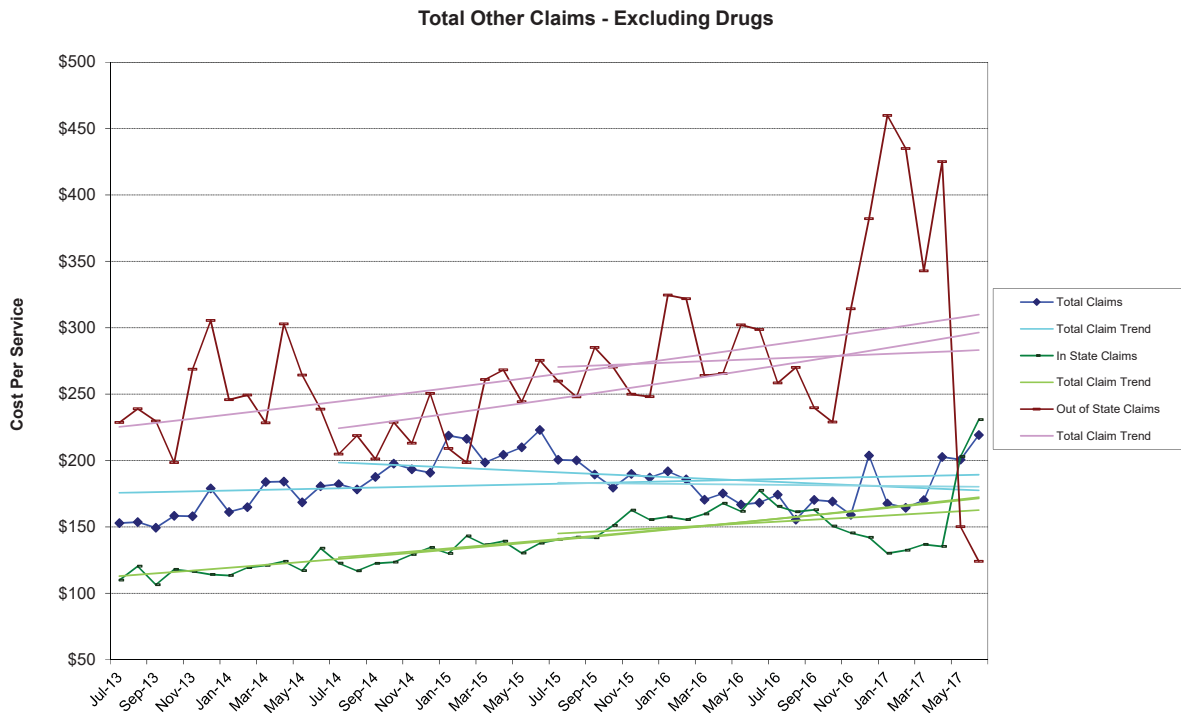
OTHER

TOTAL

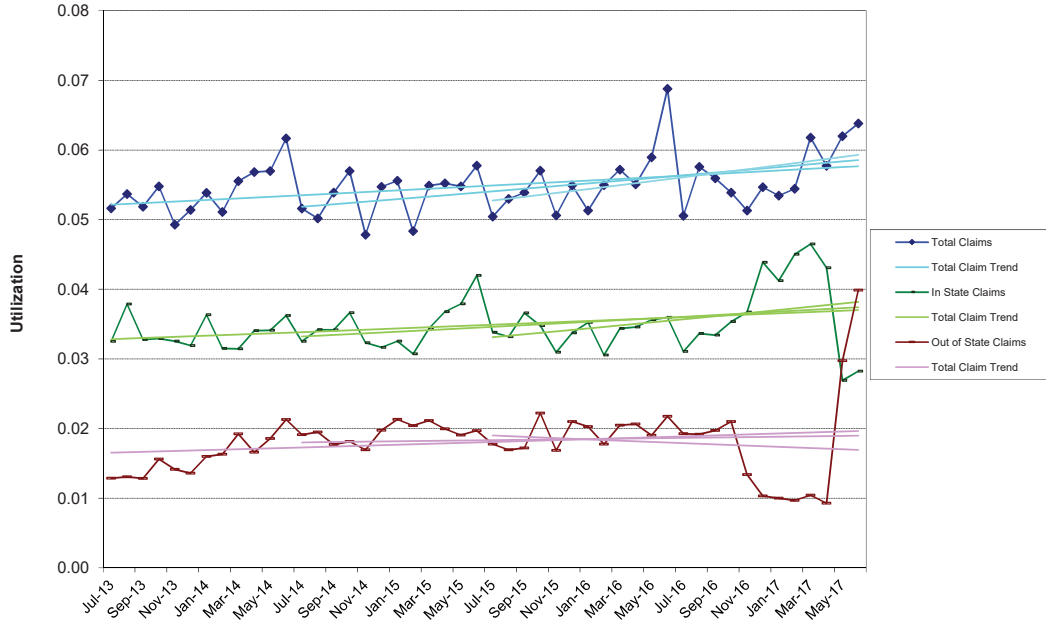
24-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
2.1%	9.2%	11.5%

36-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
1.2%	1.0%	2.3%

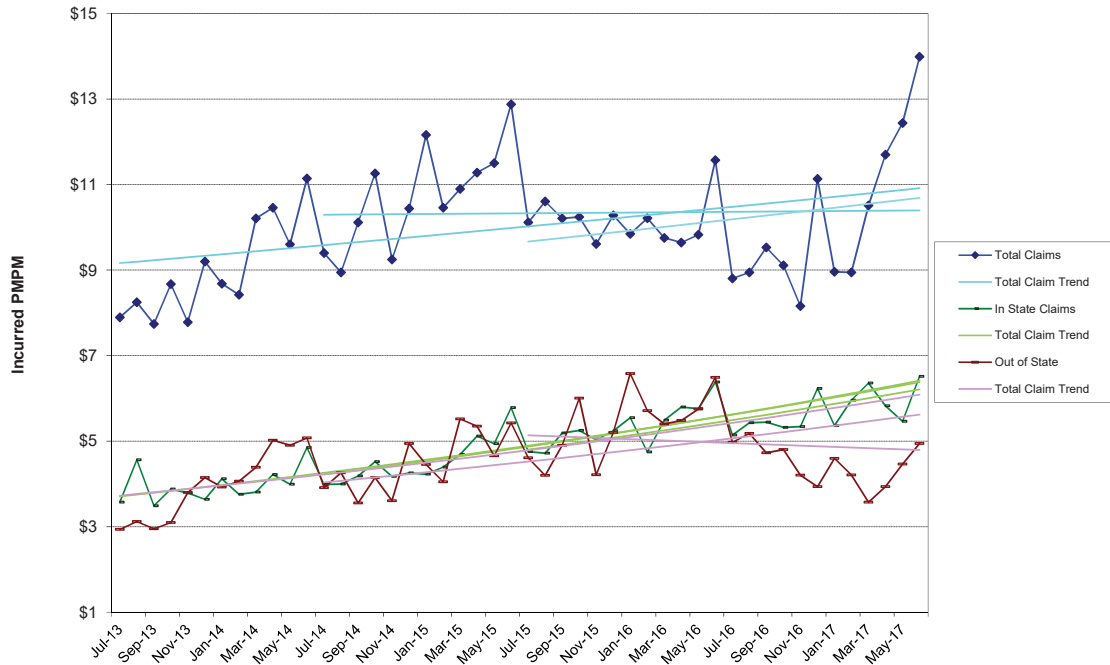
48-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
0.8%	5.1%	5.9%



Total Other Claims - Excluding Drugs



Total Other Claims - Excluding Drugs



**NON-MEDICARE CLAIMS
Excluding Drugs**

HOSPITAL INPATIENT

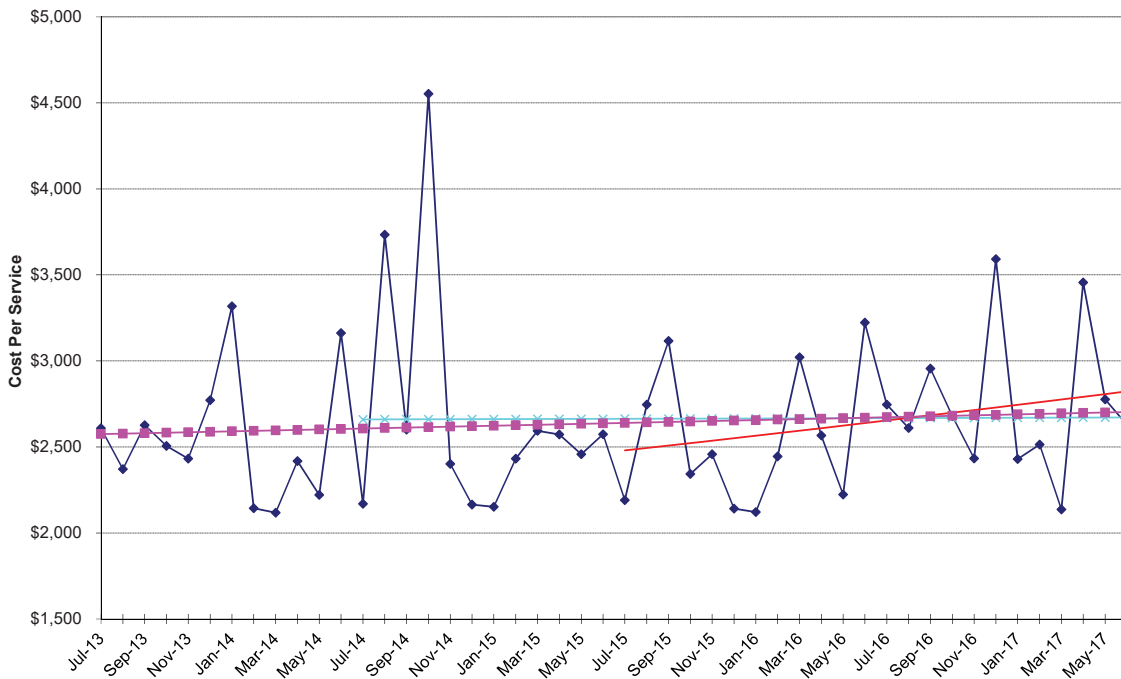
Maternity

24-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-21.0%	7.0%	-15.4%

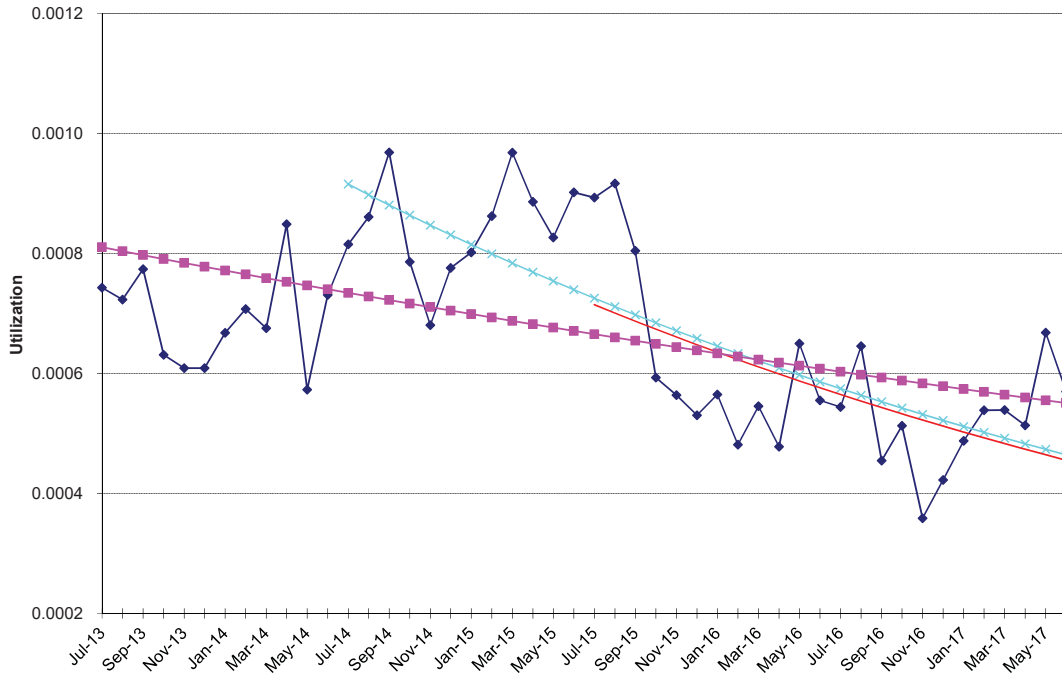
36-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-20.8%	0.2%	-20.6%

48-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-9.4%	1.3%	-8.3%

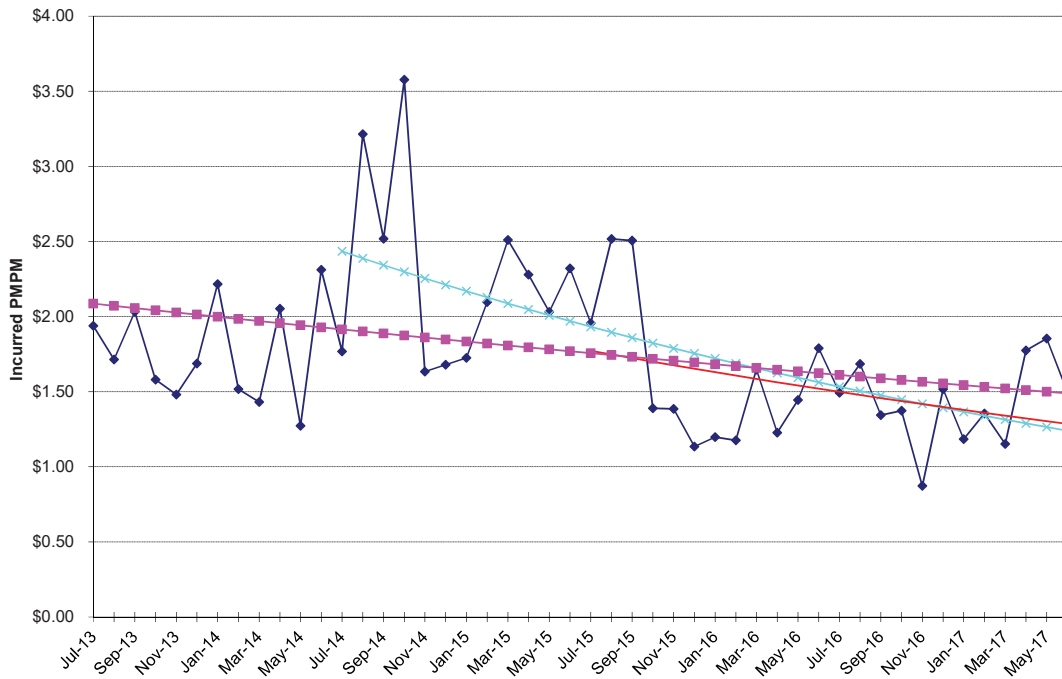
Hospital Inpatient - Maternity



Hospital Inpatient - Maternity



Hospital Inpatient - Maternity



**NON-MEDICARE CLAIMS
Excluding Drugs**

HOSPITAL INPATIENT

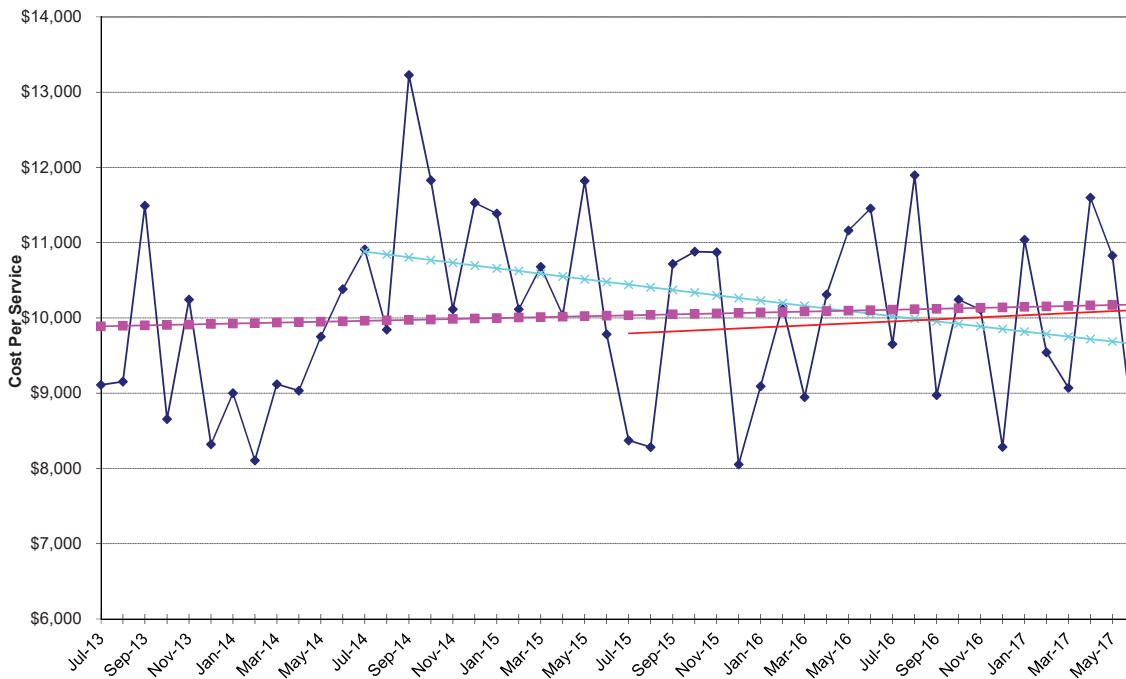
Medical / Surgical

24-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
2.9%	1.6%	4.6%

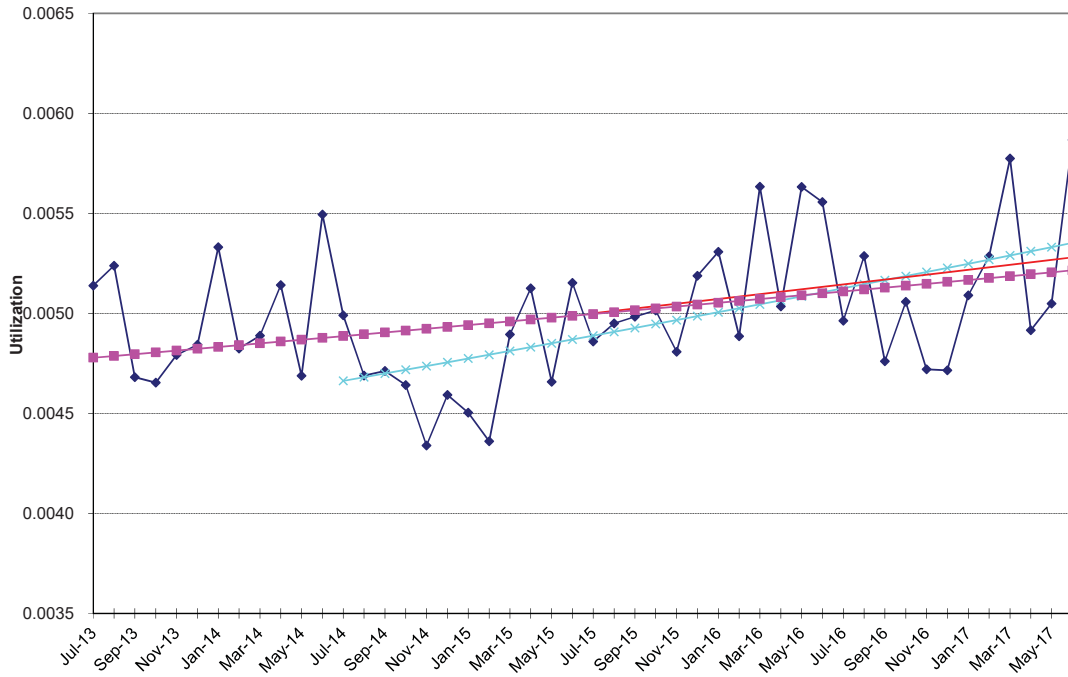
36-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
4.8%	-4.0%	0.6%

48-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
2.3%	0.7%	3.0%

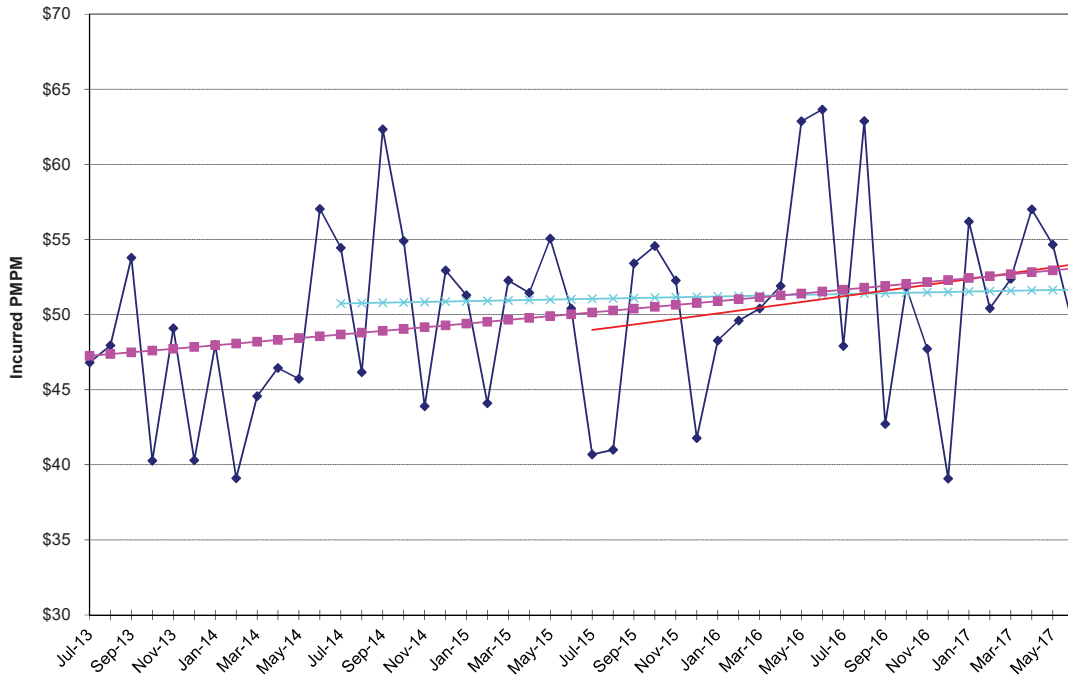
Hospital Inpatient - Medical / Surgical



Hospital Inpatient - Medical / Surgical



Hospital Inpatient - Medical / Surgical



**NON-MEDICARE CLAIMS
Excluding Drugs**

HOSPITAL INPATIENT

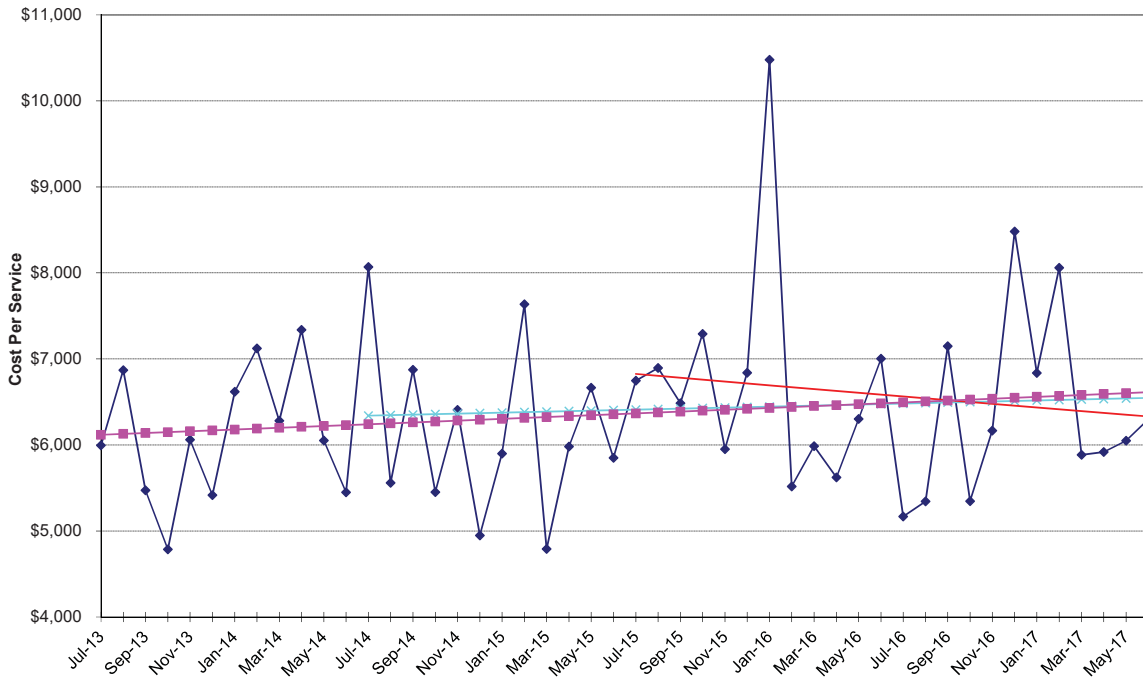
Psychiatric / Substance Abuse

24-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-13.2%	-3.8%	-16.5%

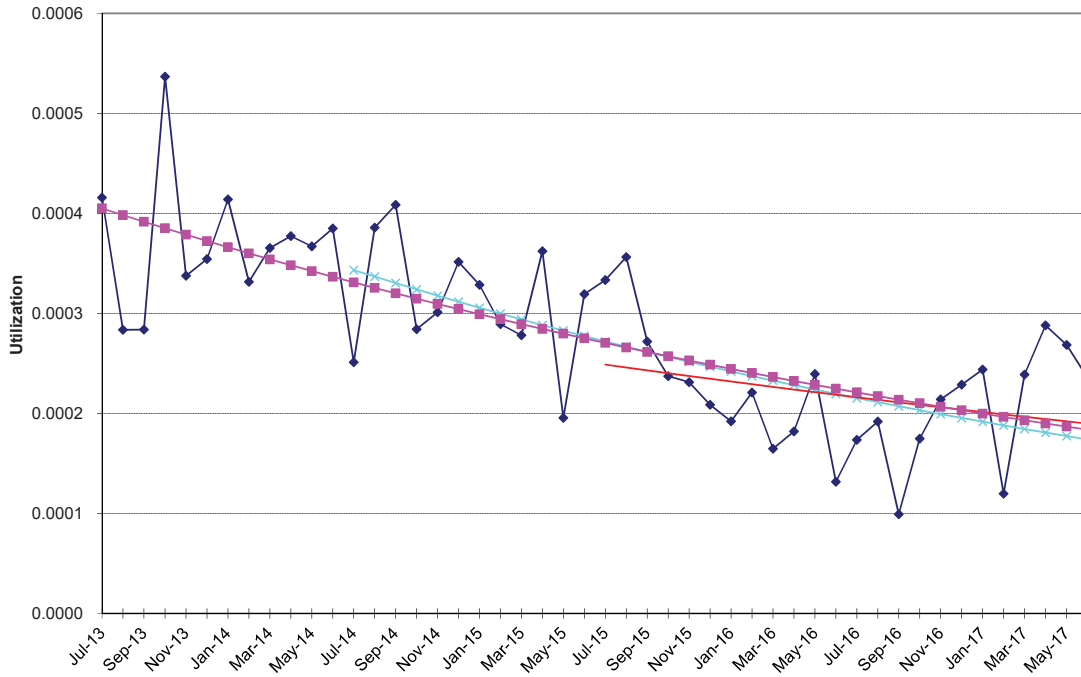
36-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-20.8%	1.1%	-19.9%

48-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-18.3%	2.0%	-16.6%

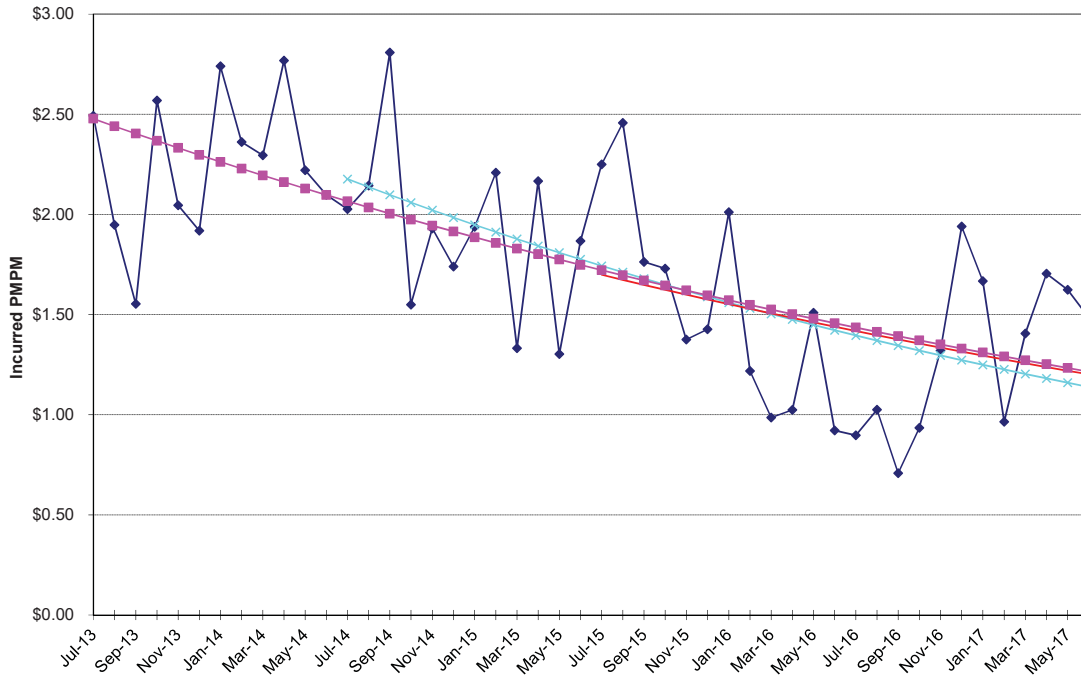
Hospital Inpatient - Psychiatric / Substance Abuse



Hospital Inpatient - Psychiatric / Substance Abuse



Hospital Inpatient - Psychiatric / Substance Abuse



**NON-MEDICARE CLAIMS
Excluding Drugs**

HOSPITAL OUTPATIENT

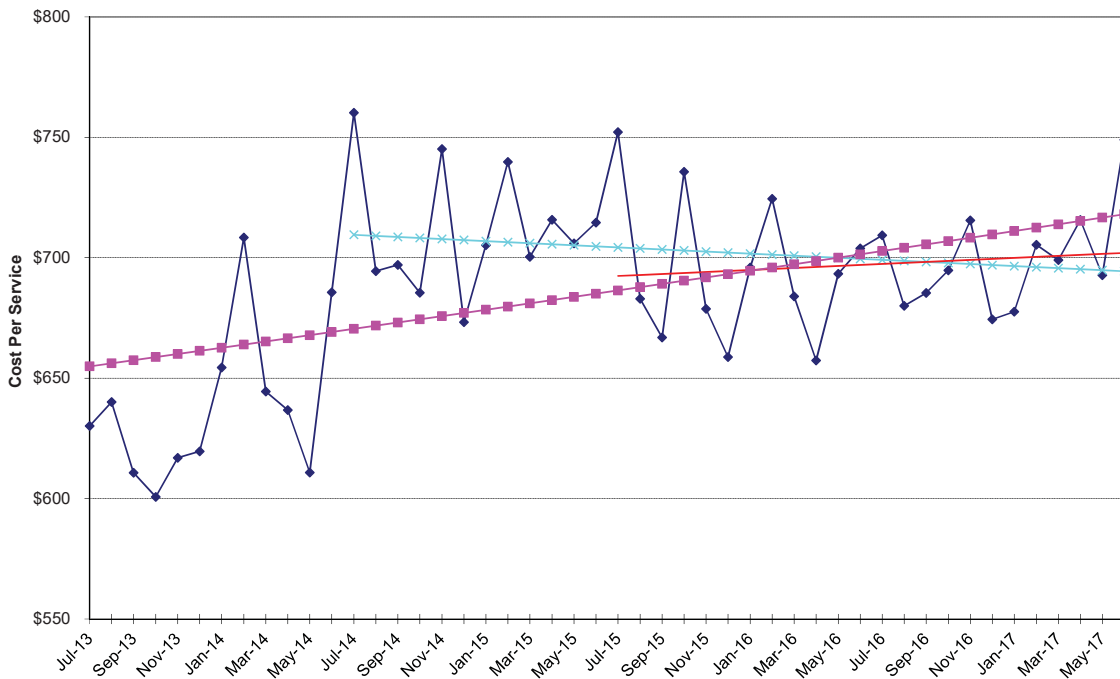
Emergency Room

24-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-3.8%	0.7%	-3.1%

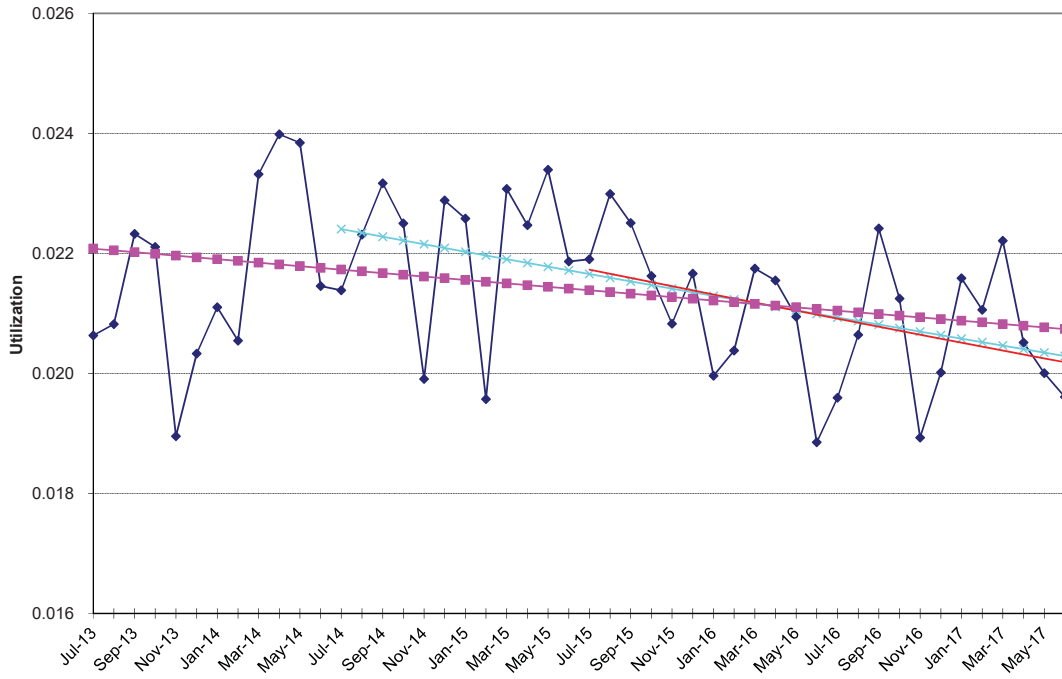
36-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-3.3%	-0.7%	-4.1%

48-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-1.6%	2.4%	0.8%

Hospital Outpatient - Emergency Room



Hospital Outpatient - Emergency Room



Hospital Outpatient - Emergency Room



**NON-MEDICARE CLAIMS
Excluding Drugs**

HOSPITAL OUTPATIENT

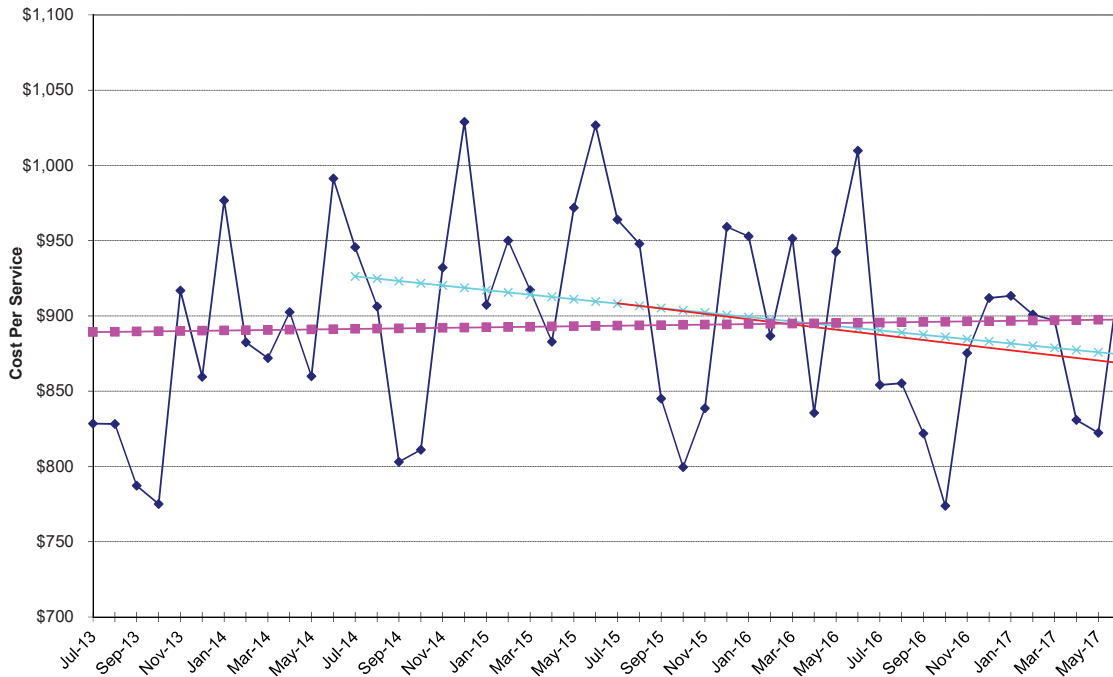
Medical / Surgical

24-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
4.0%	-2.3%	1.6%

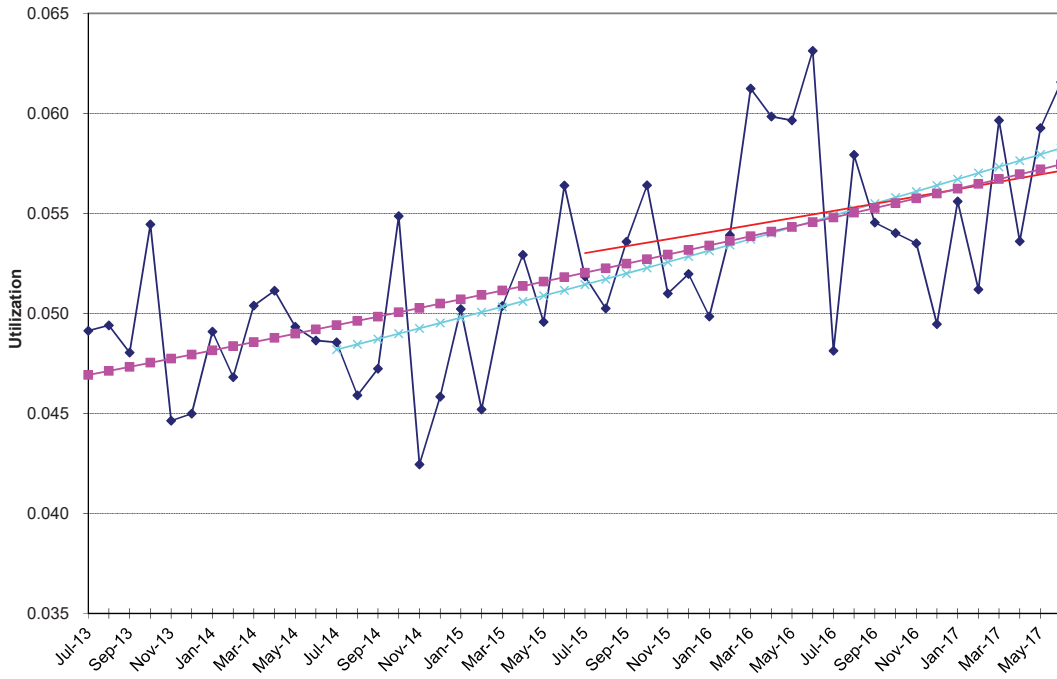
36-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
6.7%	-2.0%	4.6%

48-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
5.3%	0.2%	5.6%

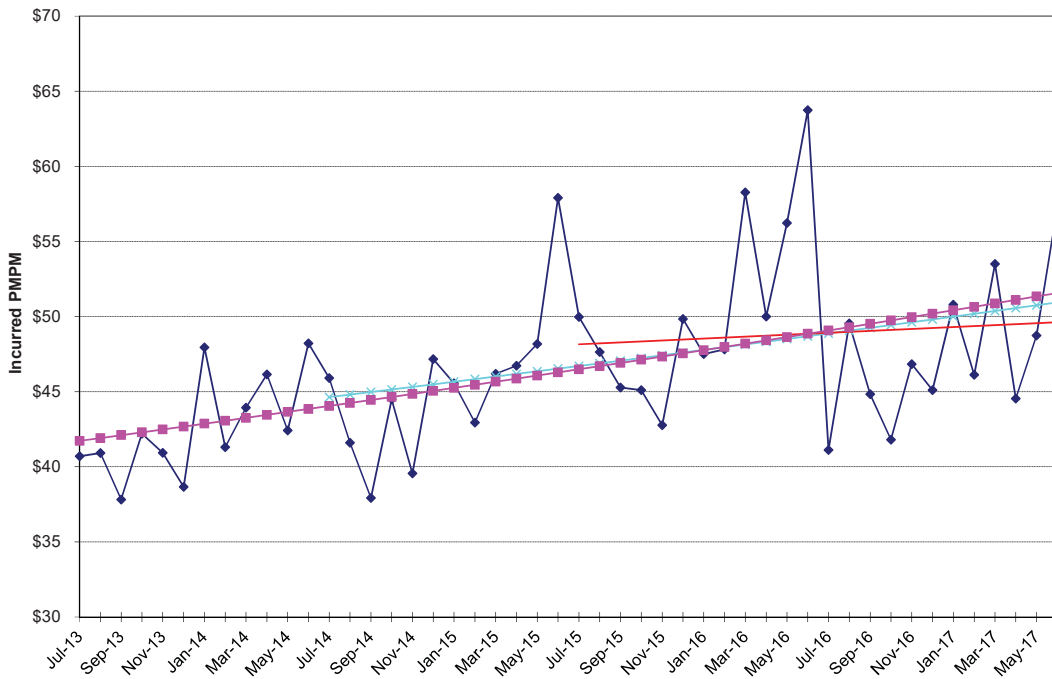
Hospital Outpatient - Medical / Surgical



Hospital Outpatient - Medical / Surgical



Hospital Outpatient - Medical / Surgical



**NON-MEDICARE CLAIMS
Excluding Drugs**

HOSPITAL OUTPATIENT

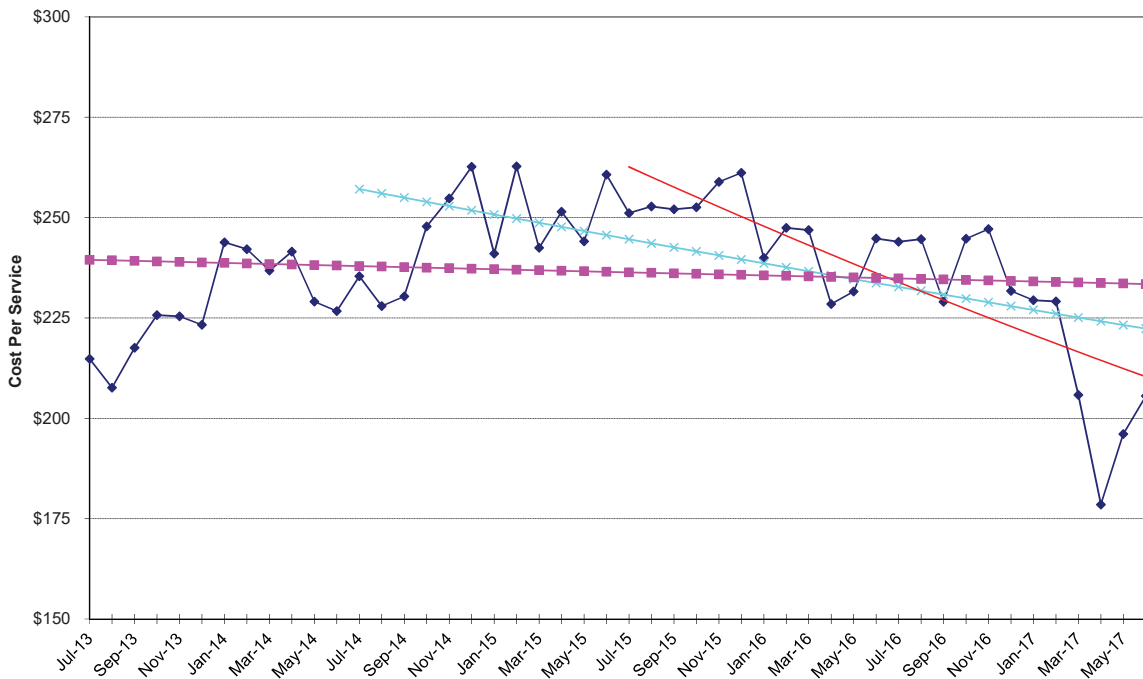
Other Services

24-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
13.0%	-10.9%	0.7%

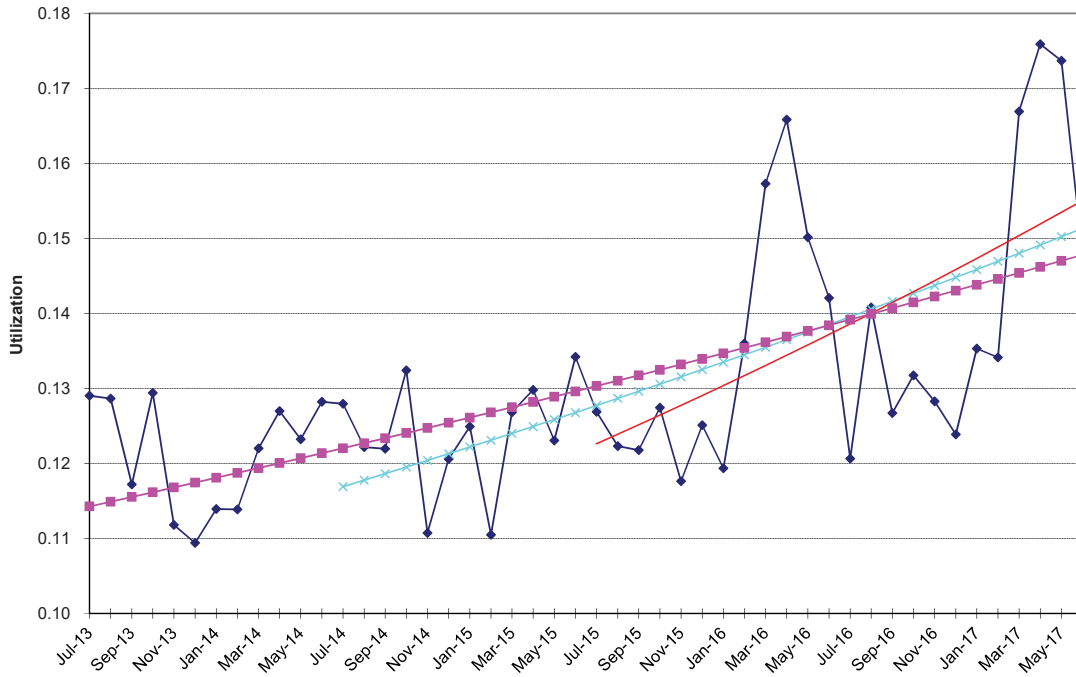
36-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
9.3%	-4.9%	3.9%

48-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
6.8%	-0.6%	6.1%

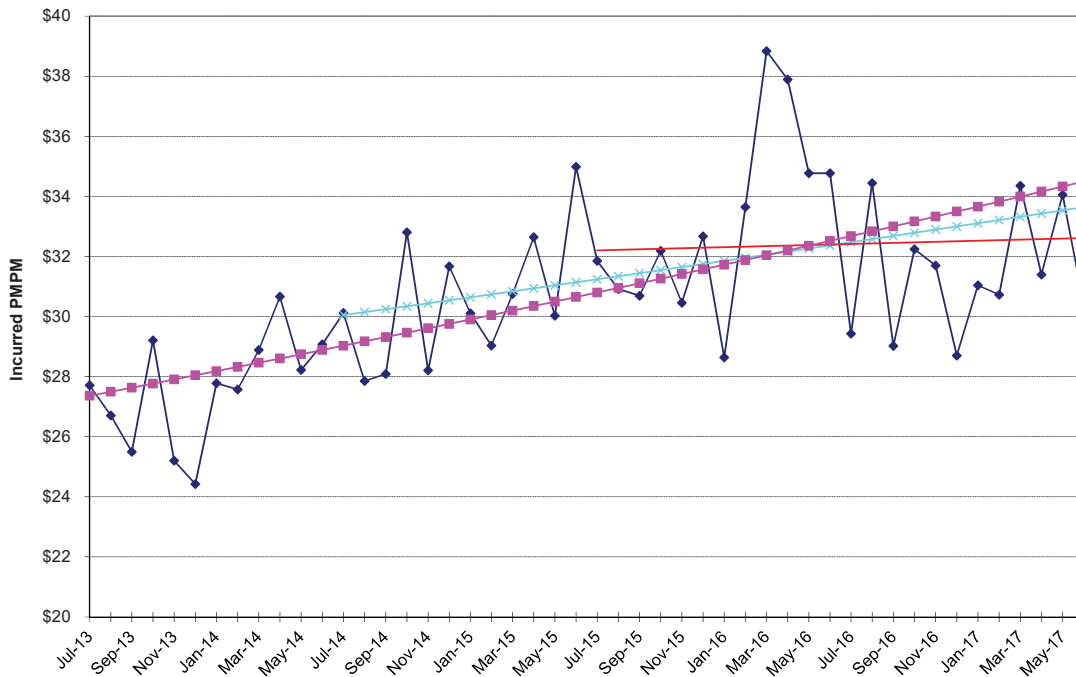
Hospital Outpatient - Other Services



Hospital Outpatient - Other Services



Hospital Outpatient - Other Services



**NON-MEDICARE CLAIMS
Excluding Drugs**

HOSPITAL OUTPATIENT

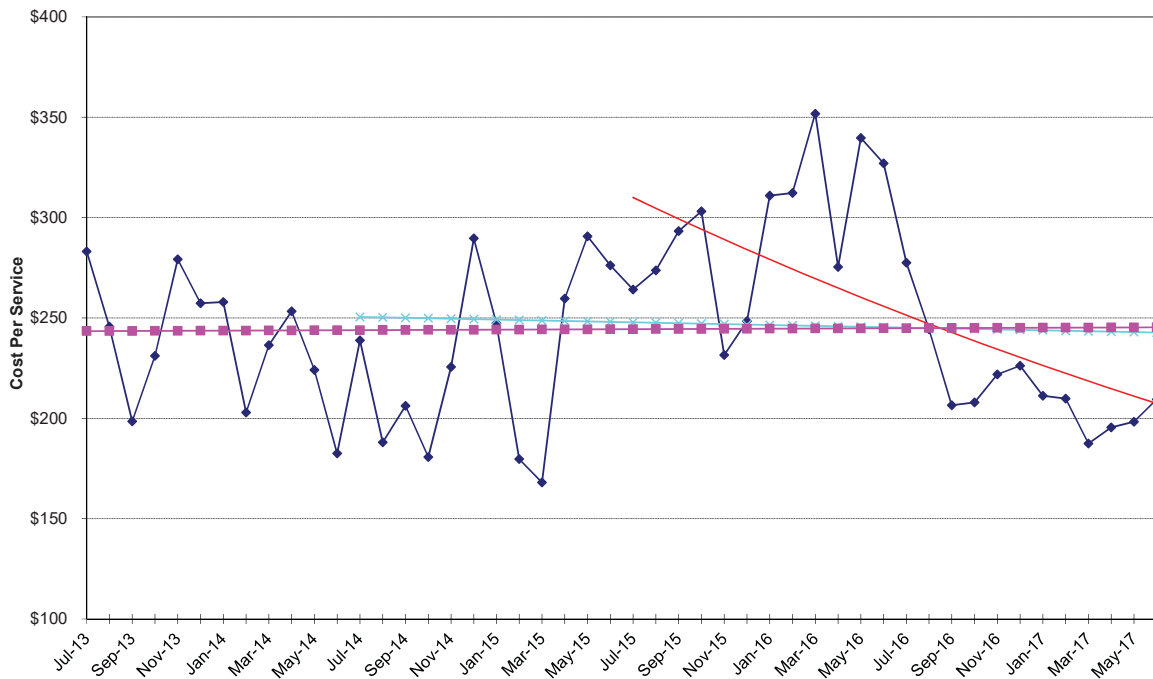
Psychiatric / Substance Abuse

24-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-19.9%	-18.9%	-35.1%

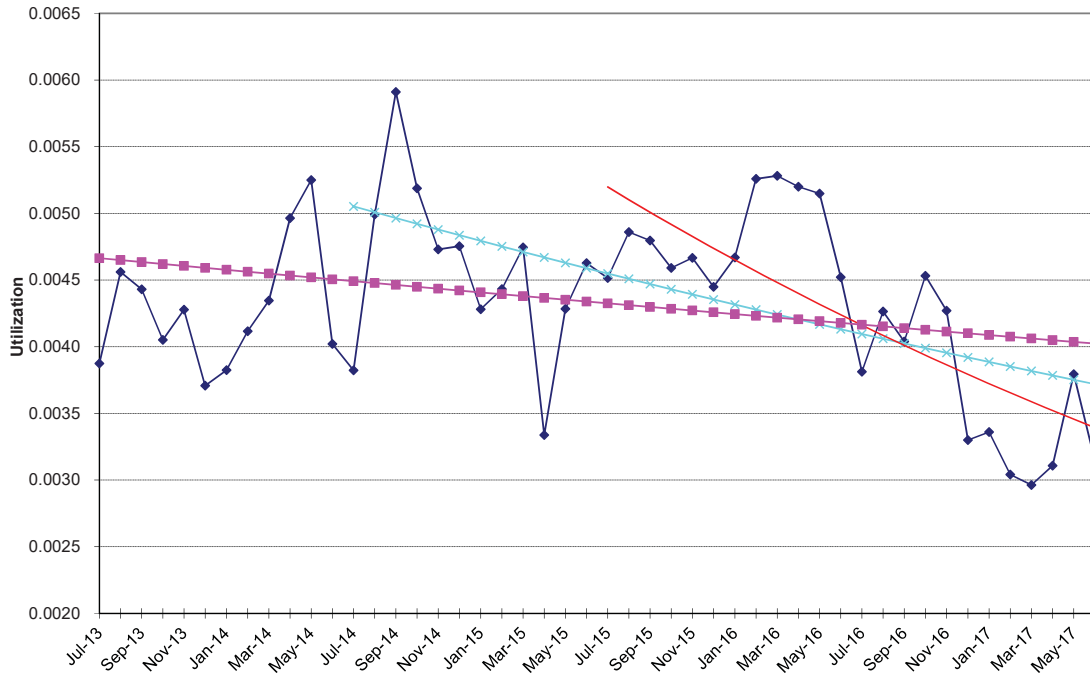
36-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-10.0%	-1.1%	-10.9%

48-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-3.7%	0.2%	-3.5%

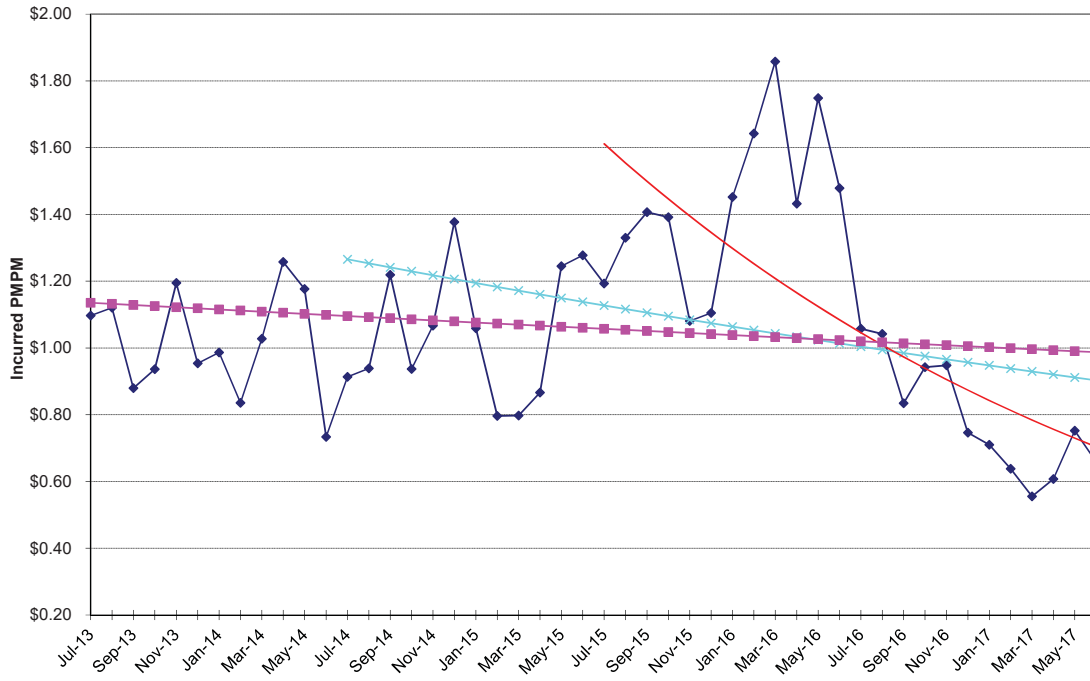
Hospital Outpatient - Psychiatric / Substance Abuse



Hospital Outpatient - Psychiatric / Substance Abuse



Hospital Outpatient - Psychiatric / Substance Abuse



**NON-MEDICARE CLAIMS
Excluding Drugs**

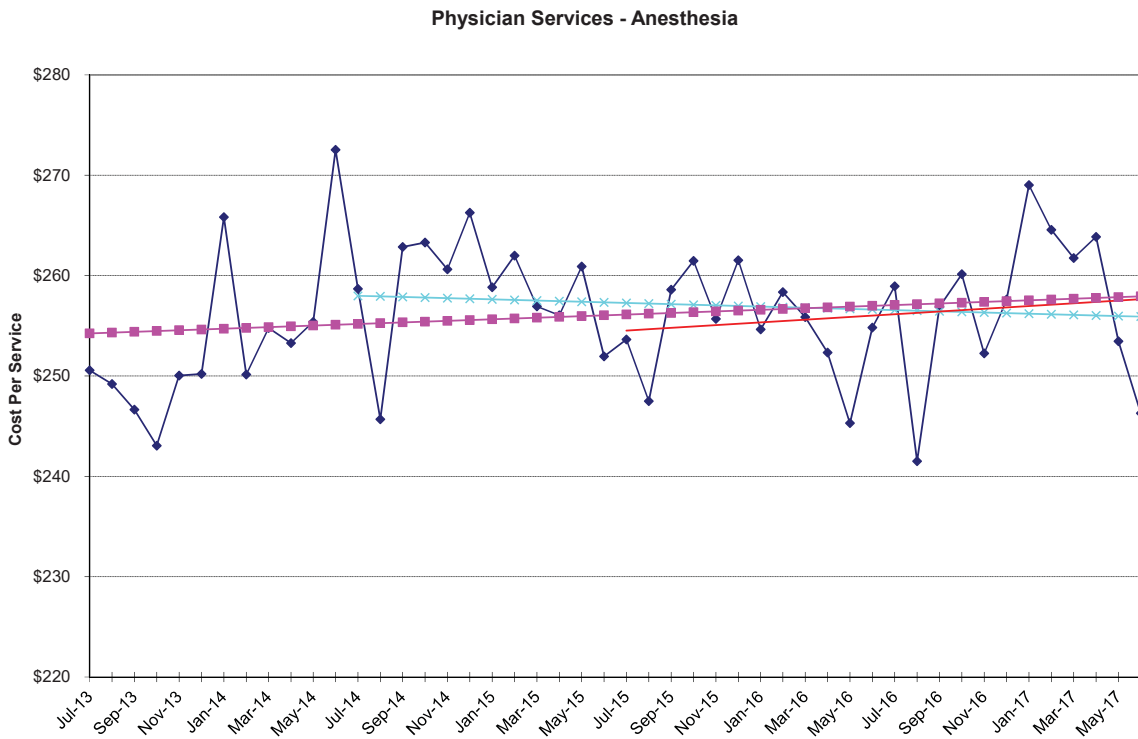
PHYSICIAN SERVICES

Anesthesia

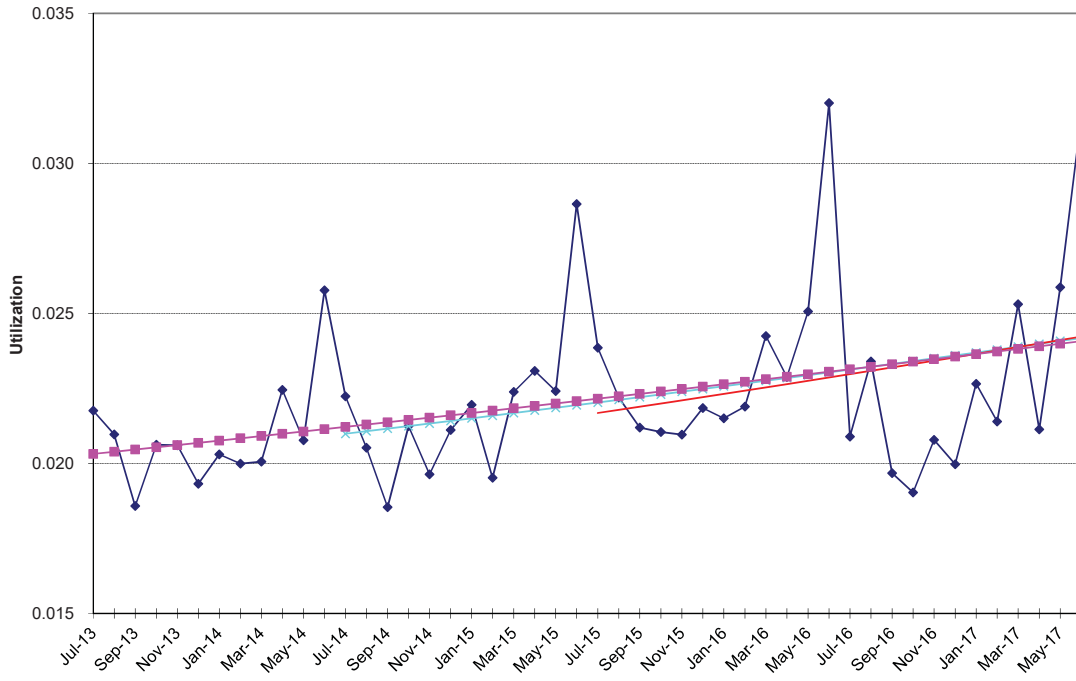
24-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
6.0%	0.6%	6.6%

36-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
5.0%	-0.3%	4.7%

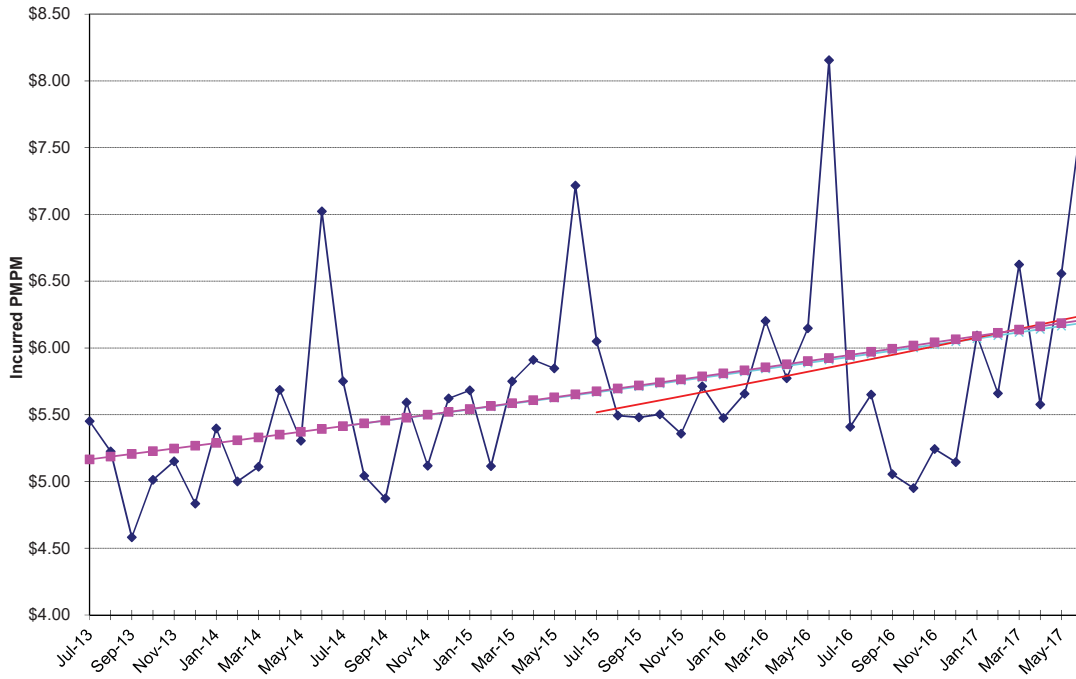
48-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
4.4%	0.4%	4.8%



Physician Services - Anesthesia



Physician Services - Anesthesia



**NON-MEDICARE CLAIMS
Excluding Drugs**

PHYSICIAN SERVICES

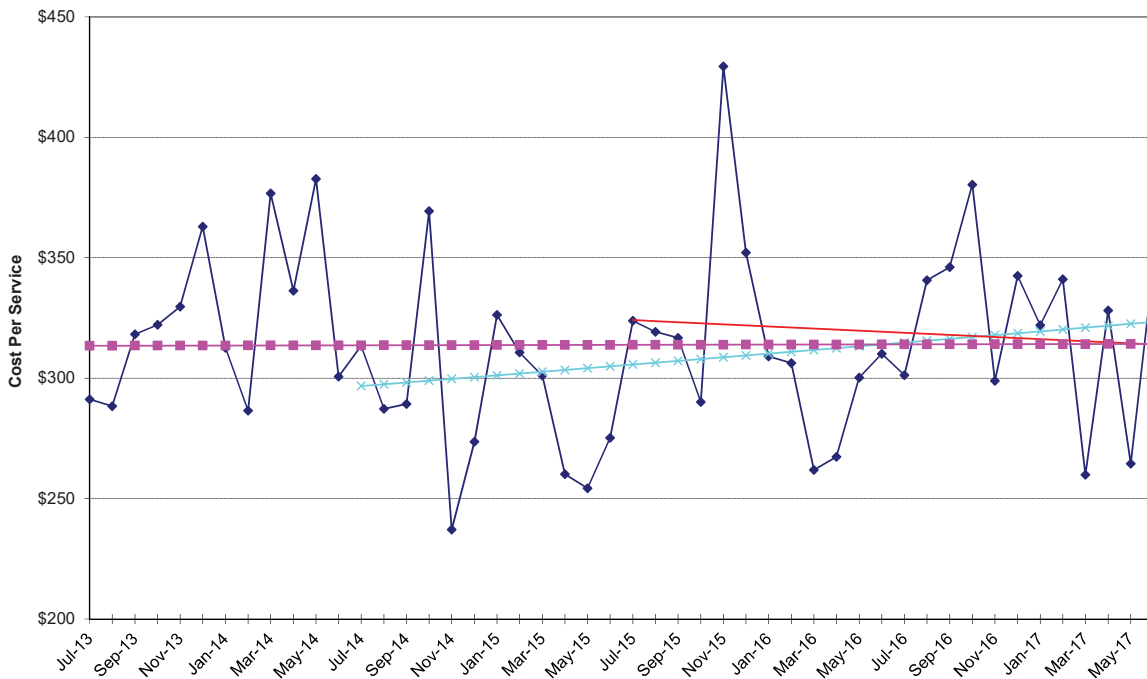
Chemotherapy / Radiation

24-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-7.0%	-1.6%	-8.5%

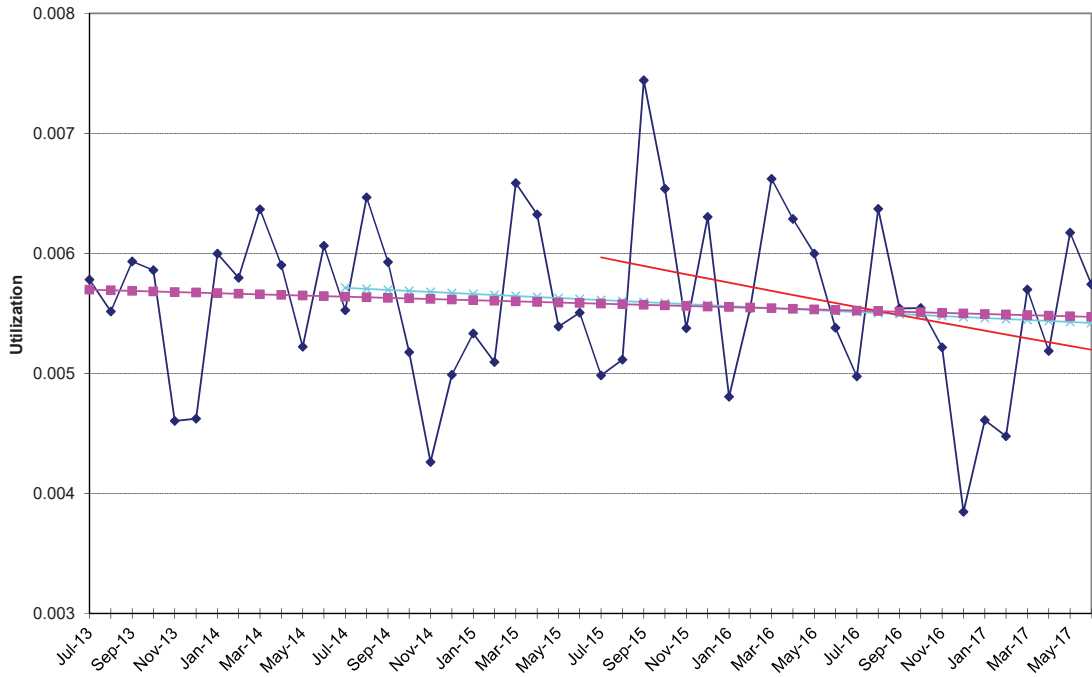
36-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-1.8%	3.0%	1.1%

48-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-1.0%	0.1%	-1.0%

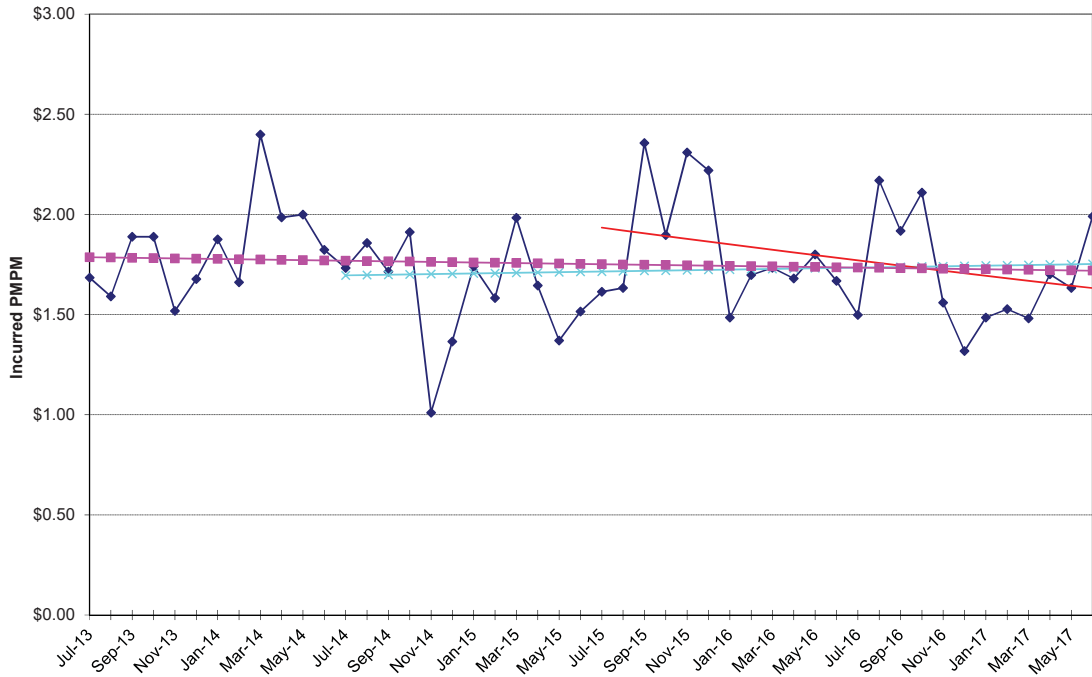
Physician Services - Chemotherapy Radiation



Physician Services - Chemotherapy Radiation



Physician Services - Chemotherapy Radiation



**NON-MEDICARE CLAIMS
Excluding Drugs**

PHYSICIAN SERVICES

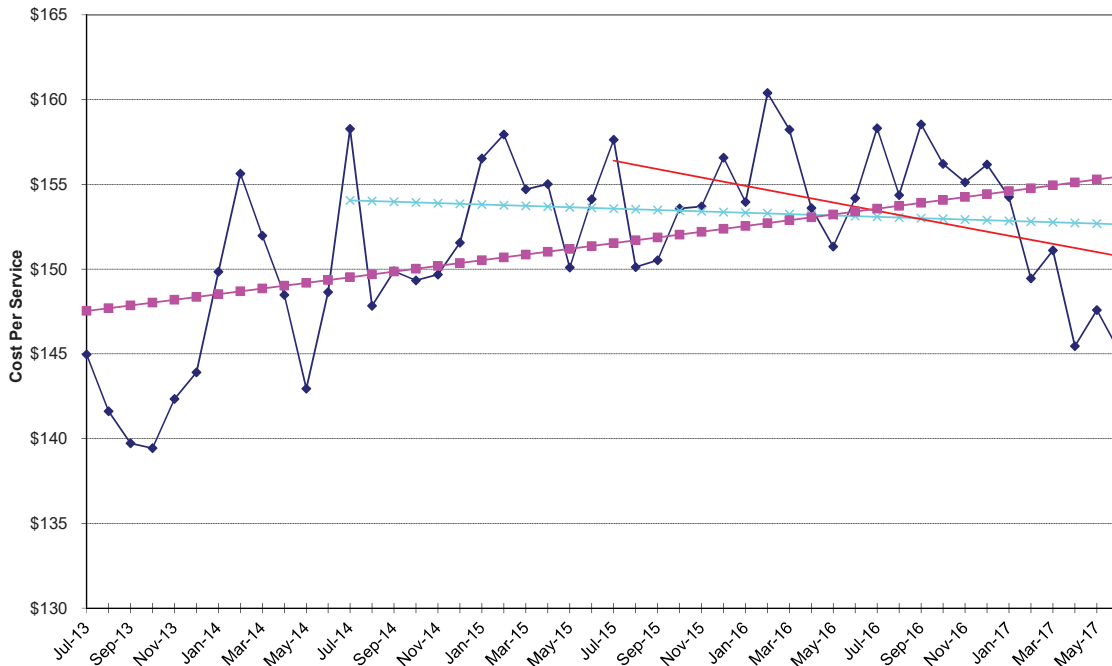
Emergency Room

24-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-3.8%	-1.9%	-5.6%

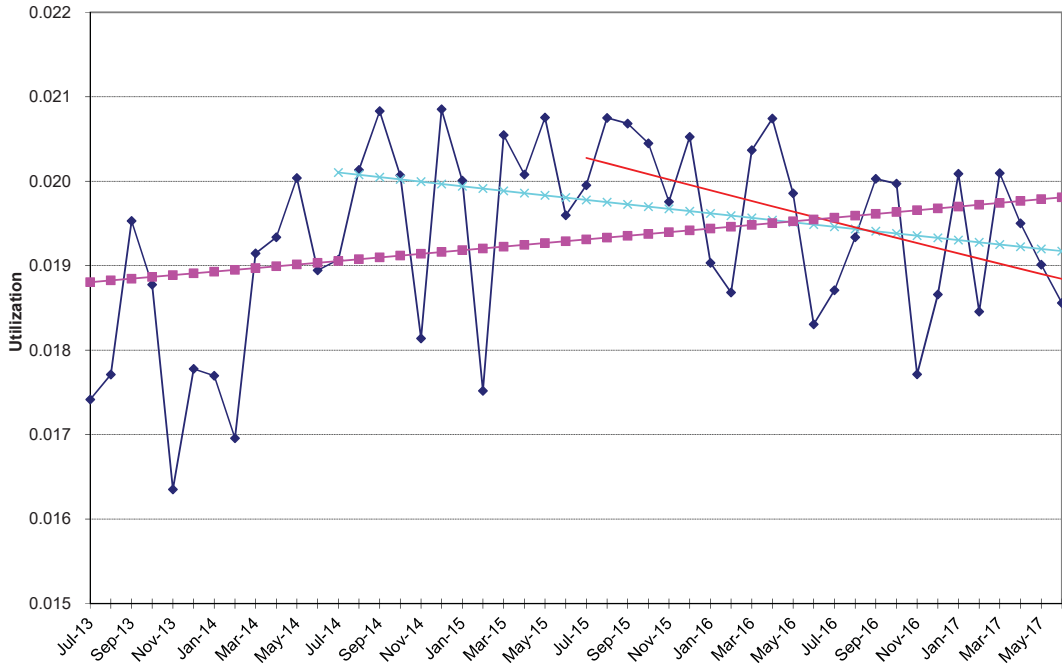
36-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-1.6%	-0.3%	-1.9%

48-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
1.3%	1.3%	2.7%

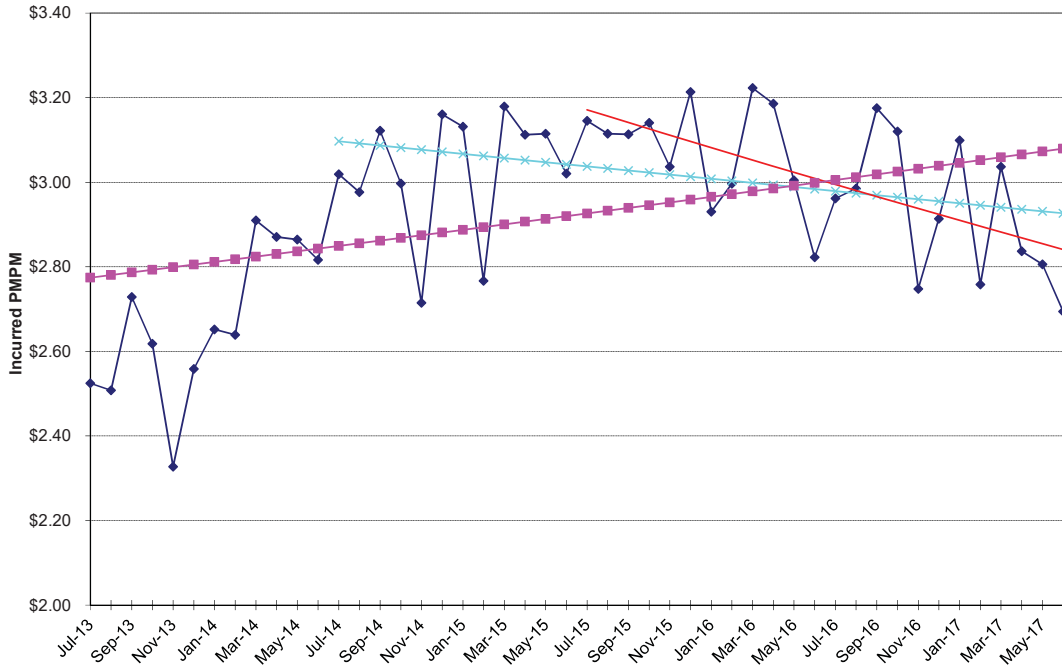
Physician Services - Emergency Room



Physician Services - Emergency Room



Physician Services - Emergency Room



**NON-MEDICARE CLAIMS
Excluding Drugs**

PHYSICIAN SERVICES

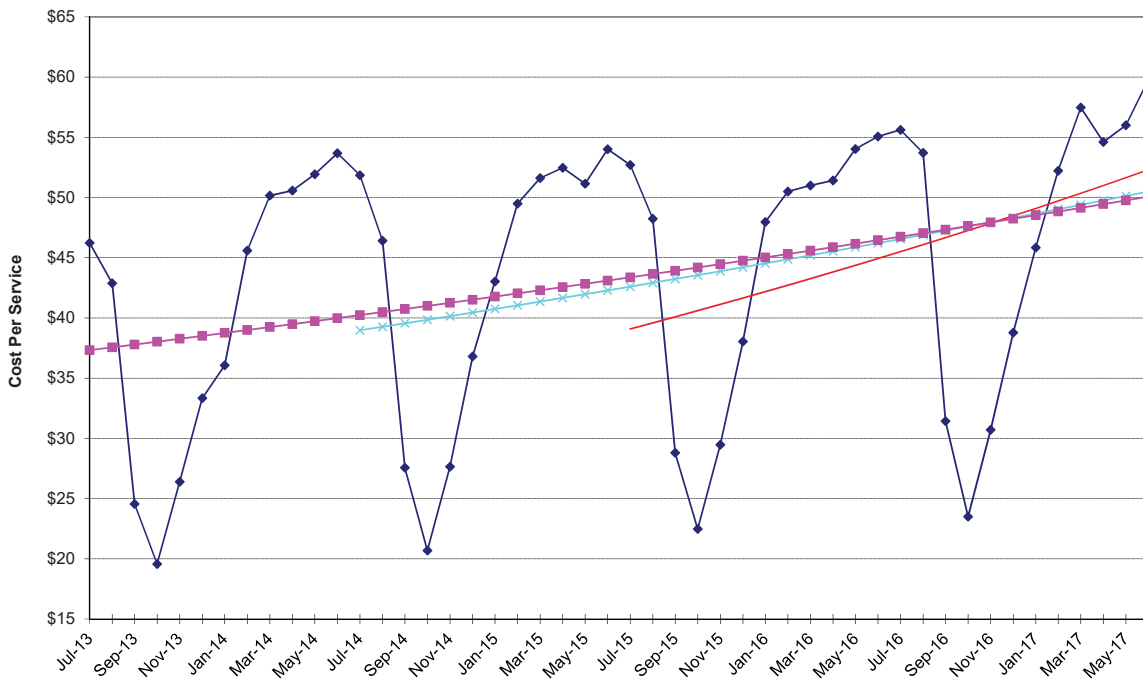
Immunizations / Injections / Allergy

24-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-20.7%	16.4%	-7.6%

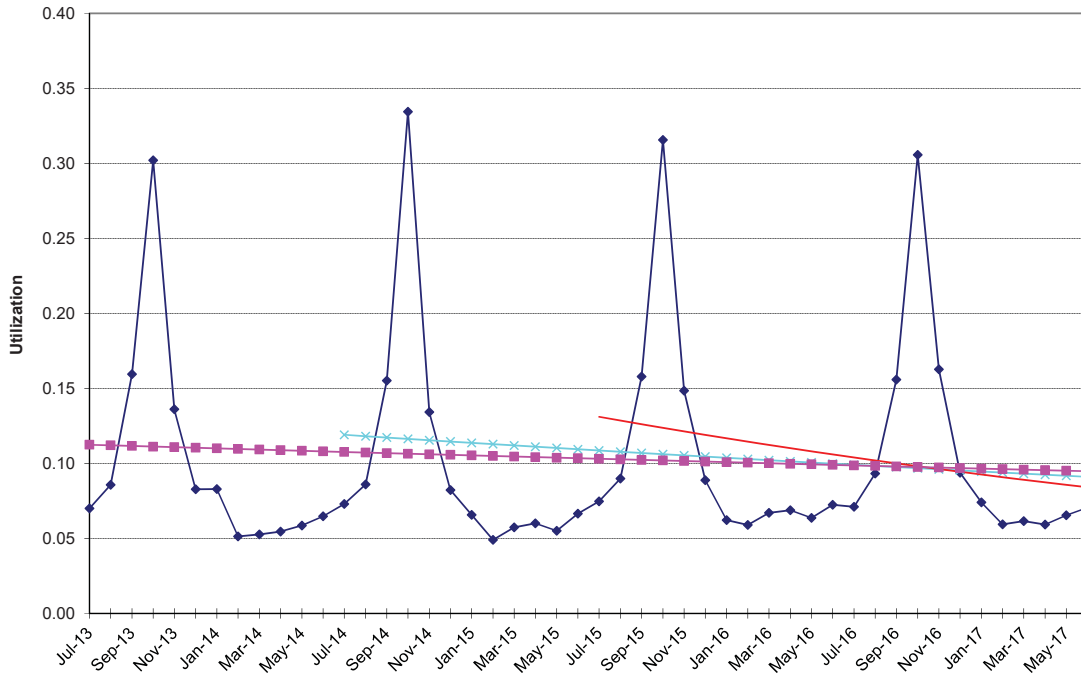
36-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-8.8%	9.3%	-0.3%

48-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-4.3%	7.8%	3.2%

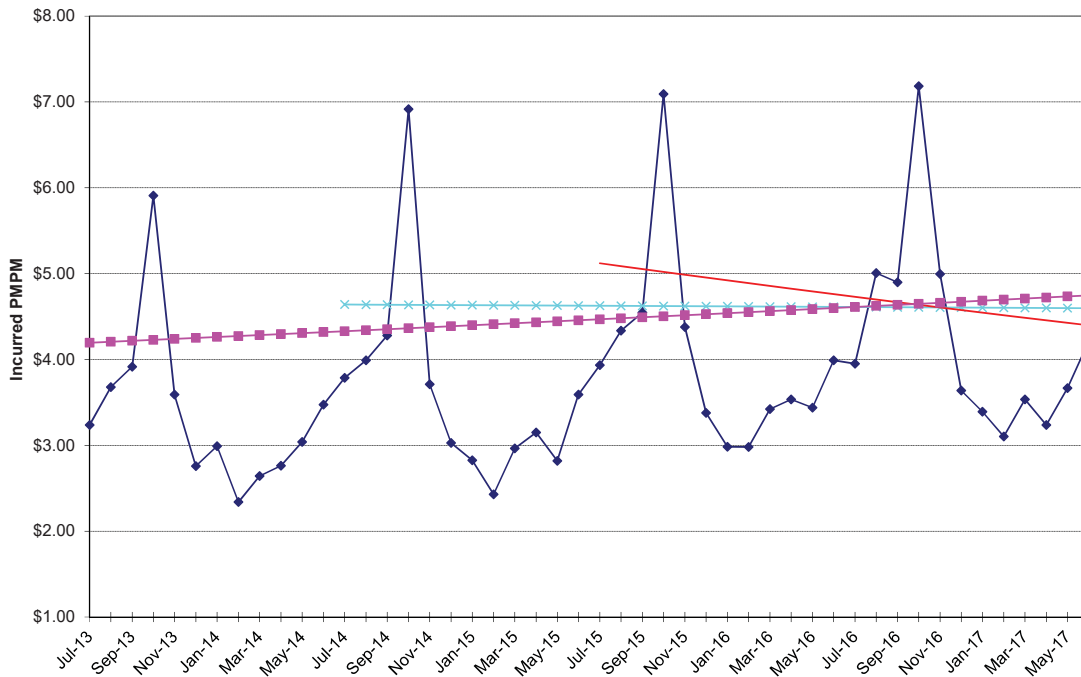
Physician Services - Immunizations / Allergy



Physician Services - Immunizations / Allergy



Physician Services - Immunizations / Allergy



**NON-MEDICARE CLAIMS
Excluding Drugs**

PHYSICIAN SERVICES

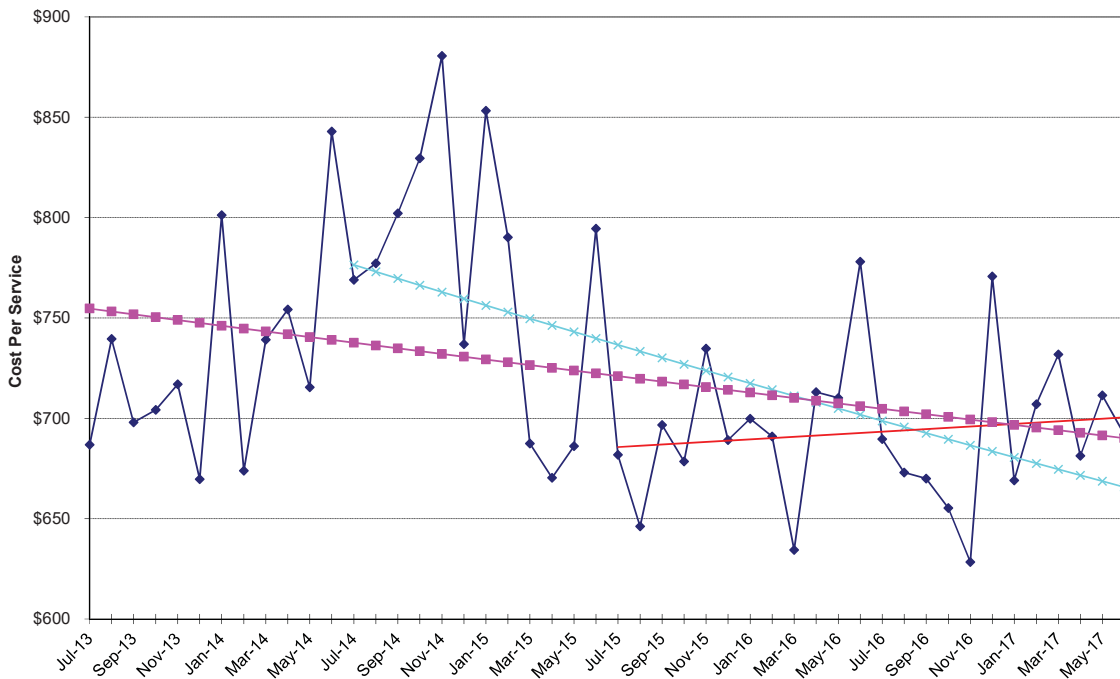
Inpatient Surgery

24-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
4.4%	1.1%	5.6%

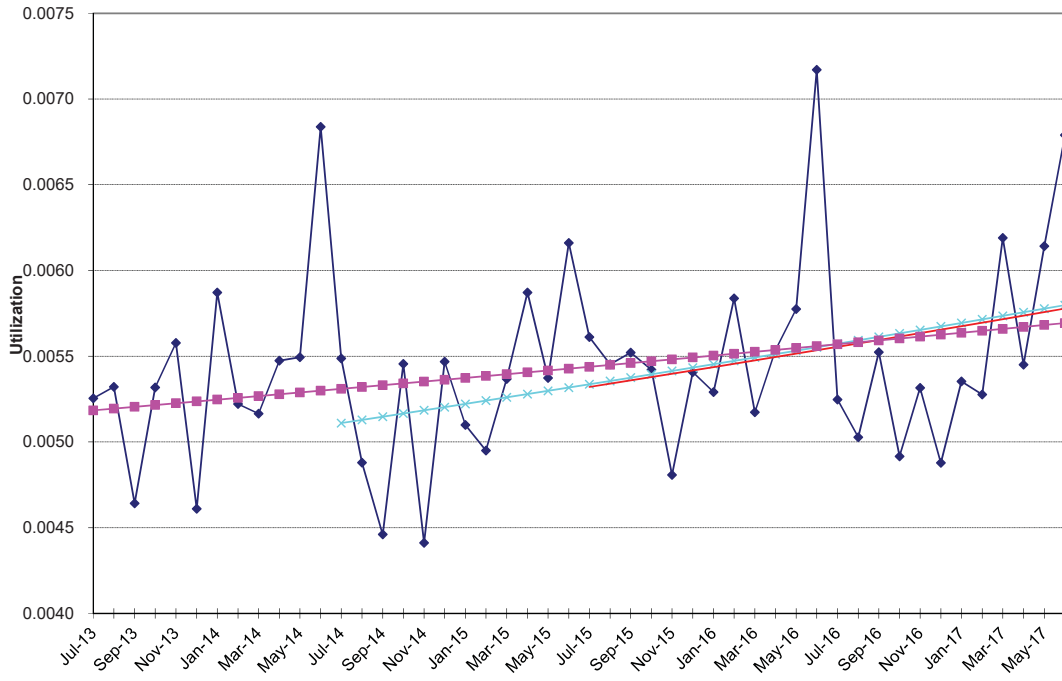
36-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
4.4%	-5.1%	-0.9%

48-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
2.4%	-2.3%	0.1%

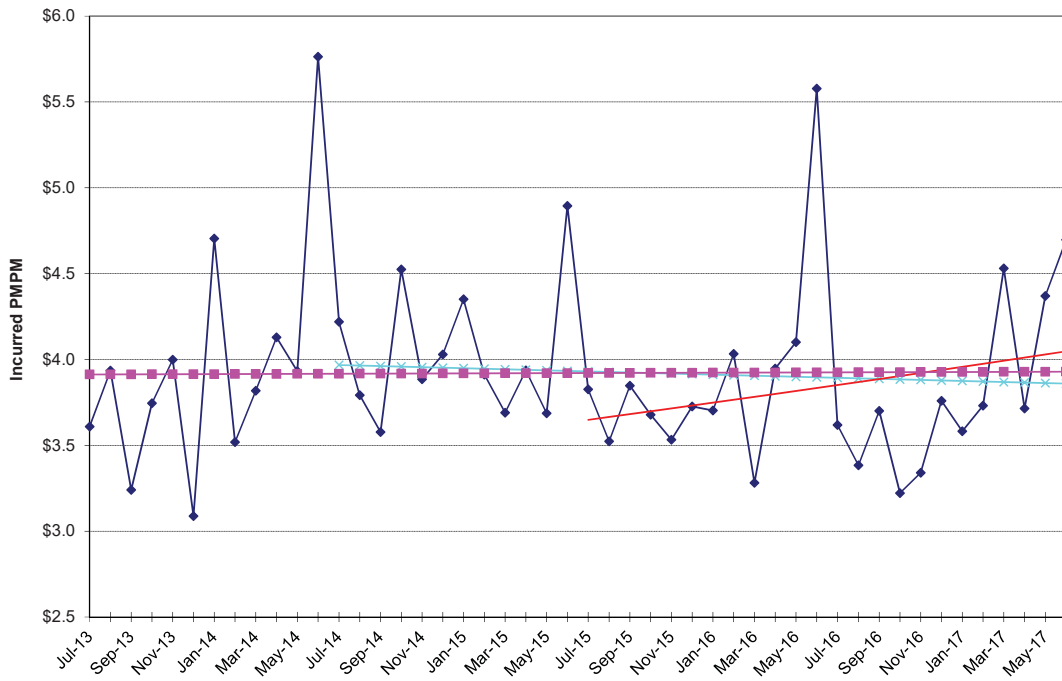
Physician Services - Inpatient Surgery



Physician Services - Inpatient Surgery



Physician Services - Inpatient Surgery



**NON-MEDICARE CLAIMS
Excluding Drugs**

PHYSICIAN SERVICES

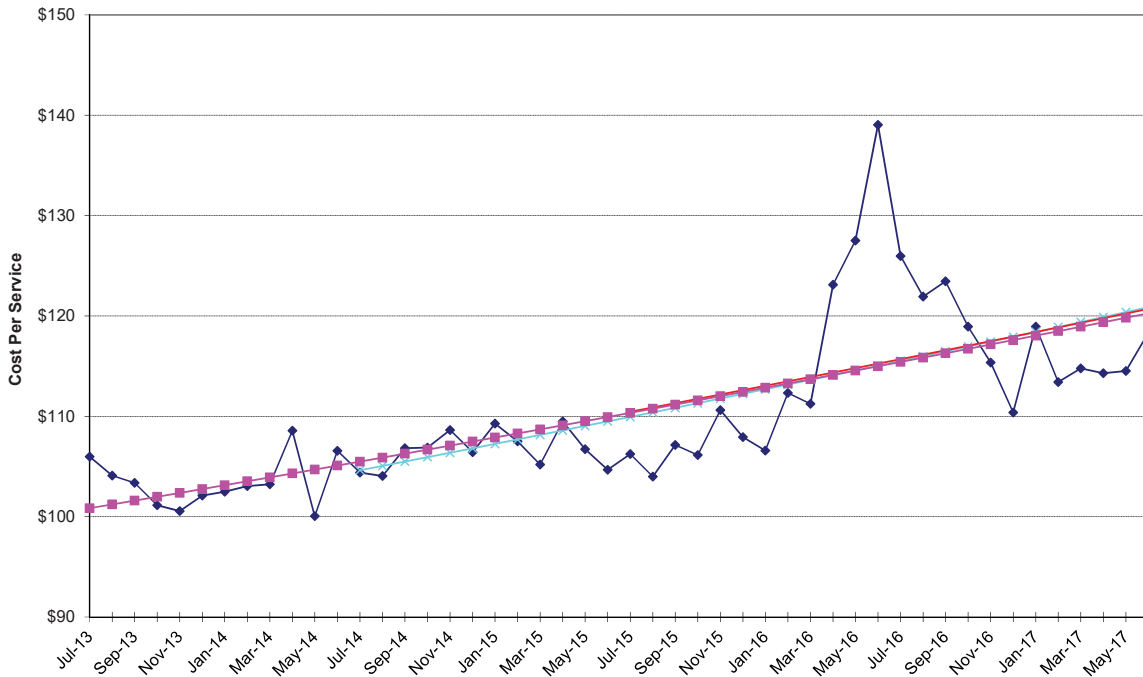
Inpatient Visits

24-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-1.3%	4.7%	3.4%

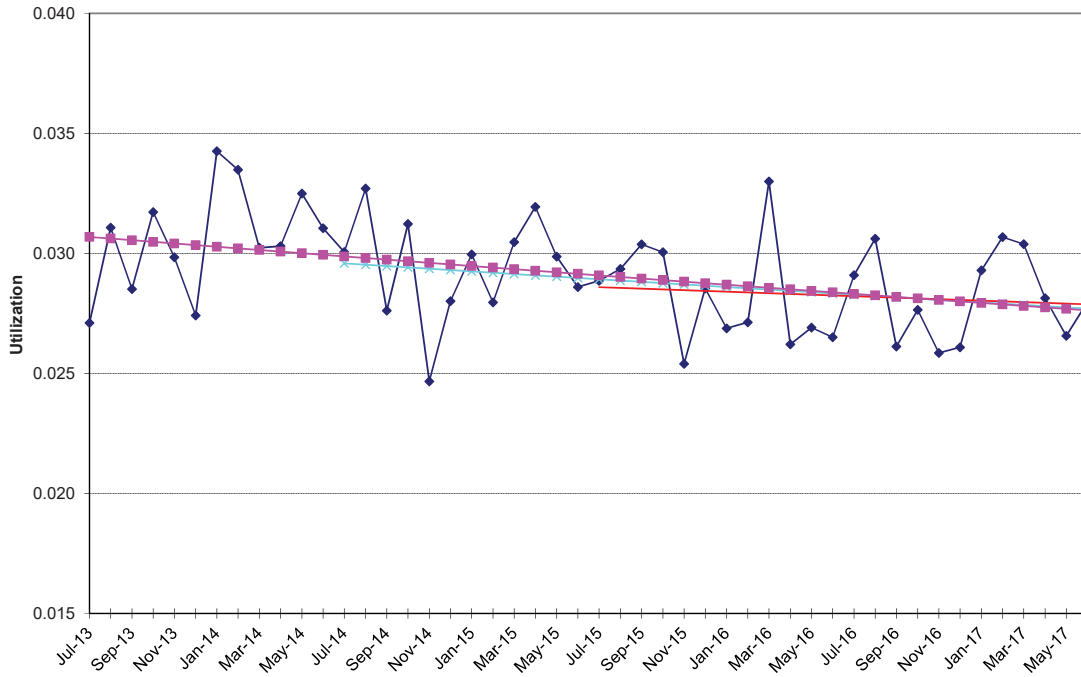
36-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-2.2%	5.1%	2.7%

48-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-2.6%	4.6%	1.8%

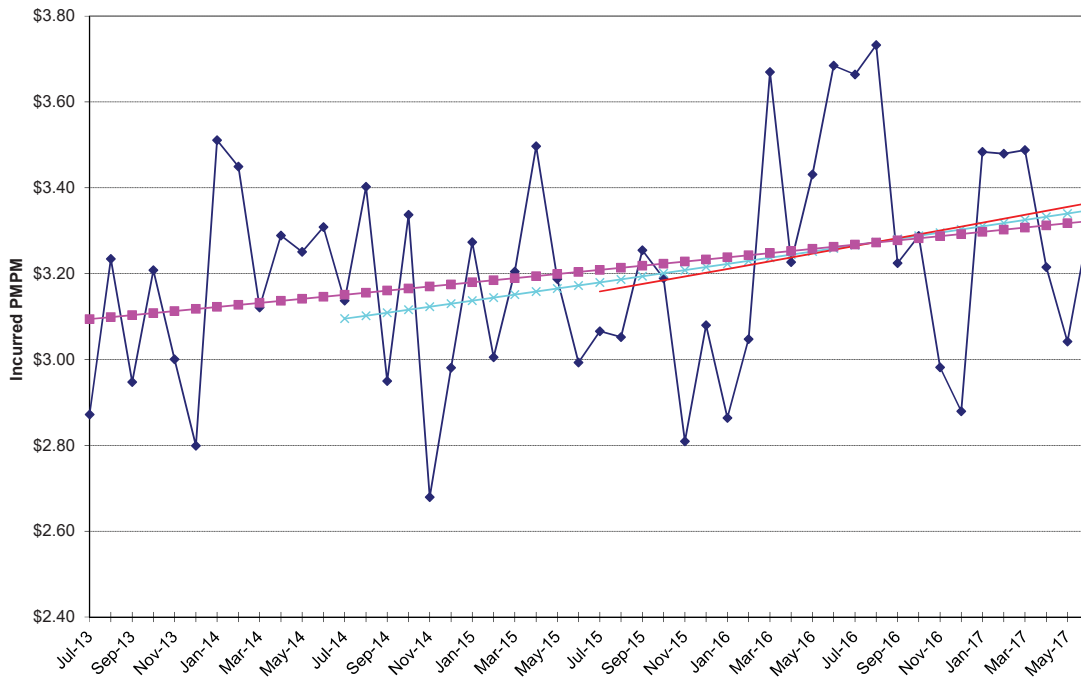
Physician Services - Inpatient Visits



Physician Services - Inpatient Visits



Physician Services - Inpatient Visits



**NON-MEDICARE CLAIMS
Excluding Drugs**

PHYSICIAN SERVICES

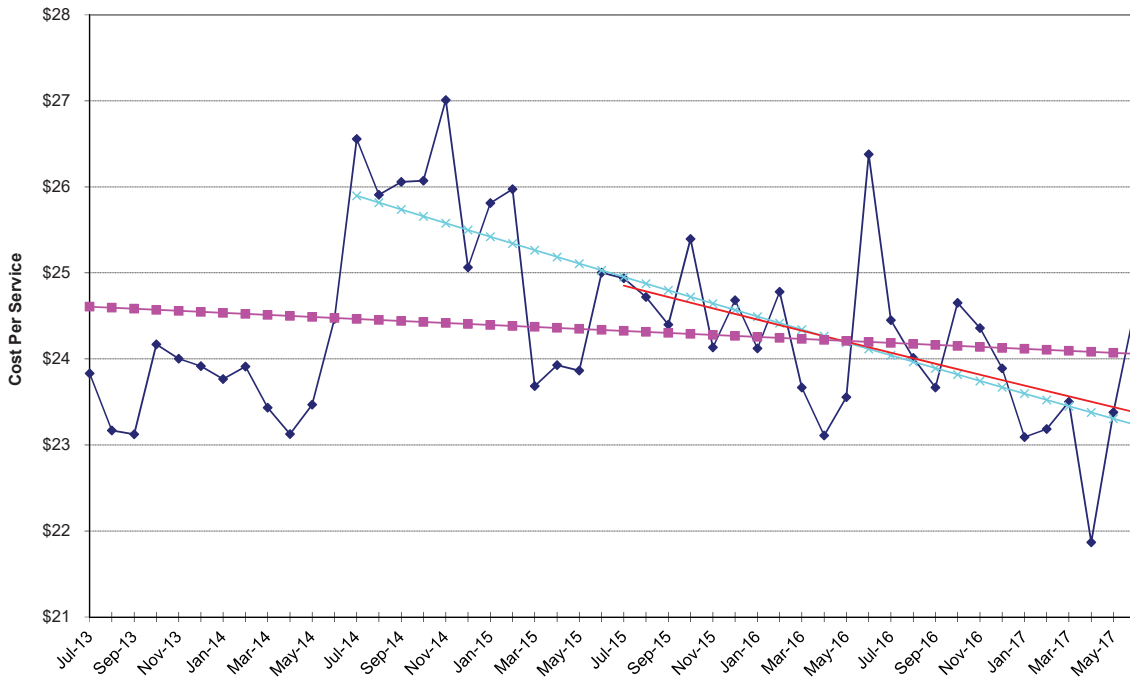
Lab & Pathology

24-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
6.1%	-3.1%	2.8%

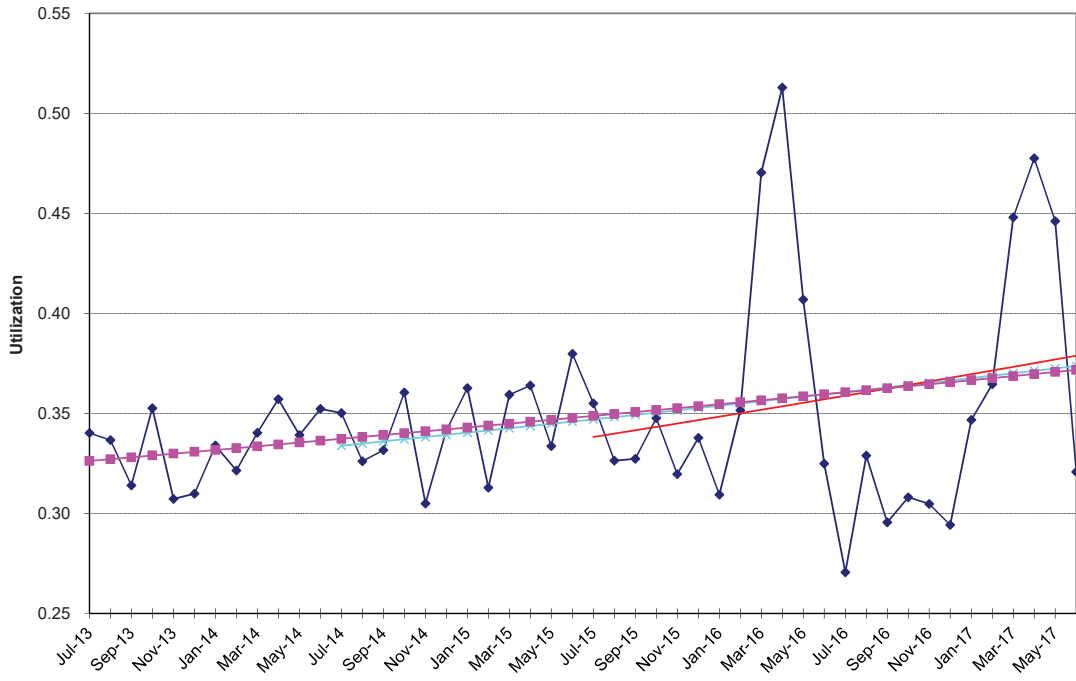
36-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
3.9%	-3.7%	0.1%

48-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
3.4%	-0.6%	2.8%

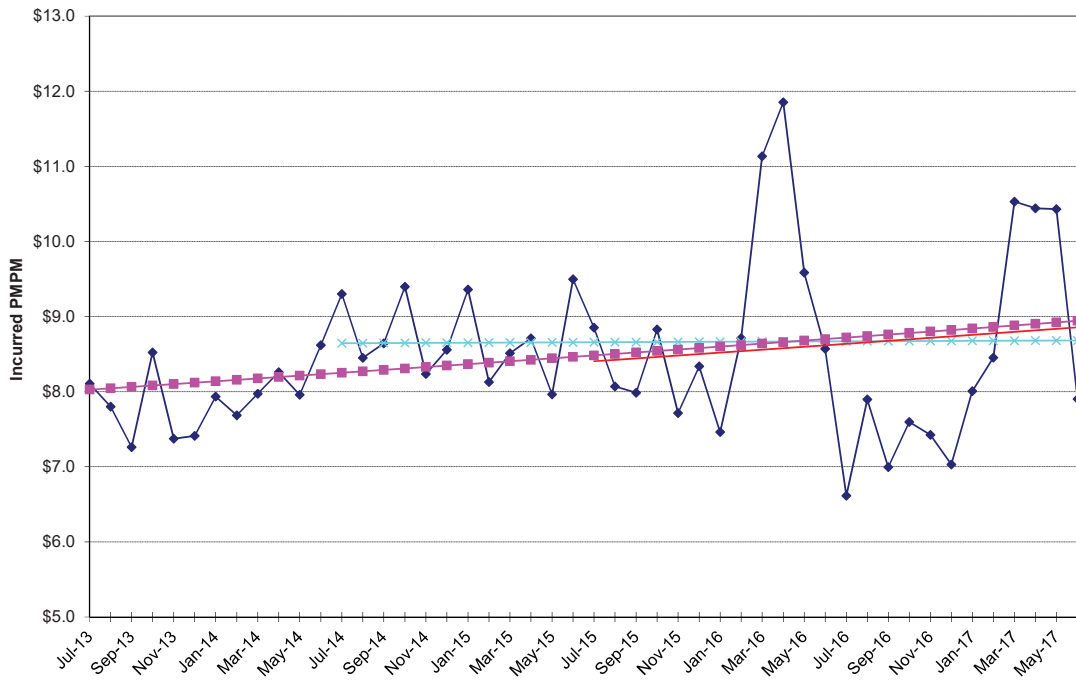
Physician Services - Lab & Pathology



Physician Services - Lab & Pathology



Physician Services - Lab & Pathology



**NON-MEDICARE CLAIMS
Excluding Drugs**

PHYSICIAN SERVICES

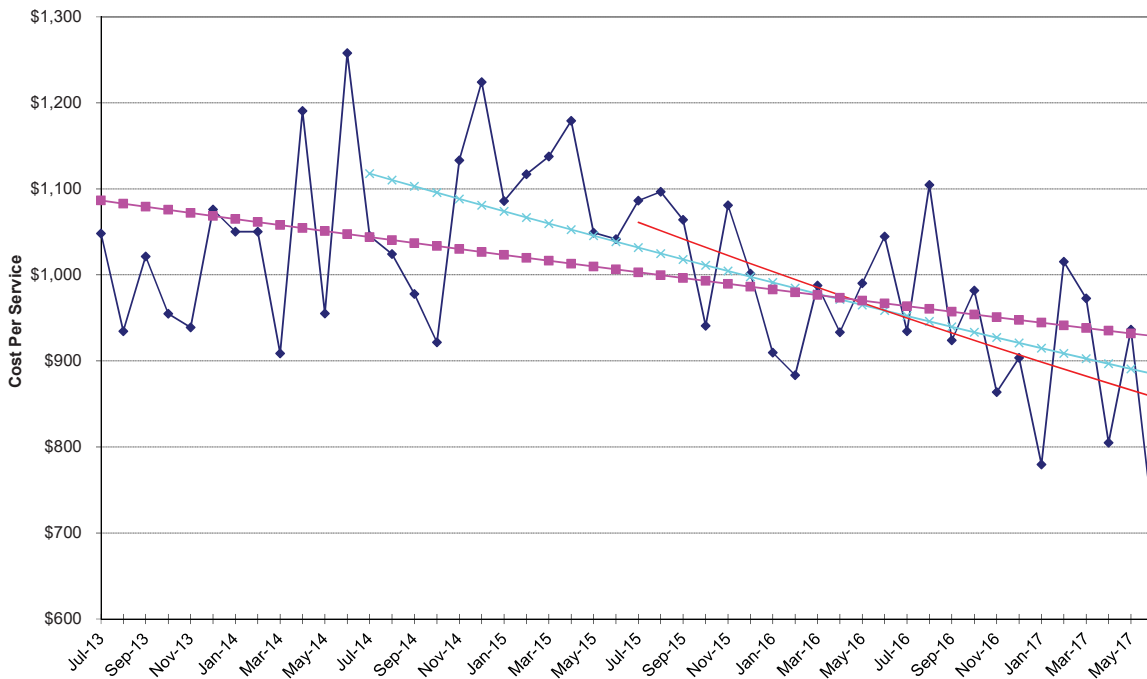
Maternity

24-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-2.5%	-10.5%	-12.7%

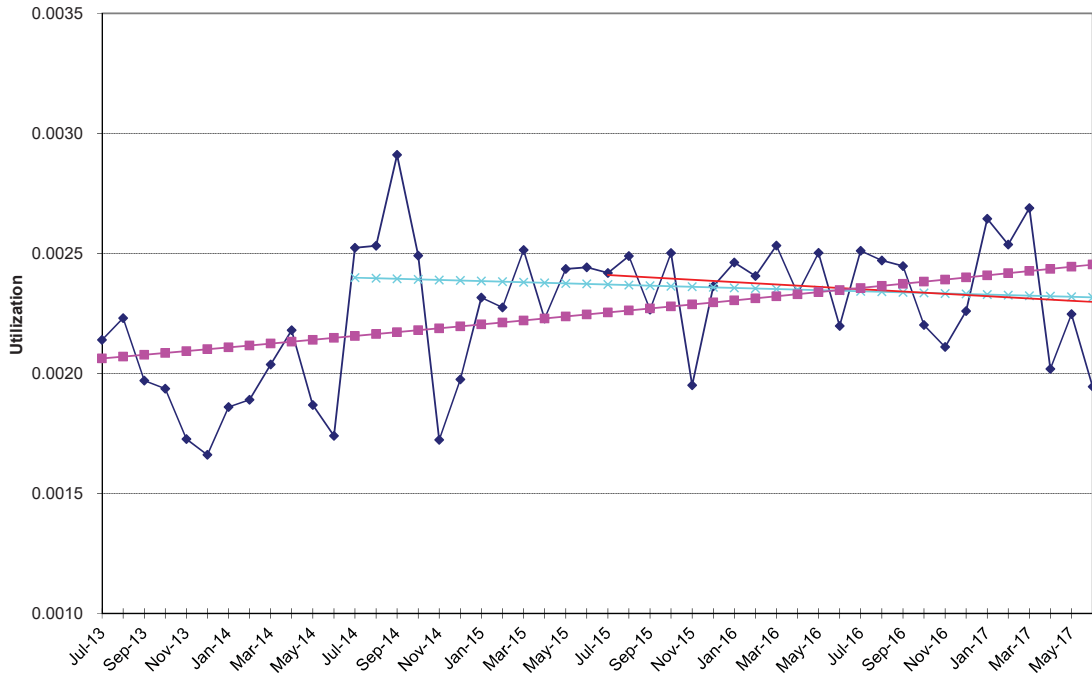
36-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-1.2%	-7.7%	-8.8%

48-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
4.5%	-3.9%	0.4%

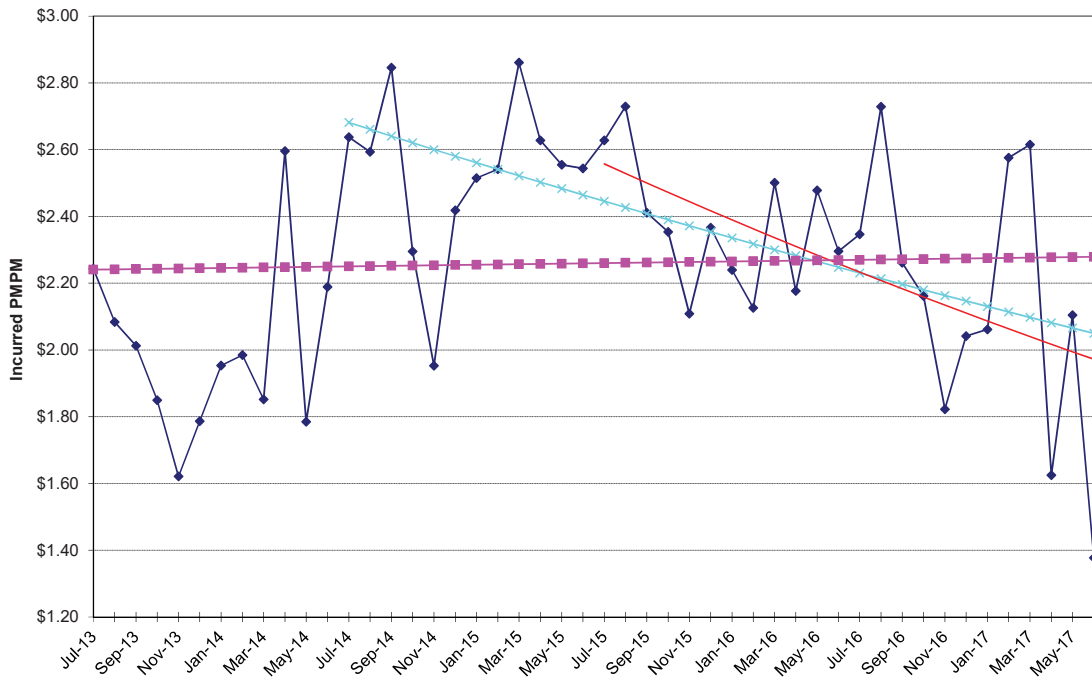
Physician Services - Maternity



Physician Services - Maternity



Physician Services - Maternity



**NON-MEDICARE CLAIMS
Excluding Drugs**

PHYSICIAN SERVICES

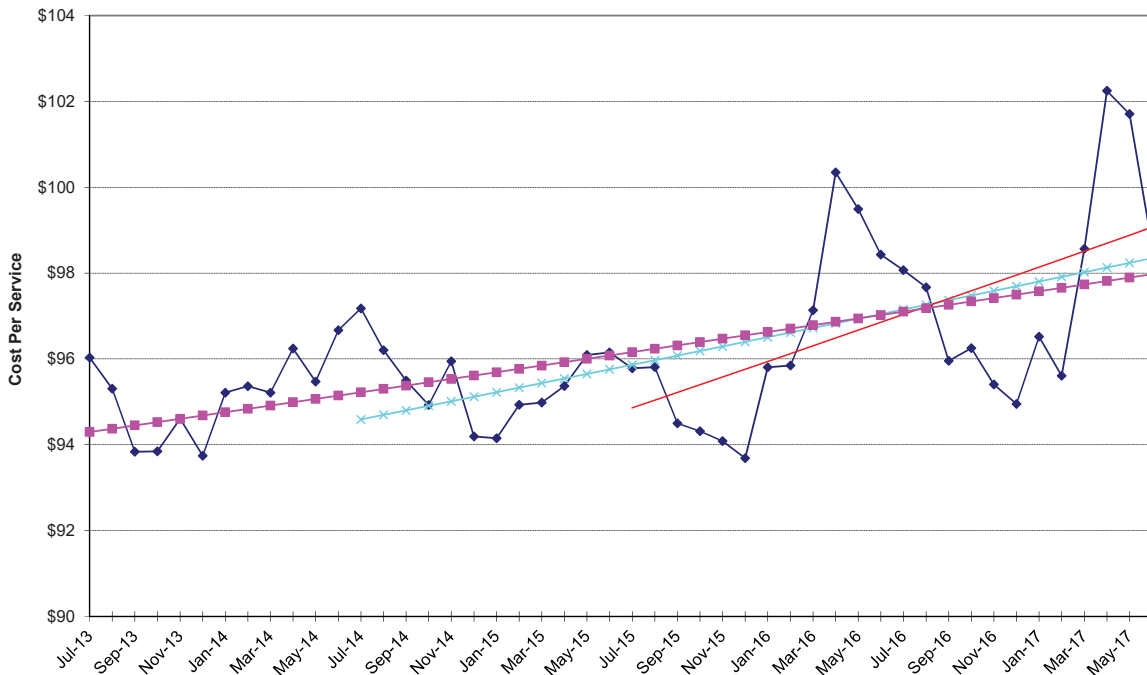
Office Visits

24-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
7.3%	2.3%	9.8%

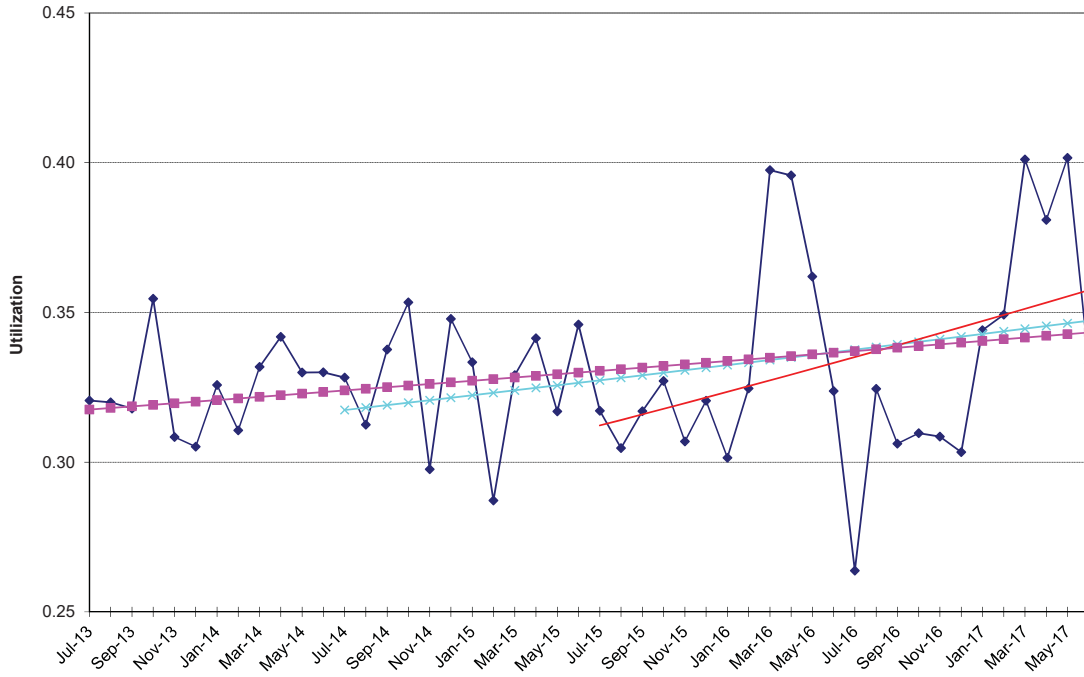
36-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
3.1%	1.3%	4.5%

48-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
2.0%	1.0%	3.0%

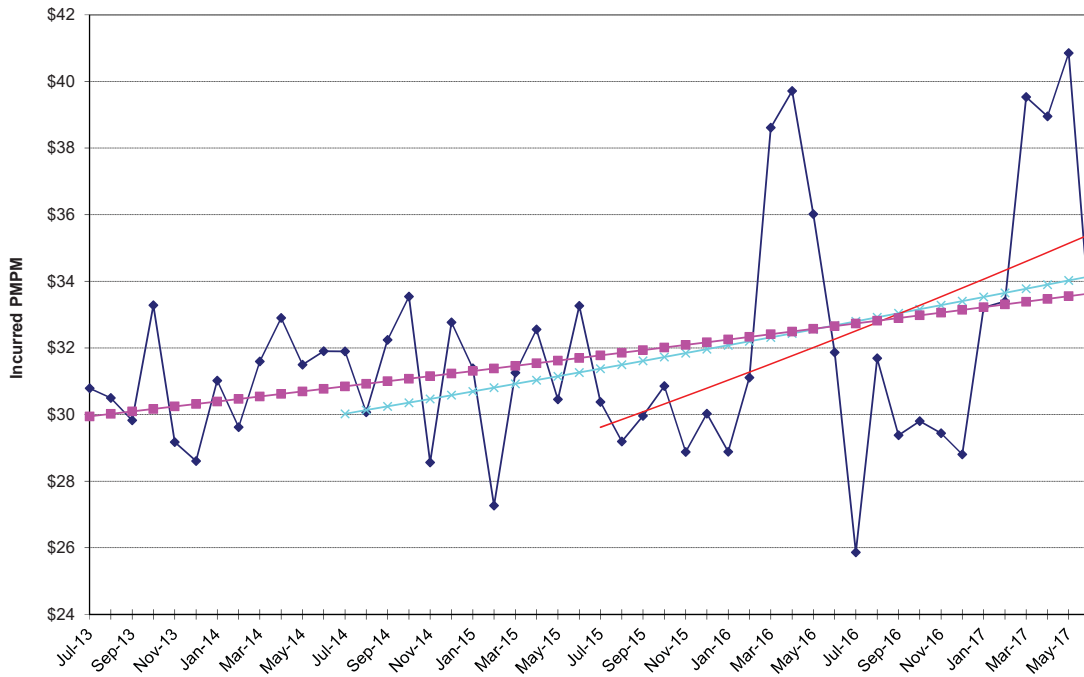
Physician Services - Office Visits



Physician Services - Office Visits



Physician Services - Office Visits



**NON-MEDICARE CLAIMS
Excluding Drugs**

PHYSICIAN SERVICES

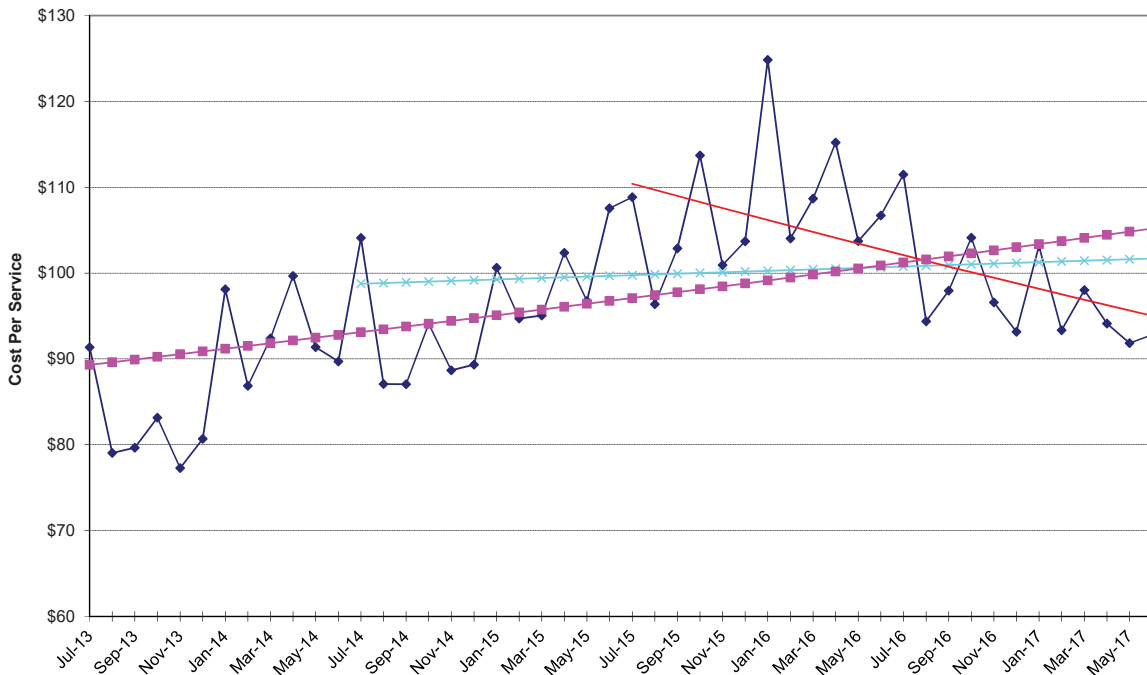
Other Services

24-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
6.1%	-7.5%	-1.9%

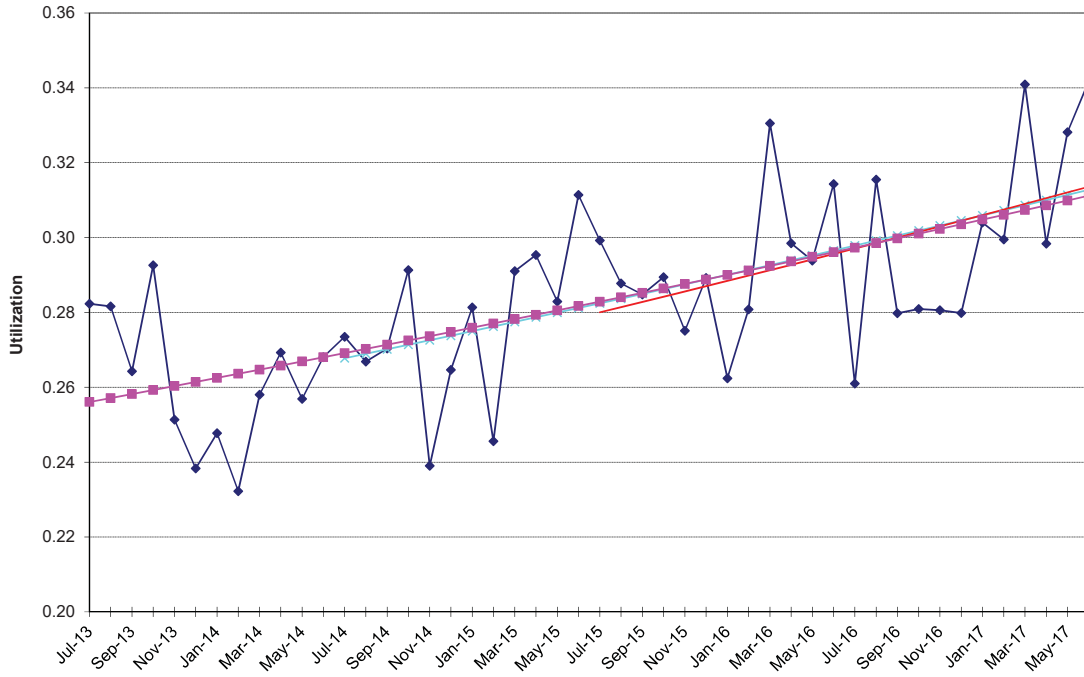
36-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
5.5%	1.0%	6.5%

48-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
5.1%	4.3%	9.6%

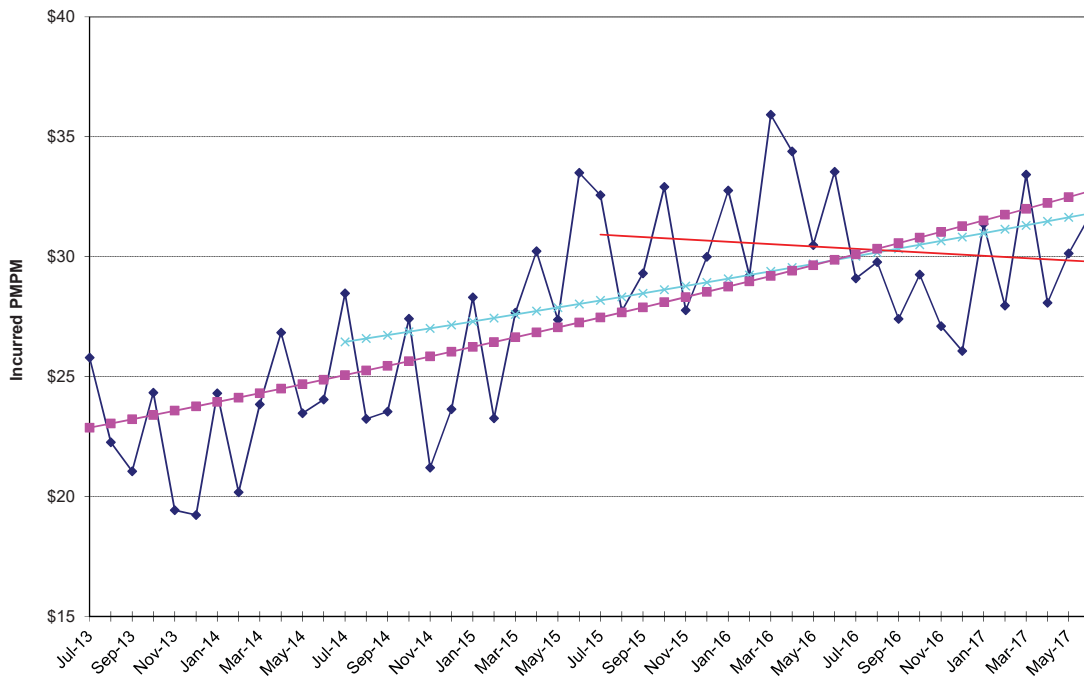
Physician Services - Other Services



Physician Services - Other Services



Physician Services - Other Services



**NON-MEDICARE CLAIMS
Excluding Drugs**

PHYSICIAN SERVICES

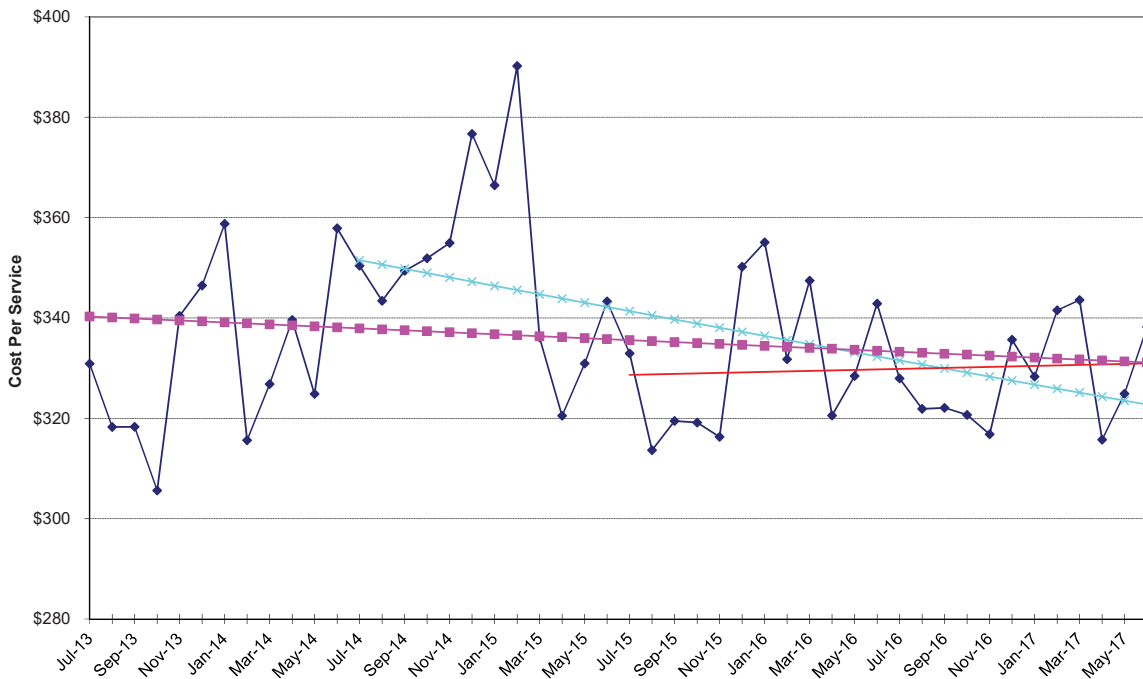
Outpatient Surgery

24-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
8.5%	0.4%	8.9%

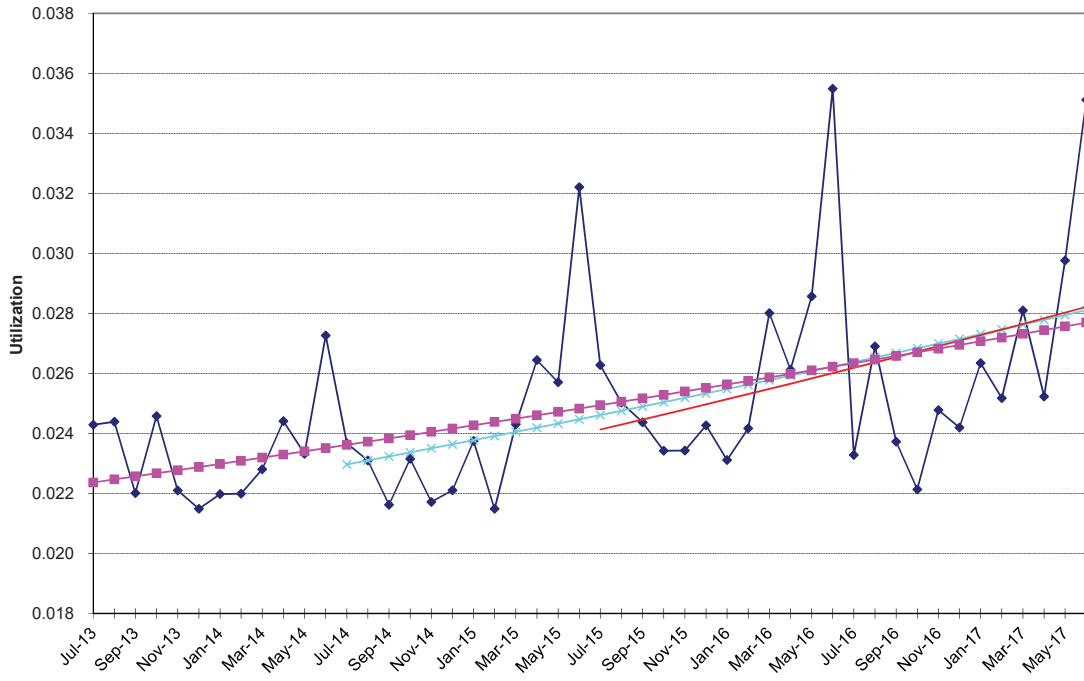
36-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
7.2%	-2.9%	4.1%

48-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
5.6%	-0.7%	4.9%

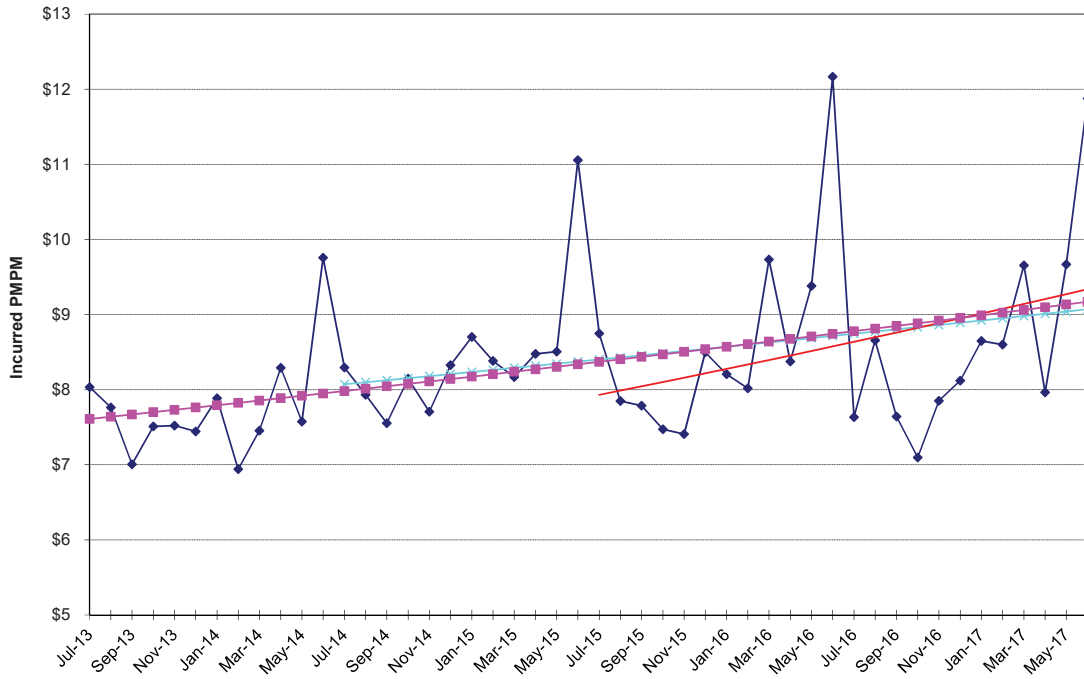
Physician Services - Outpatient Surgery



Physician Services - Outpatient Surgery



Physician Services - Outpatient Surgery



NON-MEDICARE CLAIMS
Excluding Drugs

PHYSICIAN SERVICES

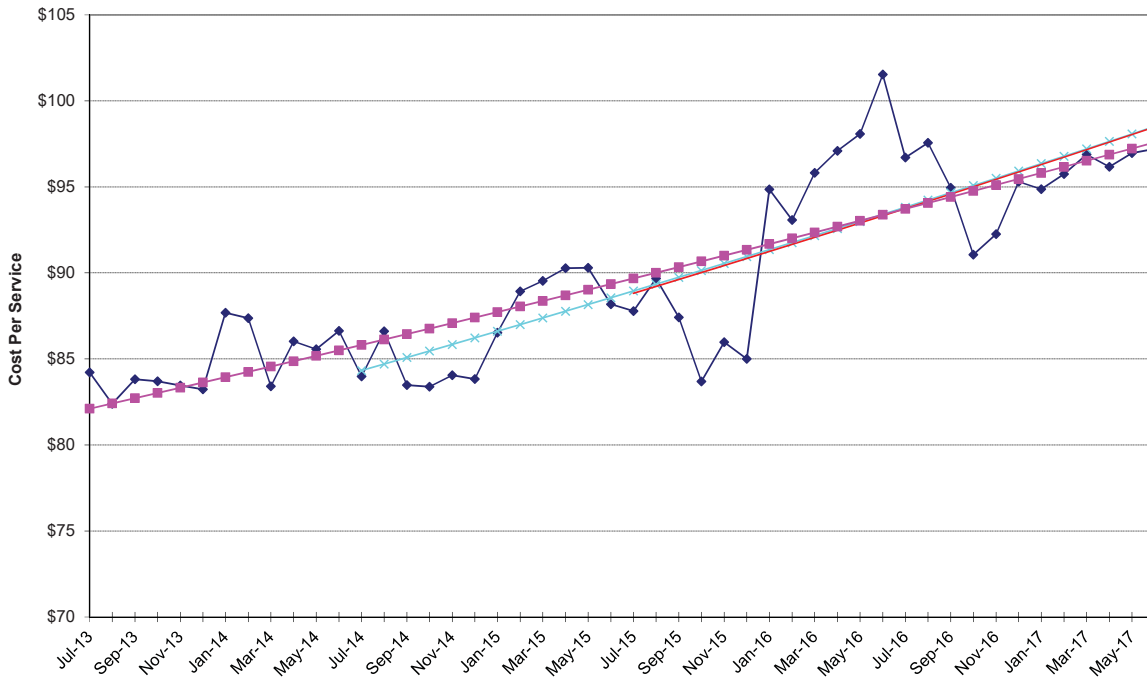
Psychiatric / Substance Abuse

24-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-5.2%	5.5%	0.1%

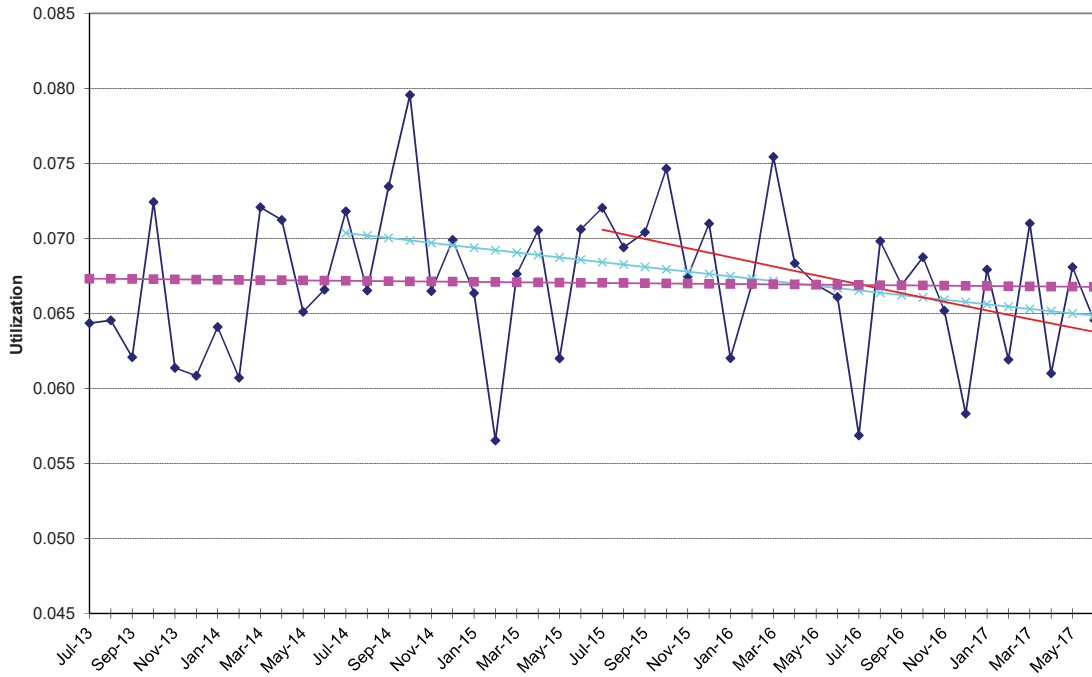
36-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-2.8%	5.5%	2.6%

48-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-0.2%	4.5%	4.3%

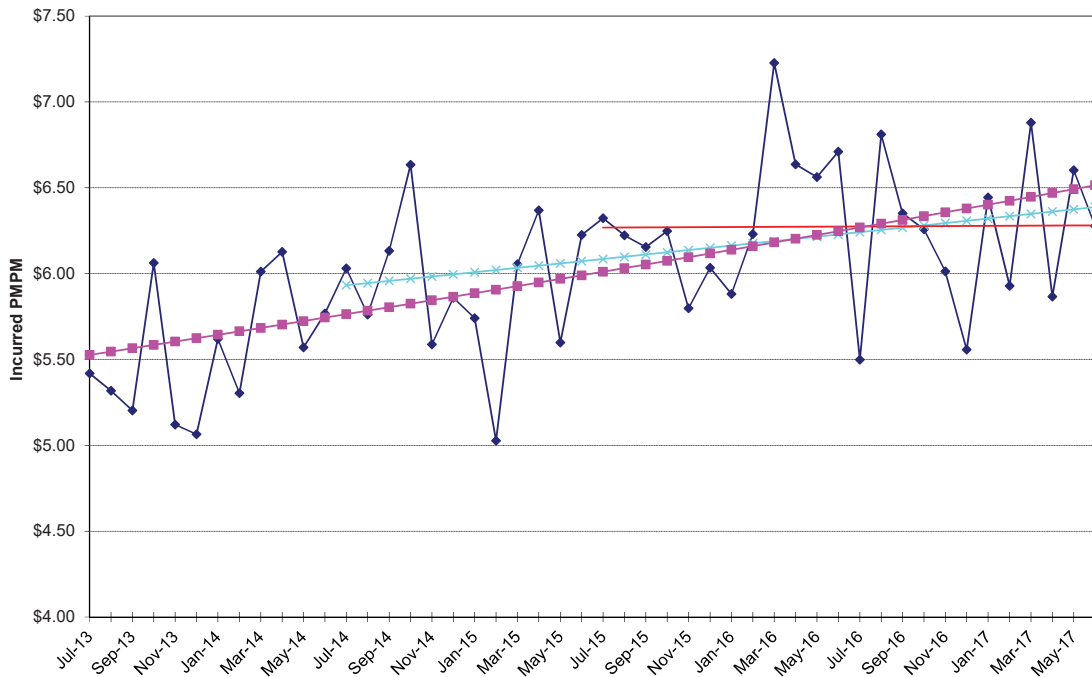
Physician Services - Psychiatric / Substance Abuse



Physician Services - Psychiatric / Substance Abuse



Physician Services - Psychiatric / Substance Abuse



**NON-MEDICARE CLAIMS
Excluding Drugs**

PHYSICIAN SERVICES

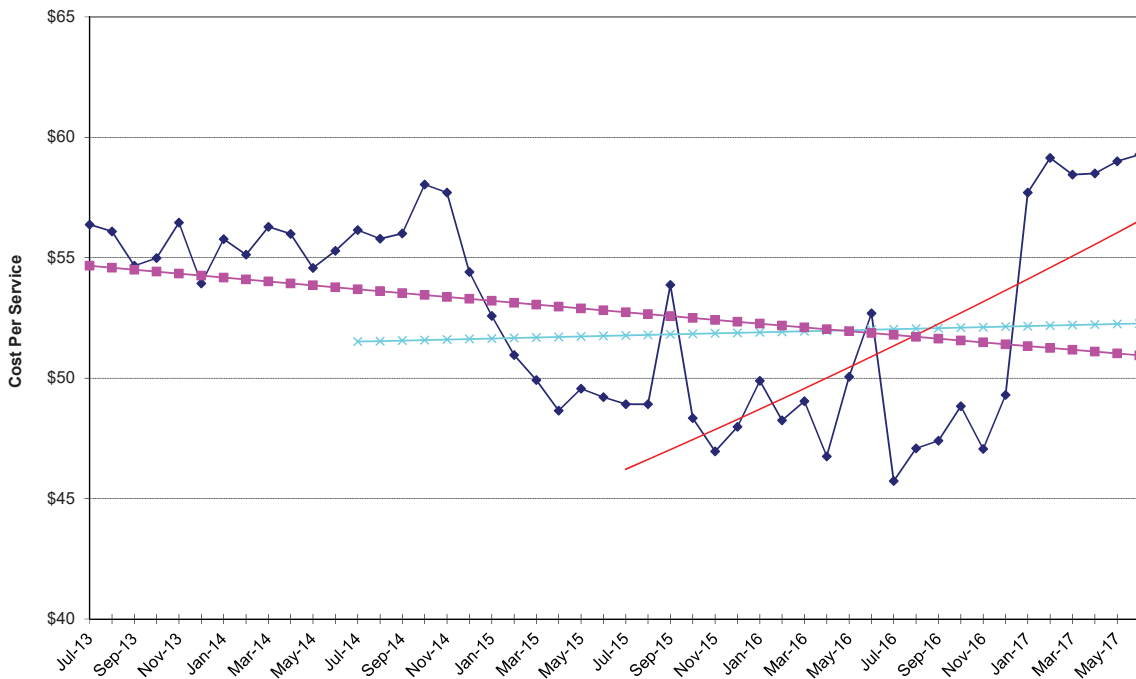
Radiology

24-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-6.6%	11.1%	3.8%

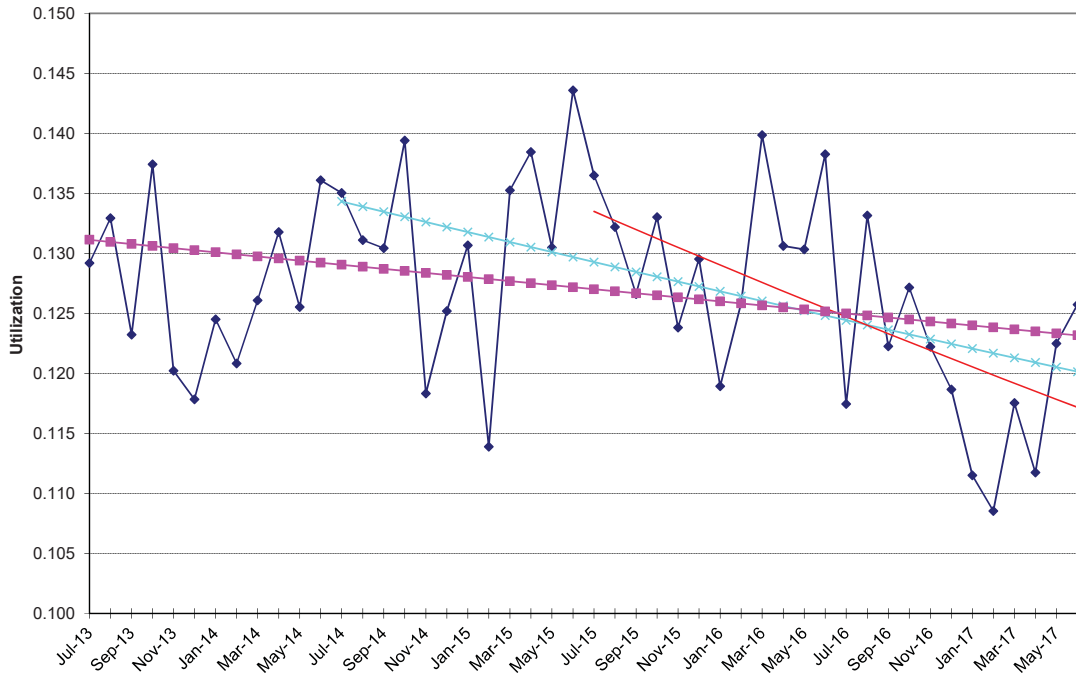
36-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-3.8%	0.5%	-3.3%

48-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-1.6%	-1.8%	-3.3%

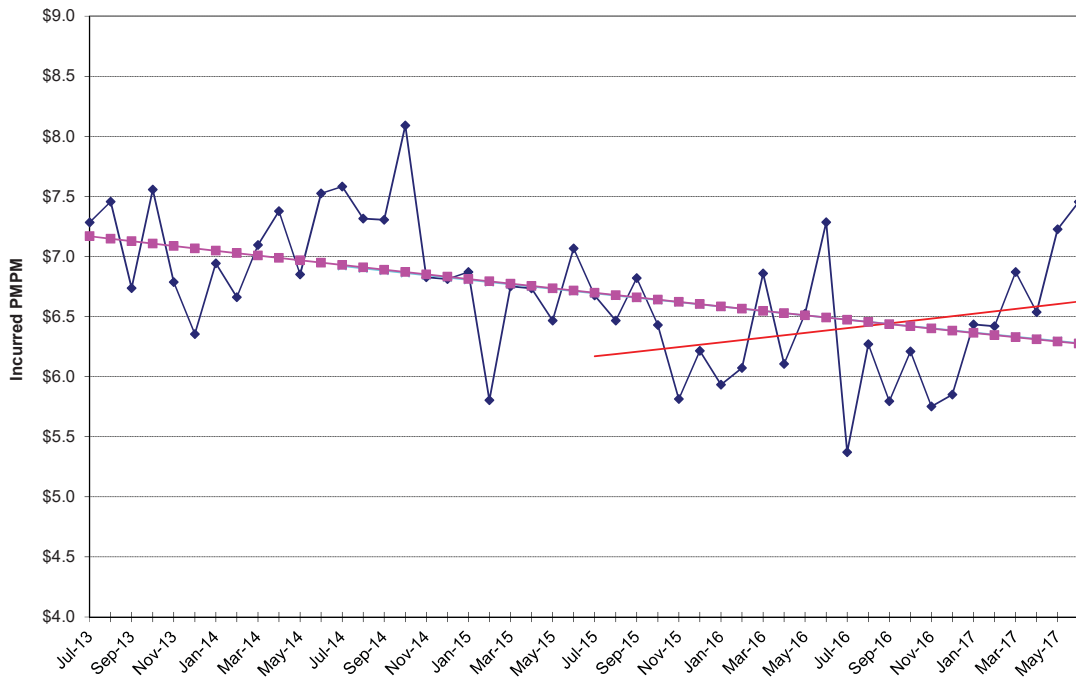
Physician Services - Radiology



Physician Services - Radiology



Physician Services - Radiology



**NON-MEDICARE CLAIMS
Excluding Drugs**

PHYSICIAN SERVICES

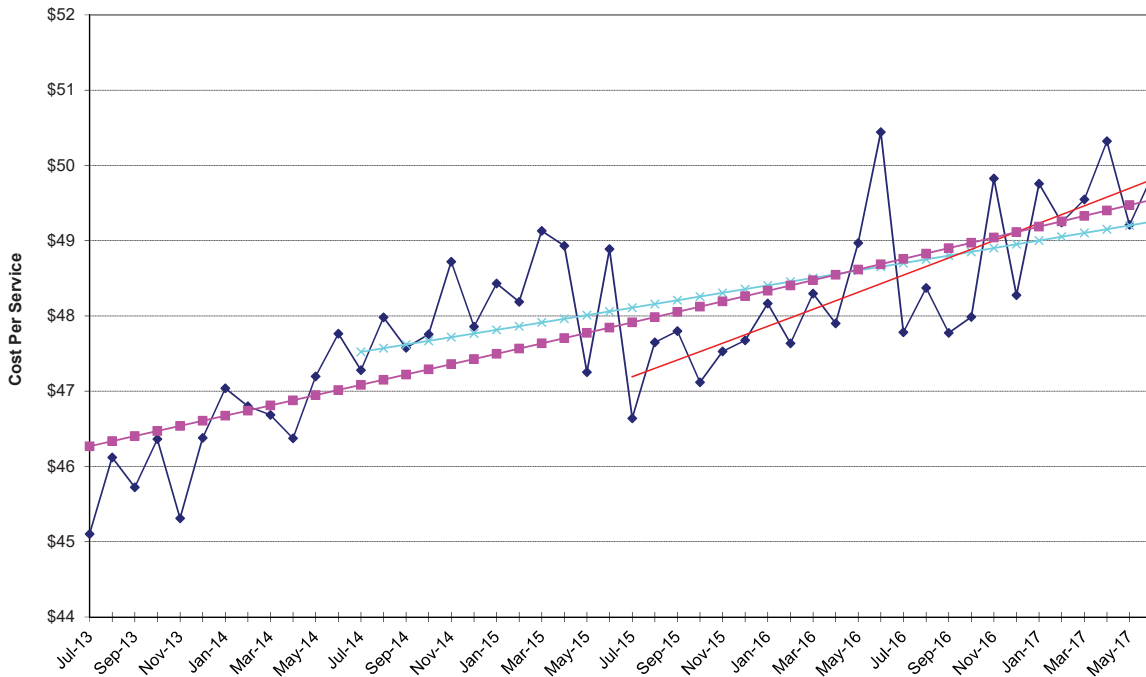
Therapies

24-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
5.8%	2.9%	8.9%

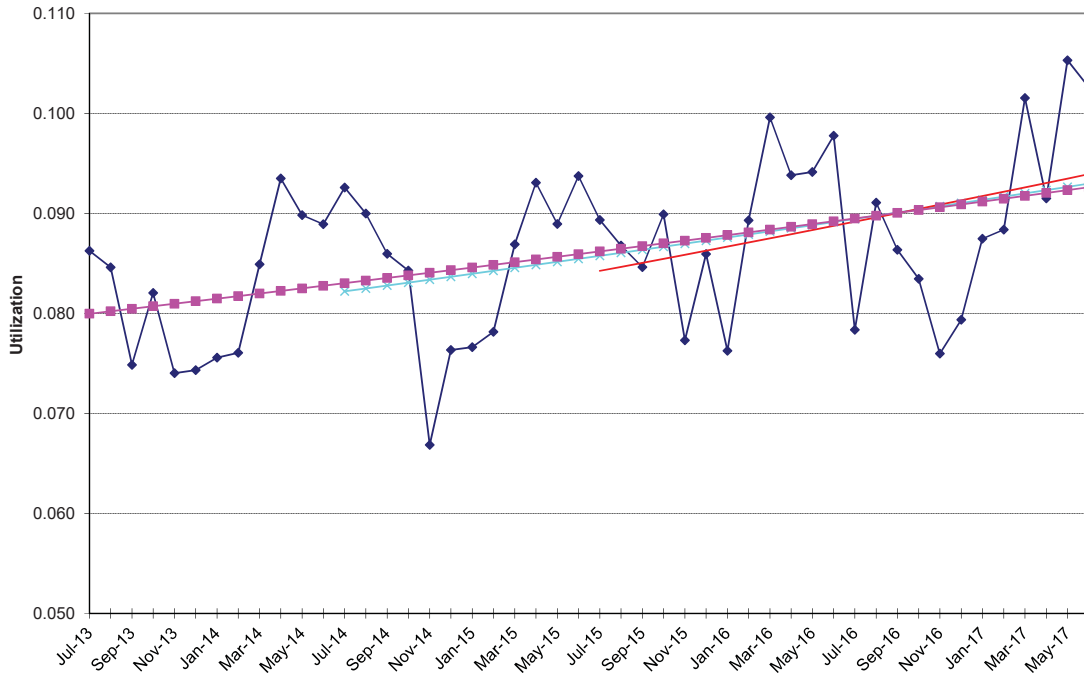
36-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
4.3%	1.2%	5.6%

48-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
3.8%	1.8%	5.7%

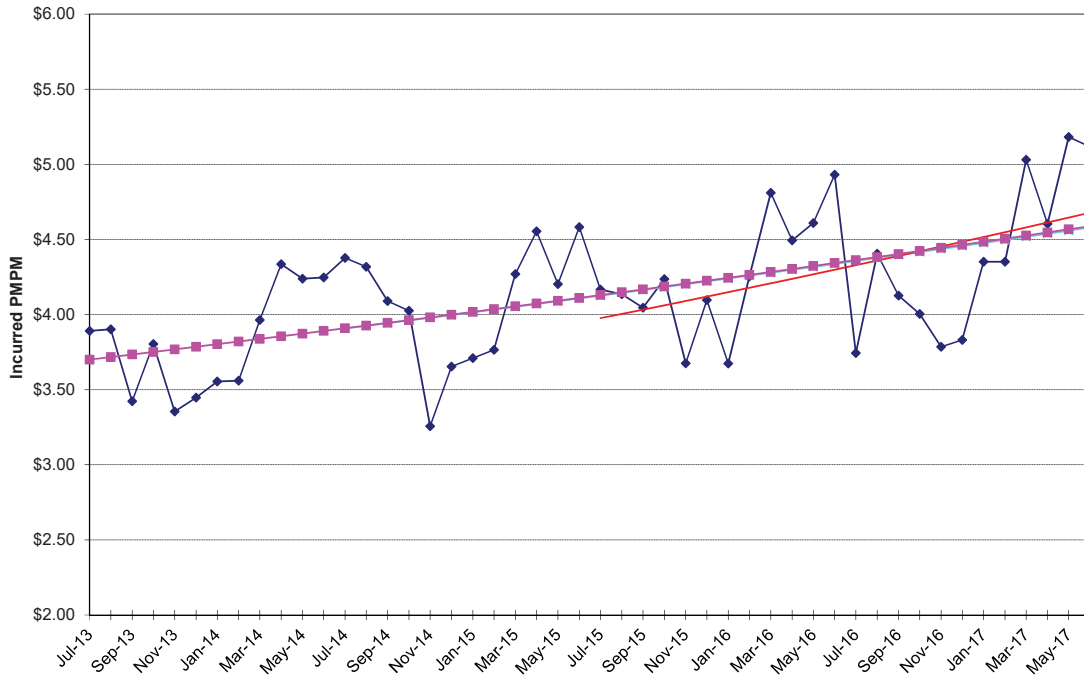
Physician Services - Therapies



Physician Services - Therapies



Physician Services - Therapies



**NON-MEDICARE CLAIMS
Excluding Drugs**

OTHER

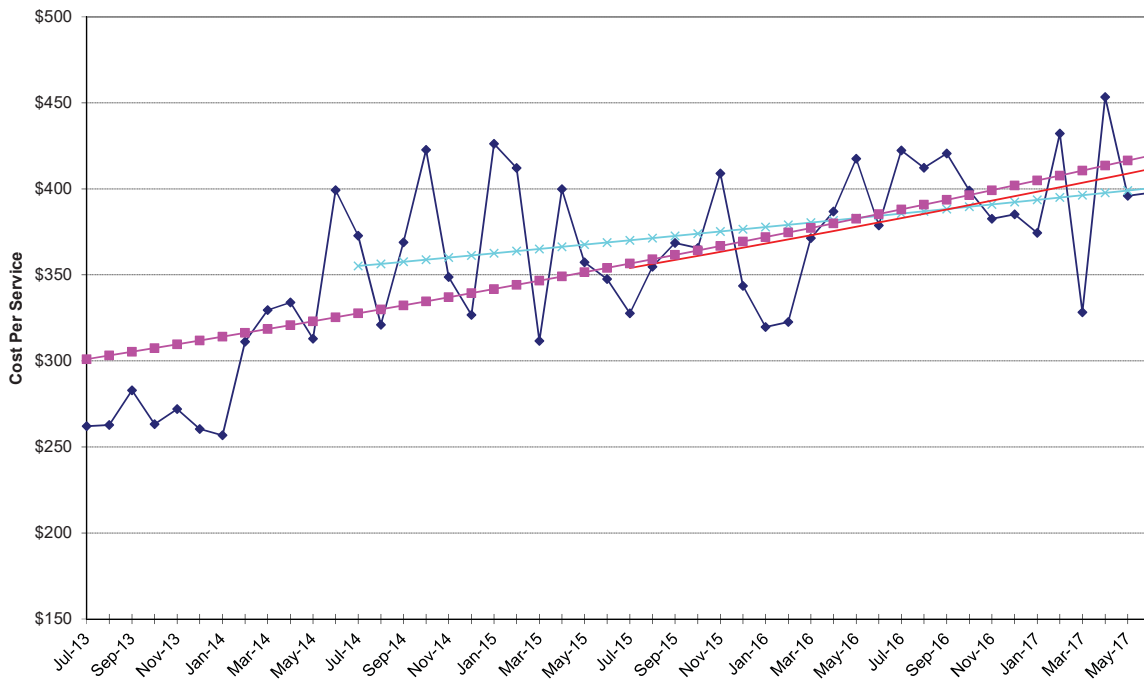
Ambulance

24-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-5.5%	8.2%	2.3%

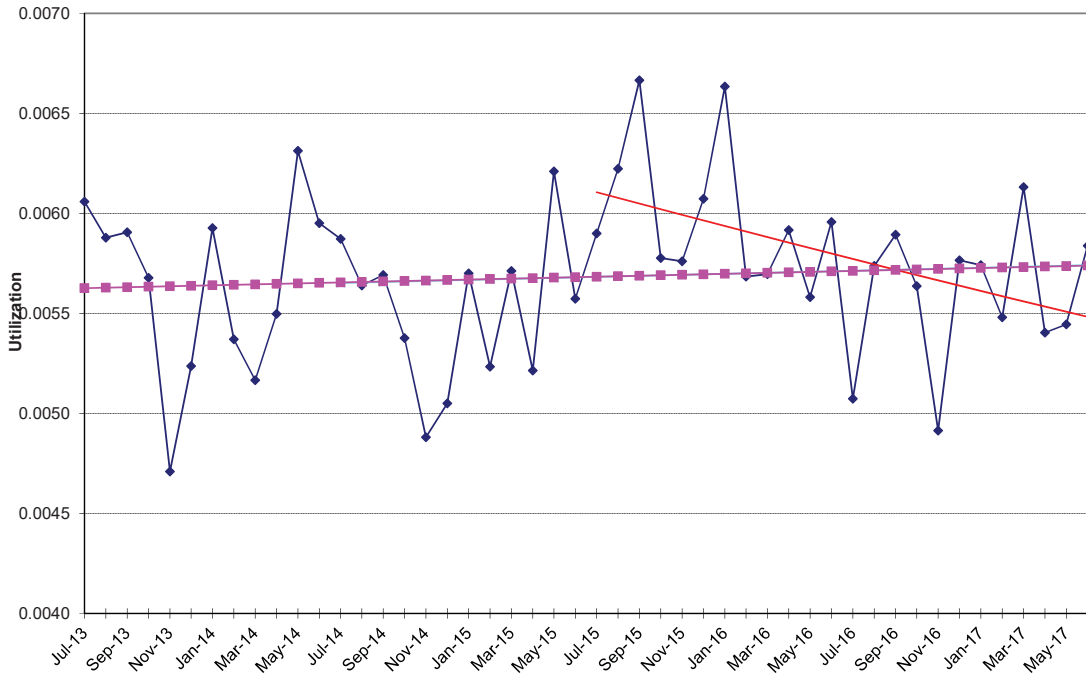
36-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
0.5%	4.2%	4.8%

48-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
0.5%	8.8%	9.4%

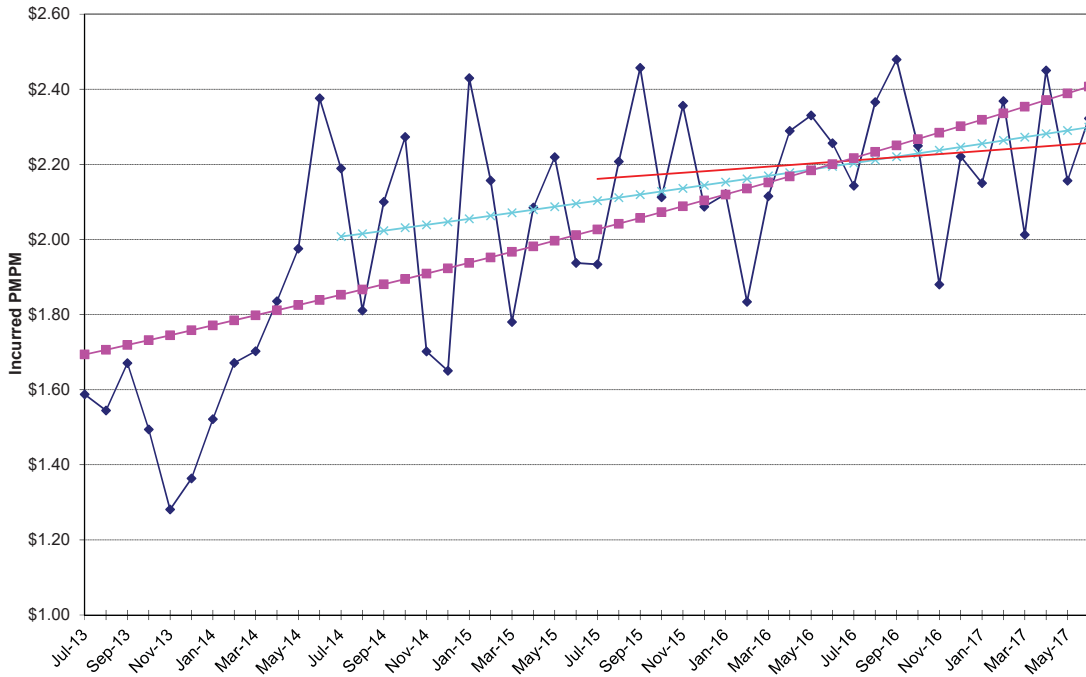
Other - Ambulance



Other - Ambulance



Other - Ambulance



**NON-MEDICARE CLAIMS
Excluding Drugs**

OTHER

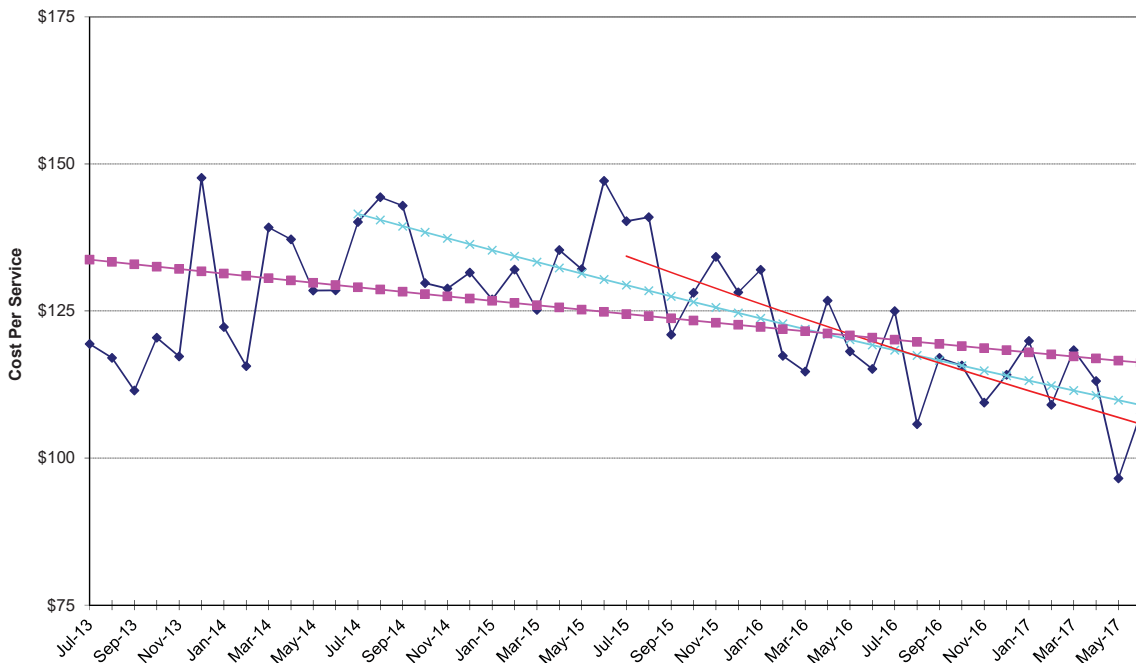
Appliances (DME)

24-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
15.2%	-11.7%	1.7%

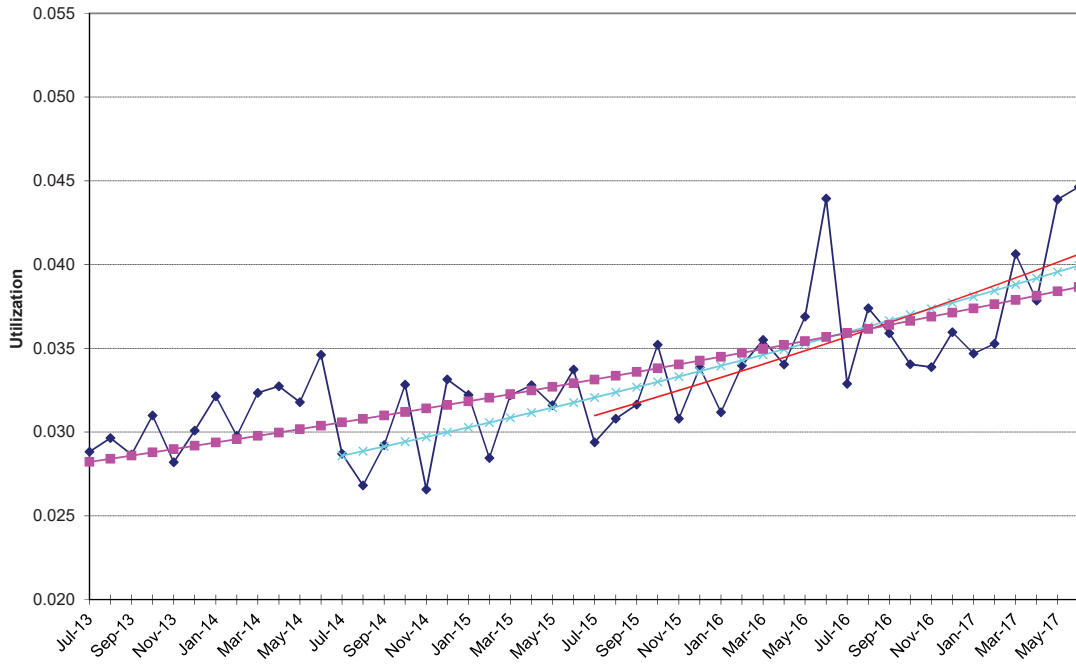
36-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
12.1%	-8.6%	2.6%

48-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
8.4%	-3.5%	4.6%

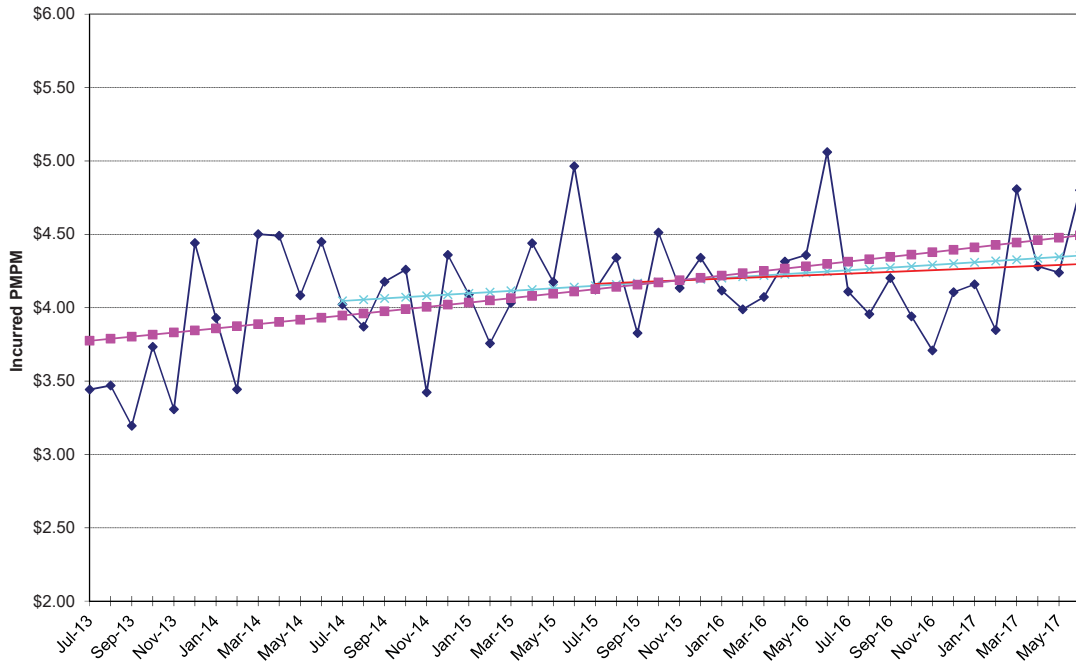
Other - Appliances (DME)



Other - Appliances (DME)



Other - Appliances (DME)



**NON-MEDICARE CLAIMS
Excluding Drugs**

OTHER

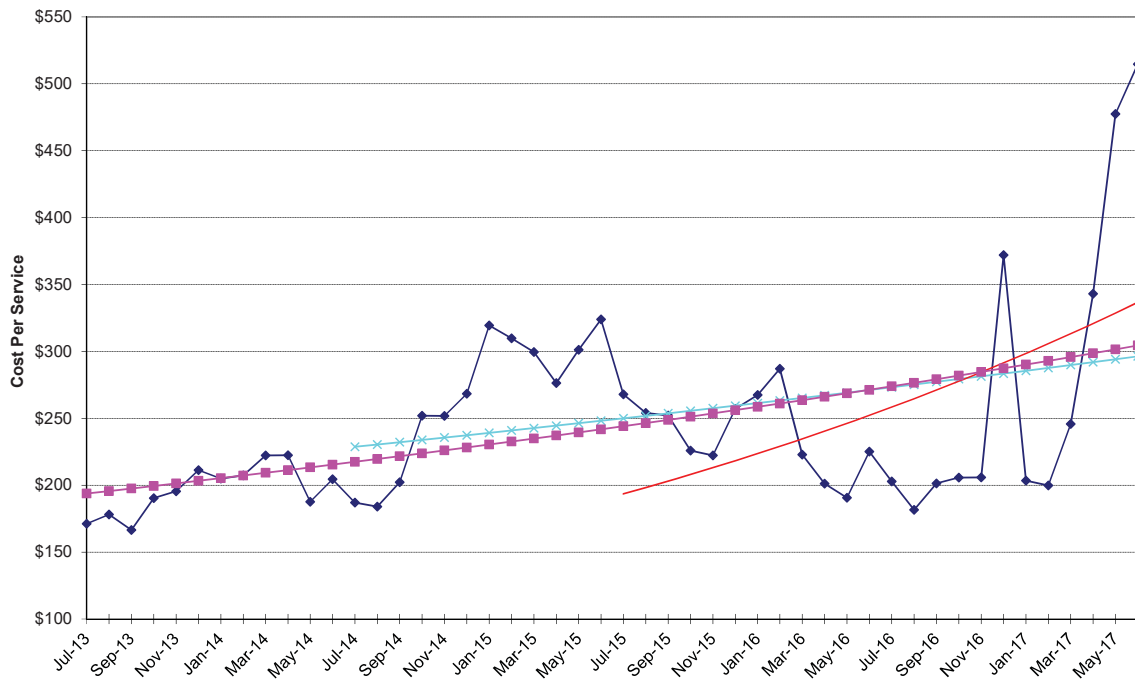
Other Services

24-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-8.2%	33.5%	22.6%

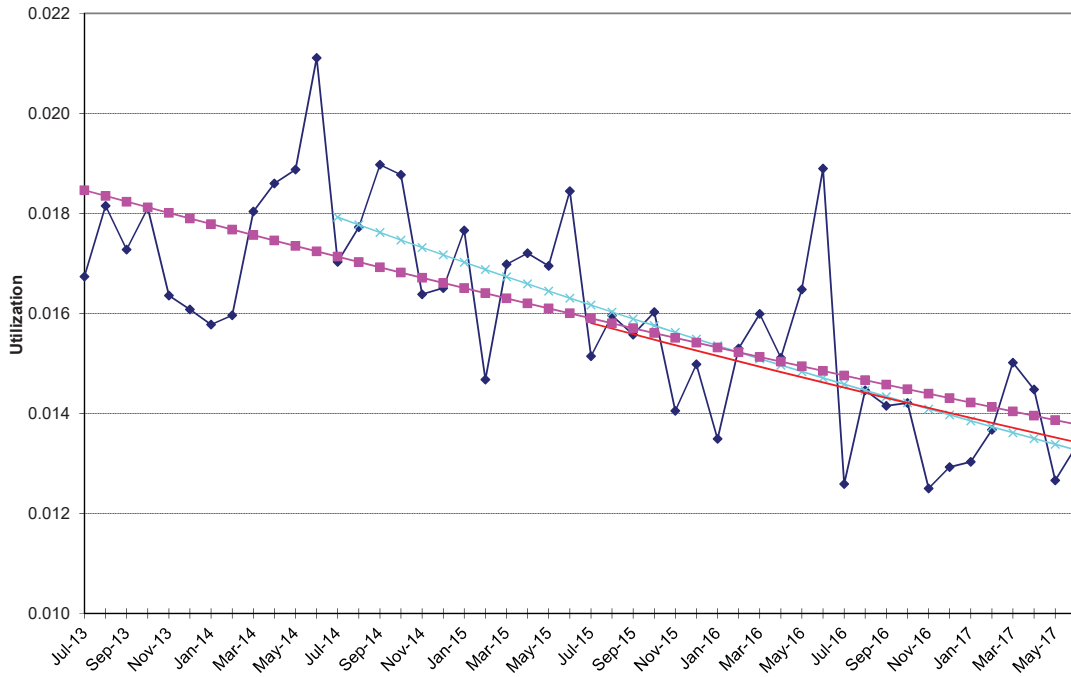
36-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-9.8%	9.3%	-1.4%

48-Month Trends Summary		
<u>Utilization</u>	<u>Cost / Service</u>	<u>Total Trend</u>
-7.2%	12.2%	4.2%

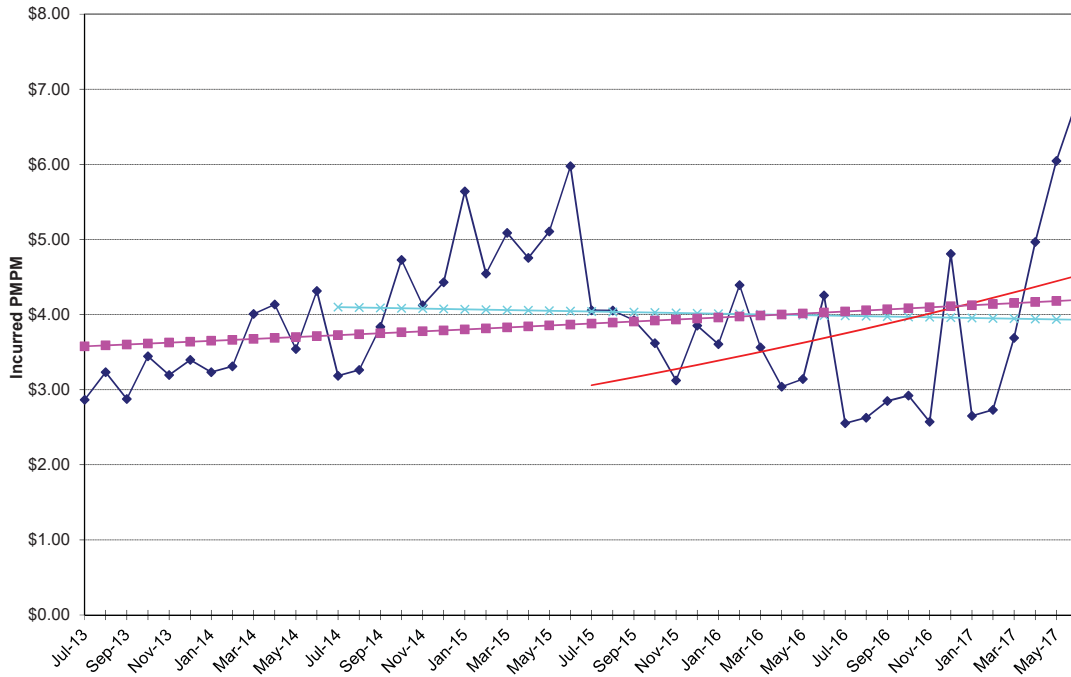
Other - Other Services



Other - Other Services



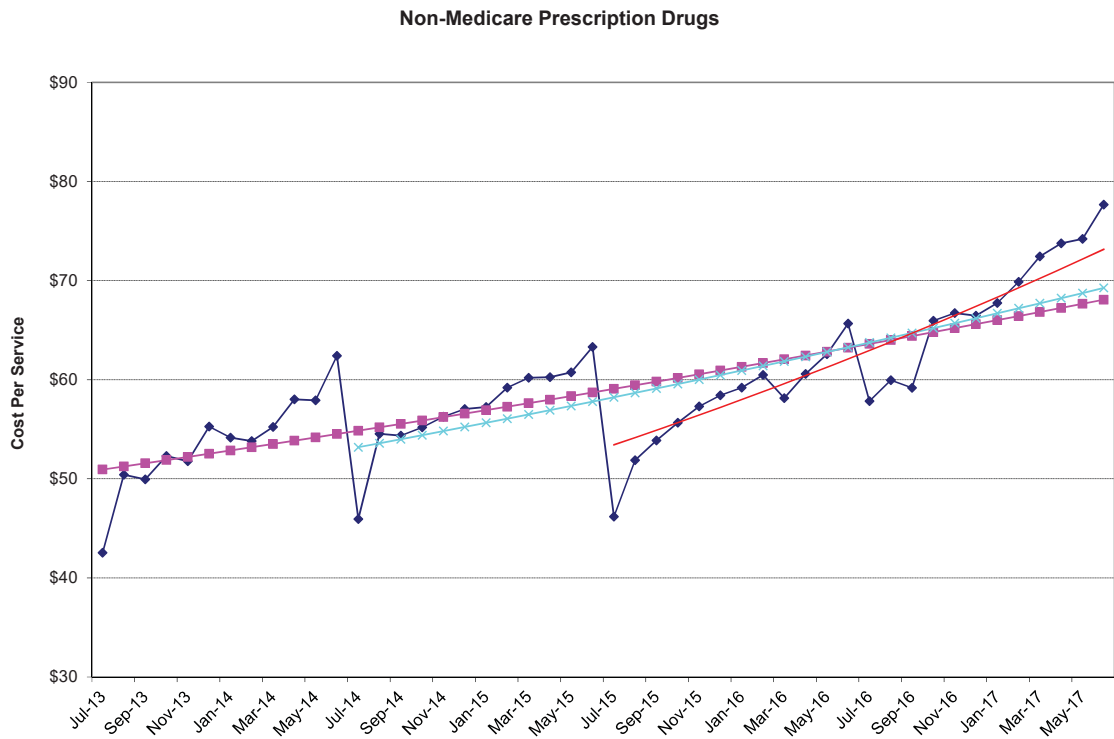
Other - Other Services



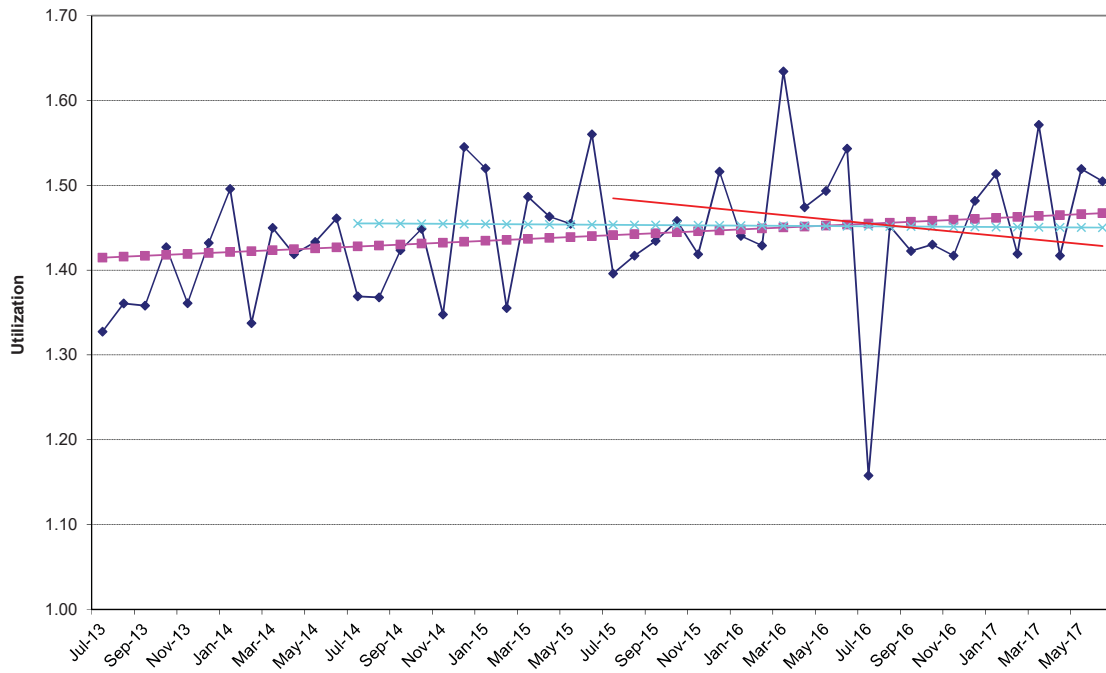
Appendix B

Non-Medicare Prescription Drugs

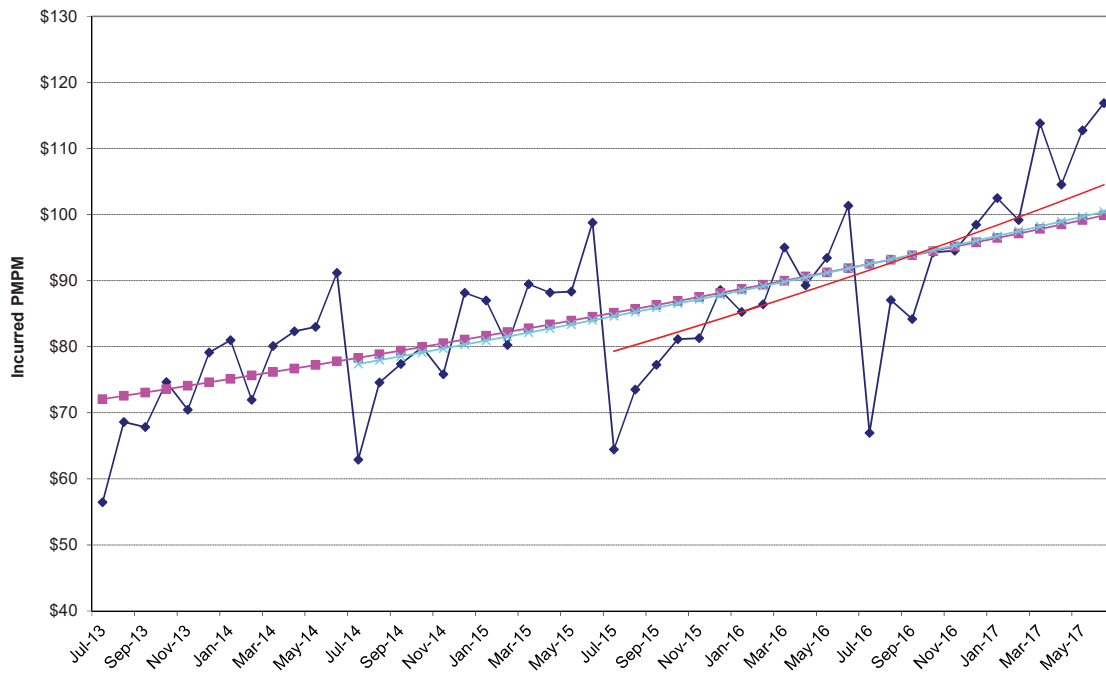
	<u>Utilization</u>	<u>Cost / Prescription</u>	<u>Total Trend</u>
24-Month Trend	-2.0%	17.8%	15.5%
36-Month Trend	-0.1%	9.5%	9.4%
48-Month Trend	0.9%	7.7%	8.7%



Non-Medicare Prescription Drugs



Non-Medicare Prescription Drugs



Appendix C – Prescription Drug Trends

Overview

Continuing Care Actuaries analyzed prescription drug experience in aggregate, by major indicator and in particular, specialty drugs. Prescription drug trends were analyzed using a 24, 36, and 48-month actuarial basis. It was found that the 24-month basis as the methodology that is most likely to produce accurate future trends. Under this methodology, utilization had a -2.4% trend and unit cost had a 12.2% trend, resulting in a composite trend of 7.1% on an unadjusted basis. The chart below summarizes components of the unadjusted prescription drug trend for the past 5 years

Year	Utilization	Unit Cost	Composite Trend
2013	0.0%	-5.8%	-5.5%
2014	-1.5%	6.2%	4.5%
2015	3.9%	7.9%	11.5%
2016	-0.7%	8.7%	6.9%
2017	-2.4%	12.2%	7.1%

Prior to this analysis, the financial plan was developed using a 11.5% trend for fiscal year 2018. Based on results and future expectations, Continuing Care Actuaries has chosen to continue to use a drug trend assumption of 11.5% for fiscal year 2018 in the financial plan.

Brand Patent Expirations

This drug trend assumption has been made because of recent drug experience, as well as future blockbuster drugs that are expected to lose their patent in the upcoming years. Examples of these drugs include:

Drug	Patent Expiration	2016 Ingredient Cost		2017 Ingredient Cost	
		Amount	%	Amount	%
Synthroid	2018	851,969	0.4%	728,884	0.3%
Apriso	2018	876,049	0.4%	844,219	0.3%
Lyrica	2018	1,205,632	0.4%	1,535,638	0.6%
Revlimid	2018	1,259,592	0.5%	1,679,542	0.7%
Eliquis	2019	1,249,522	0.5%	1,948,196	0.8%
Gilenya	2019	1,517,814	0.7%	1,775,942	0.7%
Xyrem	2019	1,541,105	0.7%	2,181,834	0.9%
Total		\$8,501,683	3.6%	\$10,694,255	4.3%

Specialty Drugs

Specialty drugs have continued to be a concern for PEIA due to the relatively rapid growth in utilization and unit cost. Nationally, specialty drug spend is expected to double in the next five years. In the past year, total cost for non-Medicare plan members has increased from \$48,540,066 in 2016 to \$73,561,670 in 2017. Overall, the following chart shows the percent of plan drug expenditures in specialty drugs in the past few years, noting that the growth in specialty drugs were 20.7% in 2016 and 51.5% in 2017:

Period	Specialty Drugs			
	Percent of Total Cost	Total Cost Growth	Number of RXs	RX Growth
FY 2013	18.0%	24.3%	11,167	5.5%
FY 2014	18.6%	5.3%	10,938	-2.1%
FY 2015	18.7%	12.4%	11,028	0.8%
FY 2016	21.1%	20.7%	11,128	0.9%
FY 2017	29.9%	51.5%	17,731	59.3%

The following chart shows the top 10 brand name specialty drugs and their total cost in 2017:

Rank	2017 Brand Name	2017 Cost	2016 Cost
1	Humira	\$17,103,300	\$12,769,819
2	Enbrel	\$8,109,509	\$7,215,827
3	Copaxone	\$4,635,061	\$3,981,387
4	Tecfidera	\$2,256,391	N/A
5	Xyrem ¹	\$2,114,824	\$1,541,105
6	Norditropin	\$2,054,809	\$2,023,817
7	Gilenya	\$1,916,698	\$1,517,814
8	Revlimid	\$1,775,941	\$1,259,952
9	Otezla	\$1,483,386	N/A
10	Harvoni	\$1,239,840	\$1,699,091

¹Xyrem was listed as non-specialty in 2016

Indicator Categories

Continuing Care Actuaries reviewed the individual prescription data items for Fiscal Year 2017. A total of 2,796,049 scripts were written for approximately 3,019 different kinds of prescriptions in 2017. The prescriptions were grouped by indicator codes, providing a basis to develop the Fiscal Year 2017 trend by indicator code. The top 40 indicator codes were analyzed, which accounted for 82.3% of PEIA's prescription drug expenditures.

PEIA members spend the most on Antirheumatic drugs. The following chart lists the top 5 and the total drug spend this year.

Rank	2017 Indicator	2017 Cost
1	Antirheumatic	\$30,771,608
2	Insulins	27,738,671
3	Immunomod Agnts	12,174,463
4	Antineoplastic	11,667,917
5	DDP-4 Inhibitor	10,242,277

The following charts summarize the utilization and cost per service for formulary and non-formulary drugs for each indicator code.

Drug Indicators by Highest Cost

<u>Rank</u>	<u>Indicator</u>	<u>Number of Prescriptions</u>	<u>Cost Per Prescription</u>	<u>Program Costs</u>	<u>Formulary Percent (cost)</u>	<u>Formulary Percent (Scripts)</u>
1	ANTIRHEUMATIC	7,348	\$4,187.75	\$30,771,608	95.2%	92.5%
2	INSULINS	34,465	804.84	27,738,671	82.9%	78.4%
3	IMMUNOMOD AGNTS	2,145	5,675.74	12,174,463	100.0%	100.0%
4	ANTINEOPLASTIC	11,825	986.72	11,667,917	90.3%	73.5%
5	DDP-4 INHIBITOR	18,249	561.25	10,242,277	100.0%	99.9%
6	INCRETIN MIMETI	11,306	777.05	8,785,307	100.0%	100.0%
7	ANTIDIABETIC	12,016	540.26	6,491,790	93.5%	91.8%
8	ANTIDEPRESSANTS	238,732	21.95	5,240,616	86.0%	71.8%
9	ANTICOAGULANTS	16,761	277.83	4,656,772	99.4%	99.4%
10	ANTI-INFLAMMATO	23,800	184.36	4,387,760	74.2%	89.1%
11	PPI	71,723	60.03	4,305,748	89.8%	95.3%
12	CONTRACEPTIVES	138,880	30.35	4,214,993	98.1%	99.5%
13	MISC ANTICONVUL	84,068	49.47	4,158,453	89.4%	82.4%
14	B-ADREN AGON	70,777	56.94	4,029,743	94.5%	97.5%
15	ANTIPSYCHOTICS	35,982	110.30	3,968,742	92.6%	97.0%
16	CHOL ABSO INHIB	16,408	235.36	3,861,803	97.1%	89.3%
17	NERVOUS SYS AGT	7,823	456.24	3,569,193	100.0%	100.0%
18	DIABETES MELLIT	4,231	788.94	3,337,996	99.8%	99.5%
19	AMPHETAMINES	19,488	168.67	3,287,009	65.8%	62.3%
20	ESTROGEN	23,638	138.12	3,264,822	99.0%	99.6%

Drug Indicators by Highest Cost (continued)

<u>Rank</u>	<u>Indicator</u>	<u>Number of Prescriptions</u>	<u>Cost Per Prescription</u>	<u>Program Costs</u>	<u>Formulary Percent (cost)</u>	<u>Formulary Percent (Scripts)</u>
21	ANTIMUSCARINICS	24,420	118.18	2,885,843	60.1%	33.7%
22	SKIN AND MUCOUS	20,066	143.34	2,876,223	84.4%	59.3%
23	BIGUANIDES	8,019	343.13	2,751,595	77.3%	89.8%
24	THYROID AGENTS	61,276	44.44	2,723,239	99.9%	99.3%
25	BETA BLOCKERS	96,402	26.31	2,536,620	99.2%	99.7%
26	CYSTIC FIBROSIS TRANSMEMBRANE CONDUCTANCE REGULATO	106,692	21.24	2,265,809	50.3%	40.1%
27	ANTIRETROVIRALS	100	22,373.28	2,237,328	100.0%	100.0%
28	SOMATOTROP AGON	1,173	1,856.96	2,178,218	87.4%	85.3%
29	GI DRUGS, MISCE	398	5,446.17	2,167,577	99.1%	97.7%
30	A-ADREN AGONIST	3,515	612.68	2,153,586	68.3%	87.5%
31	HMG-COA RED INH	4,134	502.83	2,078,683	100.0%	100.0%
32	PROTEASE INH	137,998	14.08	1,942,996	53.5%	94.3%
33	CORTICOSTEROIDS	73	26,163.60	1,909,942	97.1%	95.9%
34	OTHER MISC THER	55,427	33.63	1,863,976	64.1%	90.6%
35	EENT ANTI-INFL	807	2,305.12	1,860,229	99.9%	99.6%
36	FIBRIC ACID DER	2,680	603.88	1,618,403	100.0%	100.0%
37	ANGIOTEN 2 ANTG	19,083	82.89	1,581,816	100.0%	100.0%
38	RESP AND CNS	65,564	24.09	1,579,567	94.3%	96.3%
39	OPIATE AGONISTS	11,215	140.41	1,574,679	98.7%	99.3%
40	NONSTEROIDAL AN	93,690	16.55	1,550,485	73.5%	55.3%
	<u>All Other Indicators</u>	<u>1,233,652</u>	<u>35.27</u>	<u>43,509,612</u>	<u>81.9%</u>	<u>79.1%</u>
	Grand Total	2,796,049	\$87.98	\$246,002,111	89.1%	81.4%

Drug Indicators by Highest Cost
Analysis of Formulary Distribution

Rank	Indicator	Formulary			Non-Formulary		
		Scripts	Ingredient Cost	Cost Per Script	Scripts	Ingredient Cost	Cost Per Script
1	ANTIRHEUMATIC	6,795	\$29,282,131	\$4,309.36	553	\$1,489,477	\$2,693.45
2	INSULINS	27,012	23,006,811	851.73	7,453	4,731,860	634.89
3	IMMUNOMOD AGNTS	2,145	12,174,463	5,675.74	0	0	N/A
4	ANTINEOPLASTIC	8,693	10,541,238	1,212.61	3,132	1,126,680	359.73
5	DDP-4 INHIBITOR	18,234	10,238,538	561.51	15	3,738	249.23
6	INCRETIN MIMETI	11,302	8,781,091	776.95	4	4,216	1,054.07
7	ANTIDIABETIC	11,028	6,072,860	550.68	988	418,930	424.02
8	ANTIDEPRESSANTS	171,525	4,505,002	26.26	67,207	735,614	10.95
9	ANTICOAGULANTS	16,663	4,628,542	277.77	98	28,230	288.06
10	ANTI-INFLAMMATO	21,209	3,255,930	153.52	2,591	1,131,830	436.83
11	PPI	68,319	3,867,024	56.60	3,404	438,725	128.89
12	CONTRACEPTIVES	138,155	4,133,034	29.92	725	81,959	113.05
13	MISC ANTICONVUL	69,272	3,717,349	53.66	14,796	441,104	29.81
14	B-ADREN AGON	69,022	3,806,447	55.15	1,755	223,297	127.23
15	ANTIPSYCHOTICS	34,920	3,675,128	105.24	1,062	293,614	276.47
16	CHOL ABSO INHIB	14,647	3,751,511	256.13	1,761	110,292	62.63
17	NERVOUS SYS AGT	7,823	3,569,193	456.24	0	0	N/A
18	DIABETES MELLIT	4,210	3,329,796	790.93	21	8,200	390.49
19	AMPHETAMINES	12,140	2,163,757	178.23	7,348	1,123,252	152.87
20	ESTROGEN	23,552	3,232,051	137.23	86	32,770	381.05

Drug Indicators by Highest Cost
Analysis of Formulary Distribution (continued)

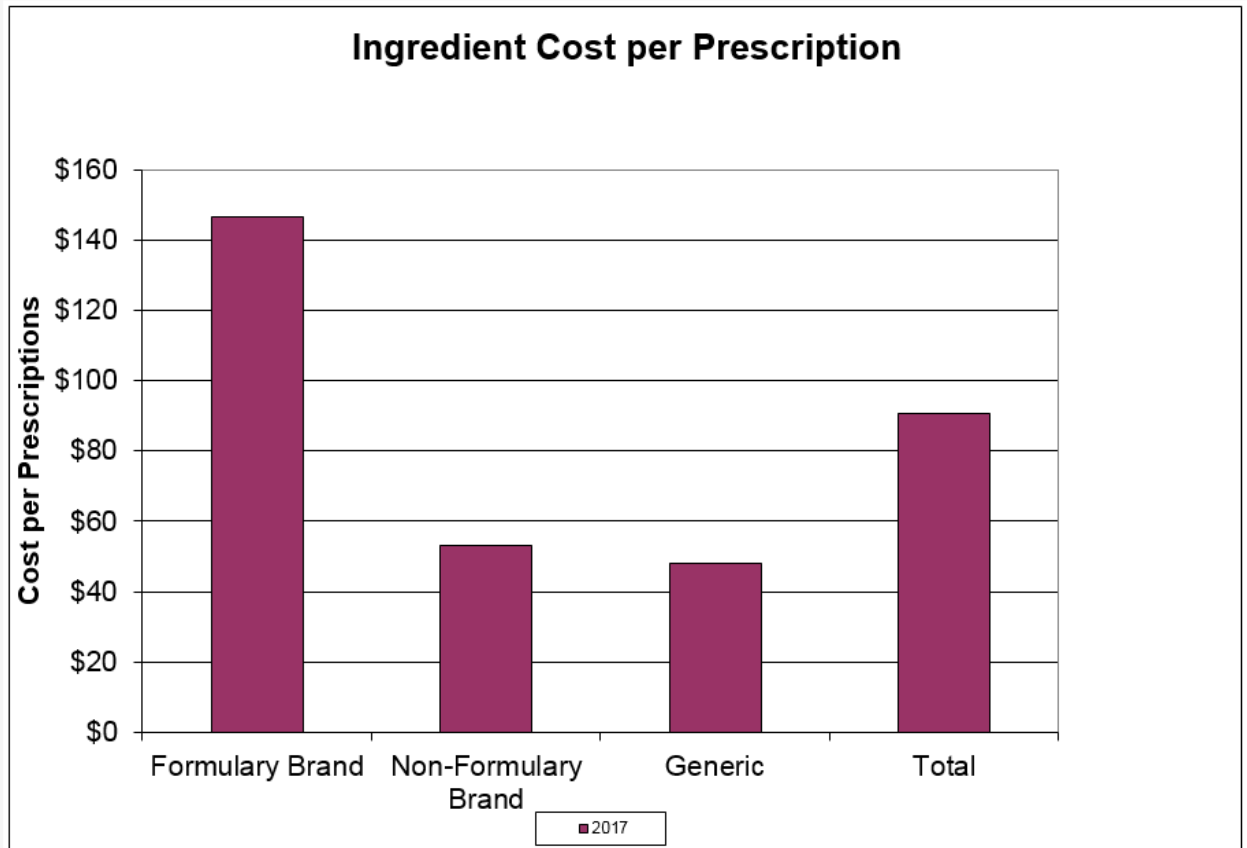
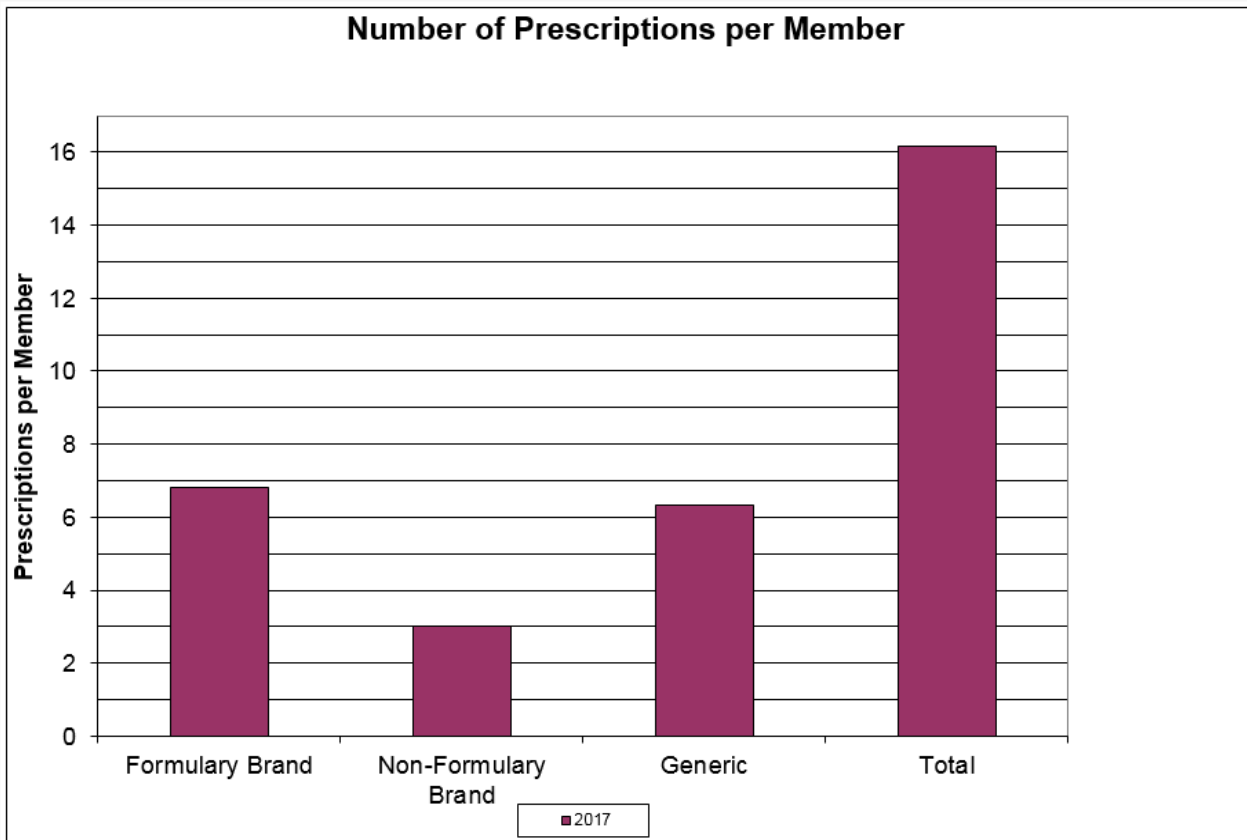
Rank	Indicator	Formulary			Non-Formulary		
		Scripts	Ingredient Cost	Cost Per Script	Scripts	Ingredient Cost	Cost Per Script
21	ANTIMUSCARINICS	8,218	1,732,996	210.88	16,202	1,152,847	71.15
22	SKIN AND MUCOUS	11,891	2,427,114	204.11	8,175	449,109	54.94
23	BIGUANIDES	7,203	2,126,332	295.20	816	625,263	766.25
24	THYROID AGENTS	60,849	2,719,493	44.69	427	3,746	8.77
25	BETA BLOCKERS	96,069	2,515,496	26.18	333	21,124	63.43
26	CYSTIC FIBROSIS TRANSMEMBRANE CONDUCTANCE REGULATO	42,733	1,139,537	26.67	63,959	1,126,272	17.61
27	ANTIRETROVIRALS	100	2,237,328	22,373.28	0	0	N/A
28	SOMATOTROP AGON	1,000	1,904,828	1,904.83	173	273,390	1,580.29
29	GI DRUGS, MISCE	389	2,146,994	5,519.26	9	20,584	2,287.10
30	A-ADREN AGONIST	3,076	1,470,741	478.13	439	682,845	1,555.46
31	HMG-COA RED INH	4,132	2,077,871	502.87	2	812	406.11
32	PROTEASE INH	130,148	1,040,072	7.99	7,850	902,924	115.02
33	CORTICOSTEROIDS	70	1,853,834	26,483.35	3	56,108	18,702.72
34	OTHER MISC THER	50,210	1,194,932	23.80	5,217	669,045	128.24
35	EENT ANTI-INFL	804	1,859,294	2,312.55	3	935	311.79
36	FIBRIC ACID DER	2,680	1,618,403	603.88	0	0	N/A
37	ANGIOTEN 2 ANTG	19,079	1,581,612	82.90	4	204	50.99
38	RESP AND CNS	63,122	1,488,803	23.59	2,442	90,764	37.17
39	OPIATE AGONISTS	11,135	1,554,573	139.61	80	20,106	251.33
40	NONSTEROIDAL AN	51,772	1,139,850	22.02	41,918	410,635	9.80
	<u>All Other Indicators</u>	<u>975,418</u>	<u>35,646,415</u>	<u>36.54</u>	<u>258,234</u>	<u>7,863,197</u>	<u>30.45</u>
	Grand Total	2,276,764	\$219,208,411	\$96.28	519,285	\$26,793,700	\$51.60

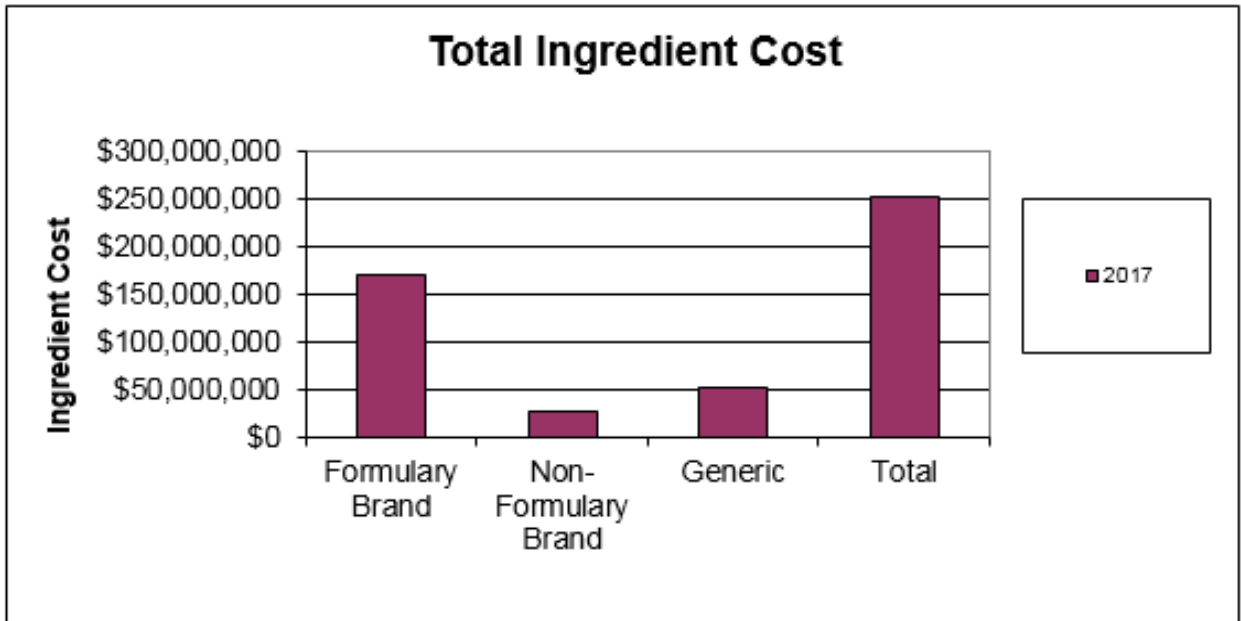
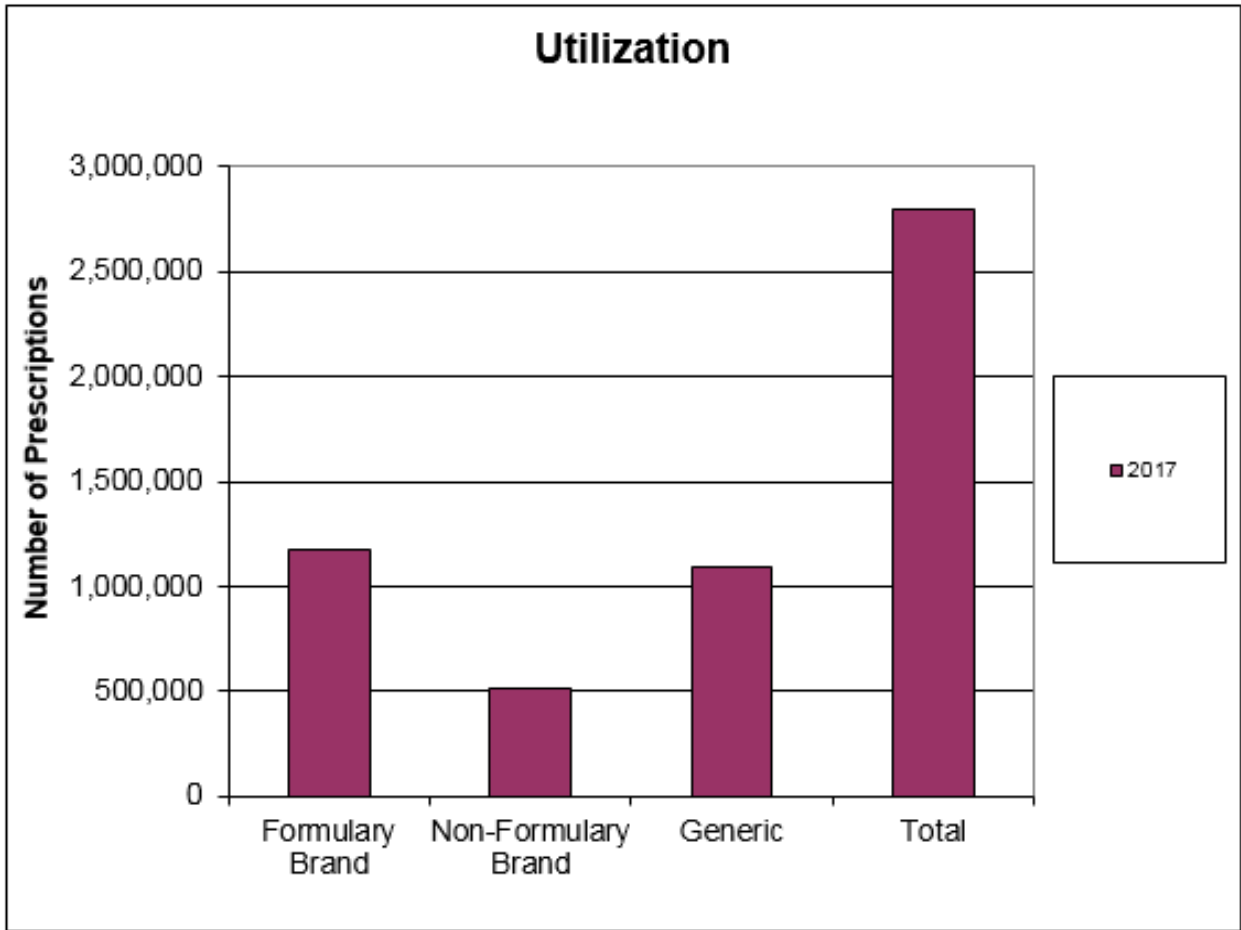
Drug Indicators by Highest Script Increase

Rank	Indicator	Formulary Cost Per Script	Non-Formulary Cost Per Script	Differential
32	PROTEASE INH	7.99	115.02	1339%
34	OTHER MISC THER	23.80	128.24	439%
12	CONTRACEPTIVES	29.92	113.05	278%
30	A-ADREN AGONIST	478.13	1,555.46	225%
10	ANTI-INFLAMMATO	153.52	436.83	185%
20	ESTROGEN	137.23	381.05	178%
15	ANTIPSYCHOTICS	105.24	276.47	163%
23	BIGUANIDES	295.20	766.25	160%
25	BETA BLOCKERS	26.18	63.43	142%
14	B-ADREN AGON	55.15	127.23	131%
11	PPI	56.60	128.89	128%
39	OPIATE AGONISTS	139.61	251.33	80%
38	RESP AND CNS	23.59	37.17	58%
6	INCRETIN MIMETI	776.95	1,054.07	36%
9	ANTICOAGULANTS	277.77	288.06	4%
35	EENT ANTI-INFL	2,312.55	311.79	0%
19	AMPHETAMINES	178.23	152.87	-14%
28	SOMATOTROP AGON	1,904.83	1,580.29	-17%
31	HMG-COA RED INH	502.87	406.11	-19%
7	ANTIDIABETIC	550.68	424.02	-23%

Drug Indicators by Highest Script Increase (continued)

Rank	Indicator	Formulary Cost Per Script	Non-Formulary Cost Per Script	Increase/ Decrease
2	INSULINS	851.73	634.89	-25%
33	CORTICOSTEROIDS CYSTIC FIBROSIS TRANSMEMBRANE	26,483.35	18,702.72	-29%
26	CONDUCTANCE REGULATO	26.67	17.61	-34%
1	ANTIRHEUMATIC	\$4,309.36	\$2,693.45	-37%
37	ANGIOTEN 2 ANTG	82.90	50.99	-38%
13	MISC ANTICONVUL	53.66	29.81	-44%
18	DIABETES MELLIT	790.93	390.49	-51%
40	NONSTEROIDAL AN	22.02	9.80	-56%
5	DDP-4 INHIBITOR	561.51	249.23	-56%
8	ANTIDEPRESSANTS	26.26	10.95	-58%
29	GI DRUGS, MISCE	5,519.26	2,287.10	-59%
21	ANTIMUSCARINICS	210.88	71.15	-66%
4	ANTINEOPLASTIC	1,212.61	359.73	-70%
22	SKIN AND MUCOUS	204.11	54.94	-73%
16	CHOL ABSO INHIB	256.13	62.63	-76%
24	THYROID AGENTS	44.69	8.77	-80%
3	IMMUNOMOD AGNTS	5,675.74	0.00	-100%
17	NERVOUS SYS AGT	456.24	0.00	-100%
27	ANTIRETROVIRALS	22,373.28	0.00	-100%
36	FIBRIC ACID DER	603.88	0.00	-100%
	<u>All Other Indicators</u>	<u>36.54</u>	<u>30.45</u>	<u>-17%</u>
	Grand Total	\$70.35	\$337.42	380%





1 - ANTIRHEUMATIC

In FY 2017, the Antirheumatic category was first in cost to PEIA with expenditure of \$30,771,608, which accounted for 12.5% of total expenditures. Formulary expenditures were \$29,282,131 or 95.2% of Antirheumatic expenditures.

Drug	Current Formulary Status	Current Brand/ Generic	Number of Prescriptions	Ingredient Cost Per Prescription	Total Ingredient Cost
			2017	2017	2017
HUMIRA	Y	SSB	3,548	\$4,823.39	\$17,113,381
ENBREL	Y	SSB	1,826	4,441.13	8,109,509
OTEZLA	N	SSB	541	2,741.93	1,483,387
XELJANZ	Y	SSB	301	3,553.79	1,069,690
CIMZIA	Y	GEN	295	3,412.88	1,006,800
<u>Subtotals</u>					
Generic	Y	GEN	357	\$3,411.38	1,217,864
Formulary Brand	Y	Brand	6,438	4,359.16	28,064,268
<u>Non-Formulary Brand</u>	<u>N</u>	<u>Brand</u>	<u>553</u>	<u>2,693.45</u>	<u>1,489,477</u>
Total			7,348	\$4,187.75	\$30,771,608

2 - INSULINS

In FY 2017, the Insulins category was second in cost to PEIA with expenditure of \$27,738, which accounted for 11.3% of total expenditures overall. Formulary expenditures were \$23,006,811 or 82.9% of Insulins expenditures.

Drug	Current Formulary Status	Current Brand/ Generic	Number of Prescriptions	Ingredient Cost Per Prescription	Total Ingredient Cost
			2017	2017	2017
NOVOLOG FLEXPEN	Y	SSB	7,430	\$905.69	\$6,729,305
LEVEMIR					
FLEXTOUCH	Y	SSB	6,496	777.64	5,051,543
TRESIBA FLEXTOUCH	Y	SSB	4,603	837.53	3,855,161
NOVOLOG	Y	SSB	3,810	999.13	3,806,687
LANTUS SOLOSTAR	N	SSB	3,483	611.60	2,130,191
<u>Subtotals</u>					
Generic	Y	GEN	864	\$416.74	\$360,060
Formulary Brand	Y	Brand	26,148	866.10	22,646,750
<u>Non-Formulary Brand</u>	<u>N</u>	<u>Brand</u>	<u>7,453</u>	<u>634.89</u>	<u>4,731,860</u>
Total			34,465	\$804.84	\$27,738,671

3 – IMMUNOMOD AGENTS

In FY 2017, the Immunomod Agents indicator category was third in cost to PEIA with expenditure of \$12,174,463, which accounted for 4.9% of total expenditures. Formulary expenditures were \$12,174,463 or 100.0% of Immunomod Agents' expenditures.

Drug	Current Formulary Status	Current Brand/ Generic	Number of Prescriptions	Ingredient Cost Per Prescription	Total Ingredient Cost
			2017	2017	2017
COPAXONE	Y	SSB	880	\$5,439.65	\$4,786,888
TECFIDERA	Y	SSB	352	6,410.20	2,256,391
GILENYA	Y	GEN	283	6,275.41	1,775,942
AVONEX	Y	SSB	237	5,221.92	1,237,595
AUBAGIO	Y	SSB	186	5,451.02	1,013,889
<u>Subtotals</u>					
Generic	Y	GEN	327	\$6,193.44	\$2,025,254
Formulary Brand	Y	Brand	1,818	5,582.62	10,149,209
<u>Non-Formulary Brand</u>	<u>N</u>	<u>Brand</u>	<u>0</u>	<u>NA</u>	<u>0</u>
Total			2,145	\$5,675.74	\$12,174,463

4 - ANTINEOPLASTIC

In FY 2017, the Antineoplastic indicator category was fourth in cost to PEIA with expenditure of \$11,667,917, which accounted for 4.7% of total expenditures overall. Formulary expenditures were \$10,541,238 or 90.3% of Antineoplastic expenditures.

Drug	Current Formulary Status	Current Brand/ Generic	Number of Prescriptions	Ingredient Cost Per Prescription	Total Ingredient Cost
			2017	2017	2017
REVLIMID	Y	SSB	161	\$10,431.94	\$1,679,542
ZYTIGA	Y	SSB	55	17,852.97	981,913
GLEEVEC	Y	SSB	103	9,053.34	932,494
IBRANCE	Y	SSB	88	9,868.91	868,464
XTANDI	Y	SSB	65	9,890.31	642,870
<u>Subtotals</u>					
Generic	Y	GEN	838	\$3,621.69	\$3,034,977
Formulary Brand	Y	Brand	7,855	955.60	7,506,261
<u>Non-Formulary Brand</u>	<u>N</u>	<u>Brand</u>	<u>3,132</u>	<u>359.73</u>	<u>1,126,680</u>
Total			11,825	\$986.72	\$11,667,917

5 – DDP-4 INHIBITOR

In FY 2017, the DDP-4 Inhibitor indicator category was fifth in cost to PEIA with expenditure of \$10,242,277, which accounted for 4.2% of total expenditures. Formulary expenditures were \$10,238,538 or 99.9% of DDP-4 Inhibitor expenditures.

Drug	Current Formulary Status	Current Brand/ Generic	Number of Prescriptions	Ingredient Cost Per Prescription	Total Ingredient Cost
			2017	2017	2017
JANUVIA	Y	SSB	9,744	\$564.77	\$5,503,166
TRADJENTA	Y	SSB	3,879	545.11	2,114,463
JANUMET	Y	SSB	2,983	624.83	1,863,857
JANUMET XR	Y	GEN	1,093	465.74	509,049
JENTADUETO	Y	GEN	416	459.92	191,327
<u>Subtotals</u>					
Generic	Y	GEN	1,587	\$467.05	\$741,213
Formulary Brand	Y	Brand	16,647	570.51	9,497,325
<u>Non-Formulary Brand</u>	<u>N</u>	<u>Brand</u>	<u>15</u>	<u>249.23</u>	<u>3,738</u>
Total			18,249	\$561.25	\$10,242,277