



# STAR Report

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# PharMerica

- **Overview of Business:**

- Focus on pharmacy management service for:
  - Skilled nursing facilities (SNF)
  - Long term care facilities (LTC)
  - Assisted living facilities (ALF)
  - Hospitals and other institutional care settings

- **“Old” Reporting System**

- Multiple reports with no consistency
- Data was **not** recent
- **Unable** to provide **trend detection**
- **Not able** to do meaningful analyses
- Clients **unable** to get an **“exact picture”**

# STAR Report

- **Strategic Trend and Analysis (STAR) Report**
  - **Quarter over Quarter** Snapshot Report
  - **Trend Detection**
    - Maximizing drug utilization
    - Maximize therapeutic interchange
    - Increase **overall efficiency**
    - **Reduce costs**
    - Optimizing resident care
    - **Favorable patient outcomes**

# STAR Report

- **Purpose:**

- Clients are able to get a better understanding of their utilization and help paint an appropriate “picture” for future utilization patterns
- Helps identify where their money is being spent quarter over quarter
- Report includes a **30,000 foot overview to patient specific detail**

# STAR Report

- **Data**

- Identified pertinent tables in the PharMerica data warehouse that captured data .
- Calculations were utilized to calculate various variables including:
  - Generic Dispensing Rate (GDR)
  - Average Cost per Prescription
  - PharMerica specific calculation for Per Patient Per Day (PPPD) and Unit Average Cost (UAC)

# STAR Report

- **Team**

- Required input from CEO, Sr. Vice President, Director, Data warehouse manager and other pharmacists

- **Tools Utilized**

- SAS Enterprise Guide
- Microsoft Excel
- PharMerica Data Warehouse

# STAR Report

## ○ **Testing Stage**

- Ran data for sample client
- Results approved by CEO, Sr. VP and team
- Presented report to client for their feedback
  - Explained the report and the value add
- Client was extremely satisfied
- Loved the functionality of the report

The background of the slide is a light green color with a pattern of overlapping, semi-transparent hexagons. A dark grey rectangular area is positioned at the top right. The main title is centered in the white area below the grey box.

# Sample Corporation Strategic Trend Analysis Report

XX Quarter

Month – Month, 20XX

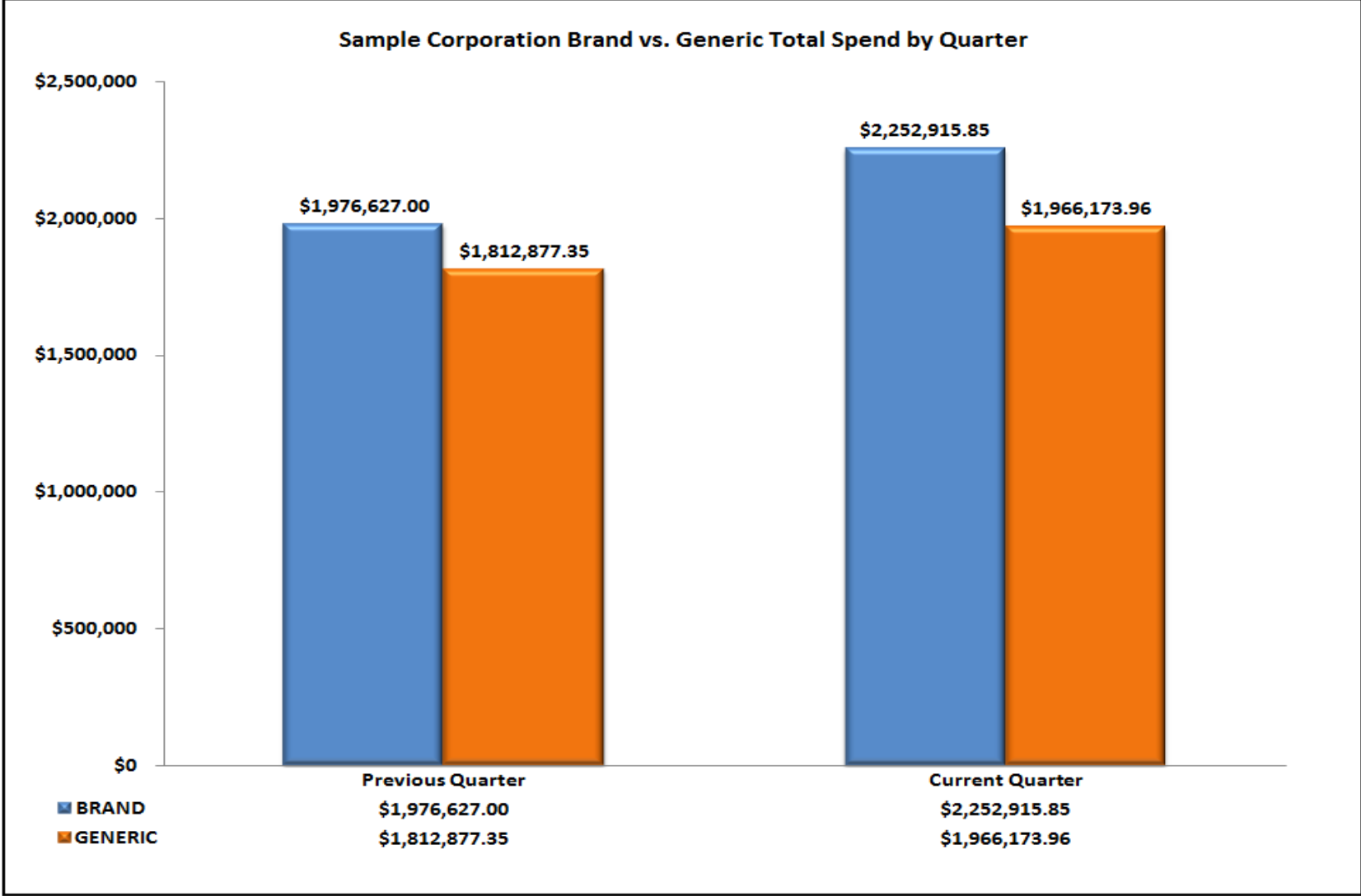
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# Med A/Managed Key Metric Summary

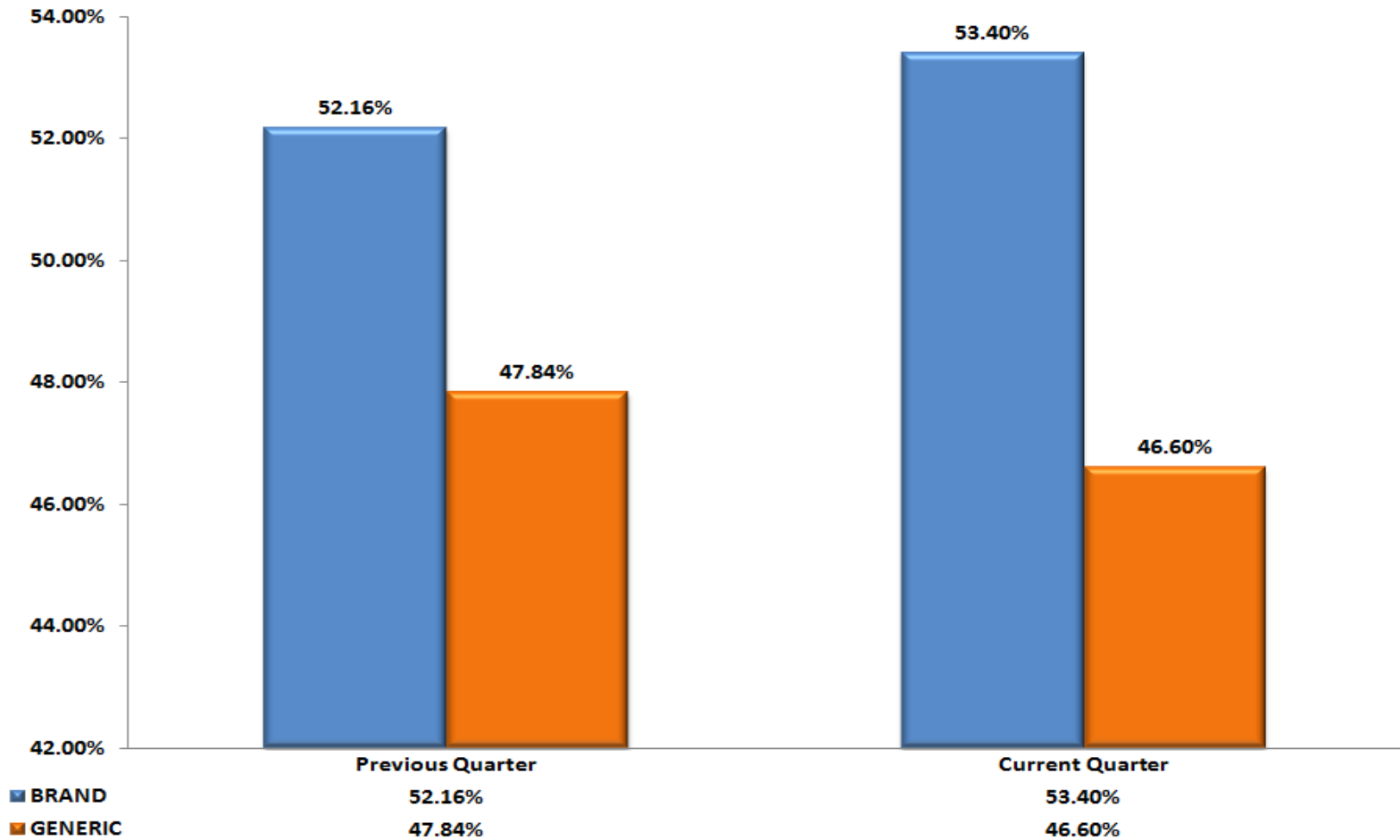
Key Metric Summary	Previous Quarter	Current Quarter	Change from Previous Quarter	PMC Benchmark	Variance from PMC Benchmark
# of Facilities Served	52	51	-1.92%		
# of Residents Served	3,790	3,928	3.64%		
# of Prescriptions Filled	74,378	78,748	5.88%		
Average # of Prescriptions per Resident per Month	6.54	6.68	2.16%	6.73	-0.70%
Total Med A/Managed Drug Spend(\$)	\$3,807,802.49	\$4,244,990.58	11.48%		
Average Cost per Prescription (\$)	\$51.20	\$53.91	5.29%	\$43.19	24.81%
Per Patient Per Day (PPPD) Cost (\$)	\$48.05	\$49.24	2.48%	\$32.44	51.80%
Generic Dispensing Rate (GDR) %	77.09%	77.66%	0.74%	77.61%	0.06%

# Brand/Generic Total Spend Analysis (\$)



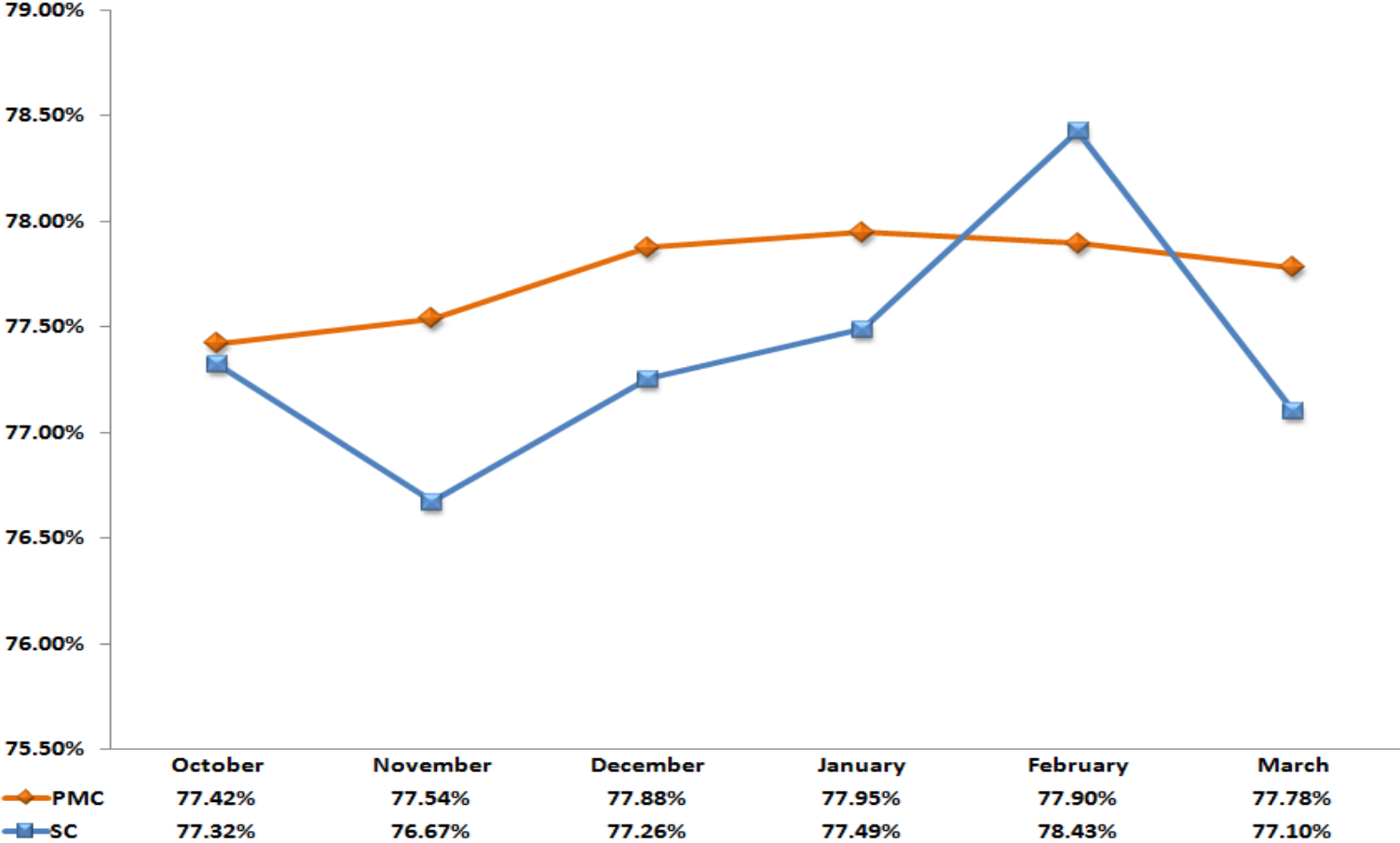
# Brand/Generic Total Spend Analysis (%)

Sample Corporation Brand vs. Generic % Spend of Total by Quarter



# Generic Dispense Rate Trend Analysis

Sample Corporation Generic Dispense Rate vs. PMC Benchmark

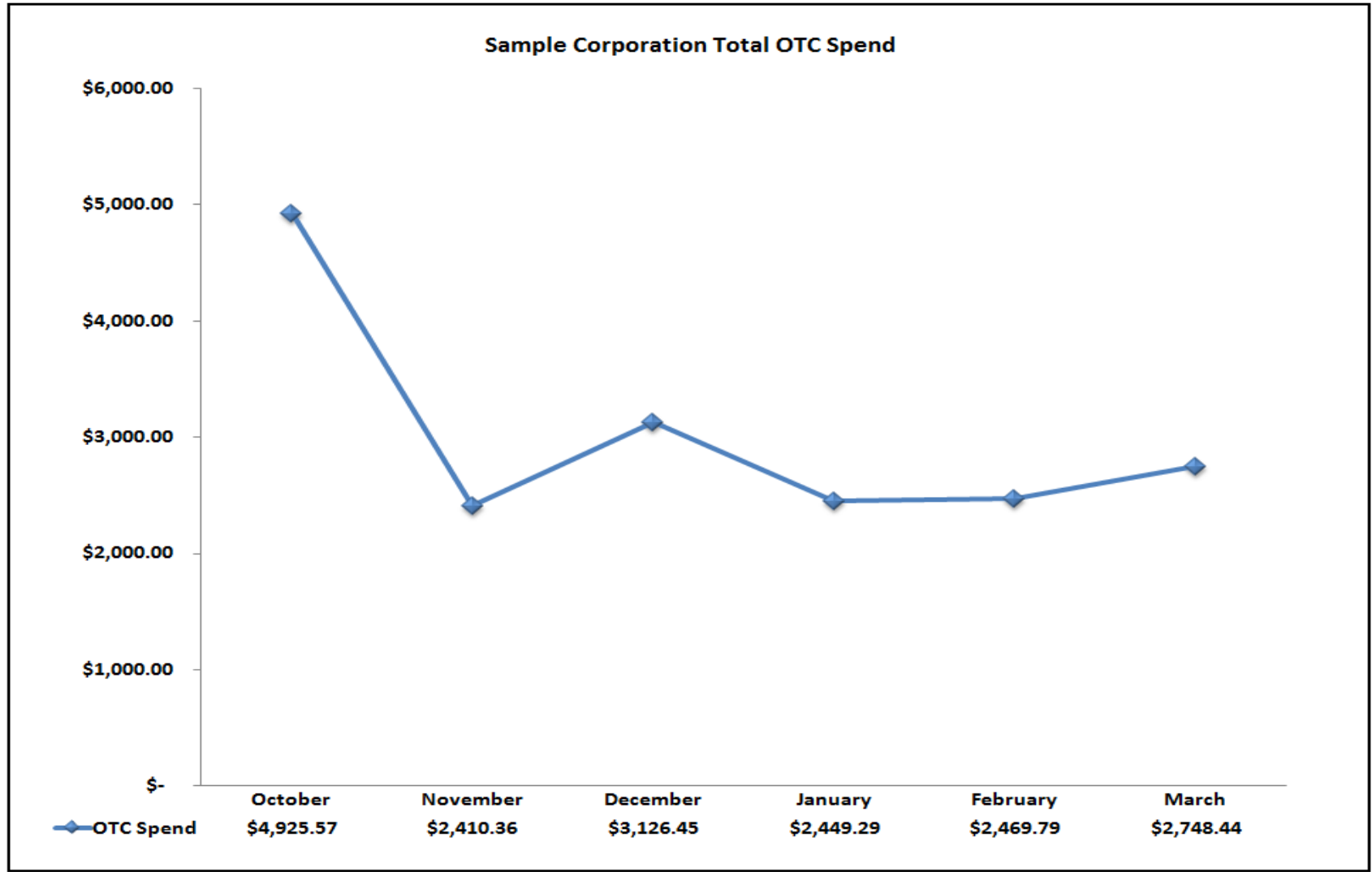


# Average Brand/Generic Cost per Script

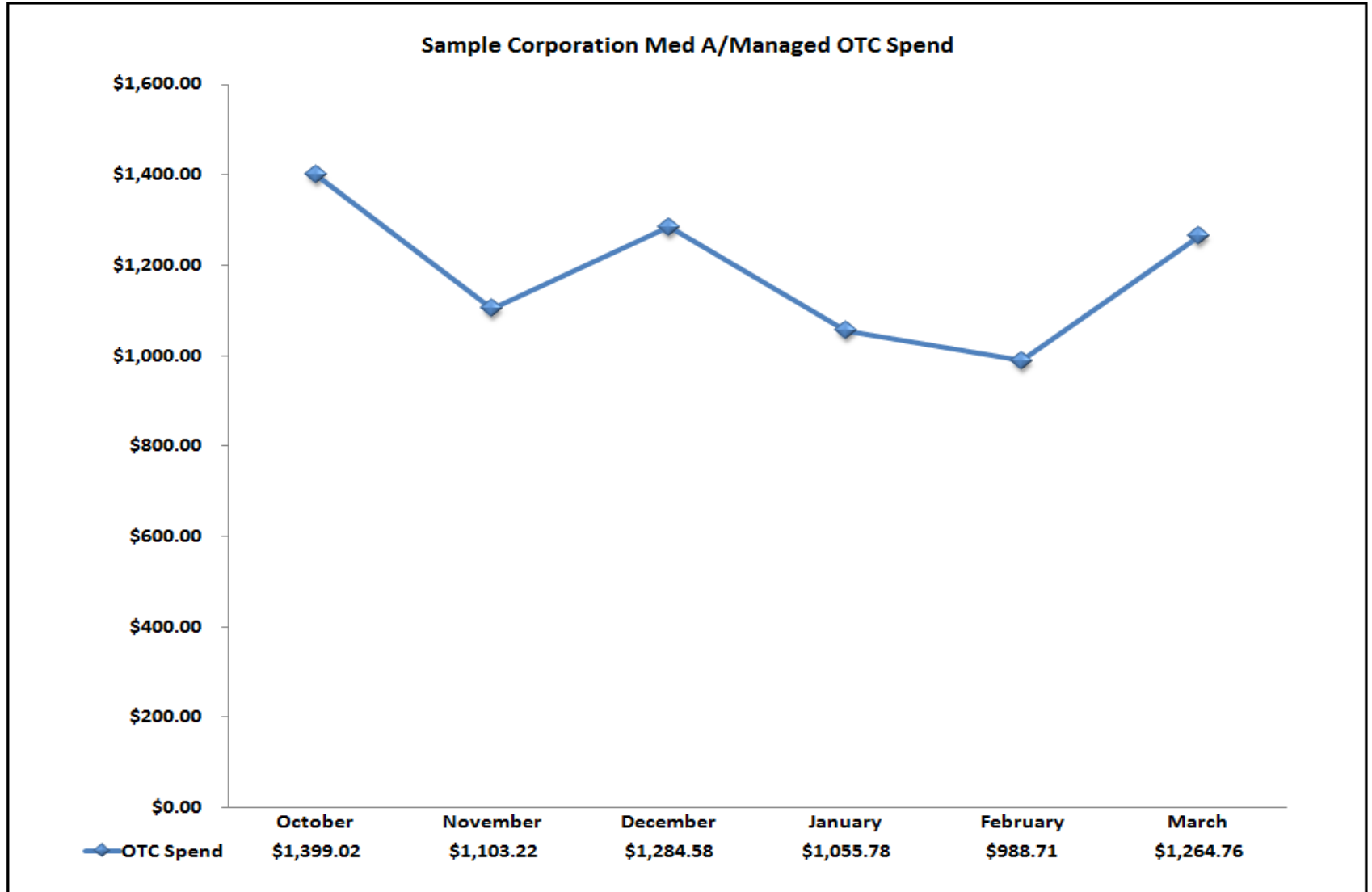
Sample Corporation Brand/Generic Cost per Script



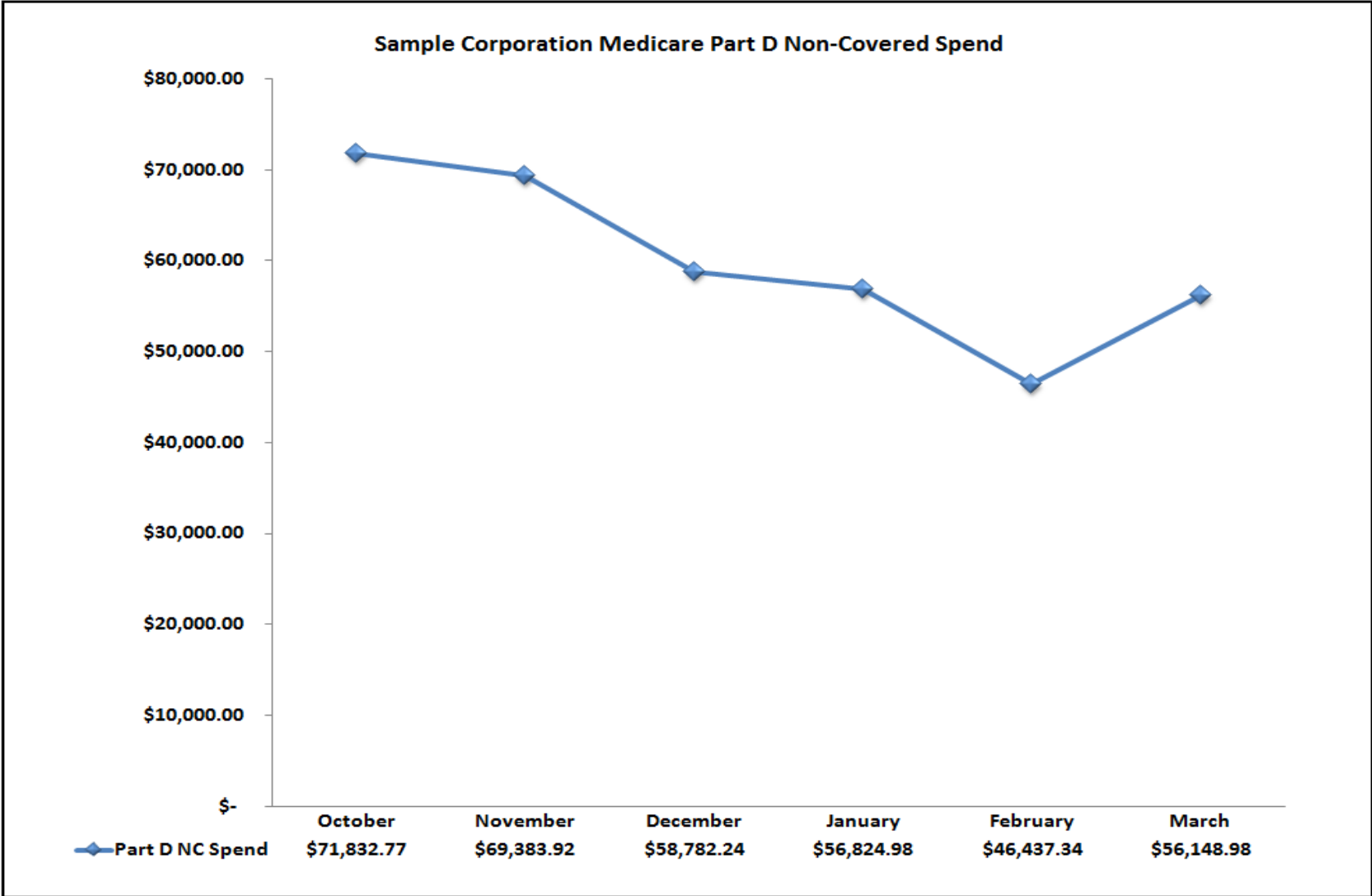
# Total OTC Spend Analysis



# Med A/Managed OTC Spend Analysis



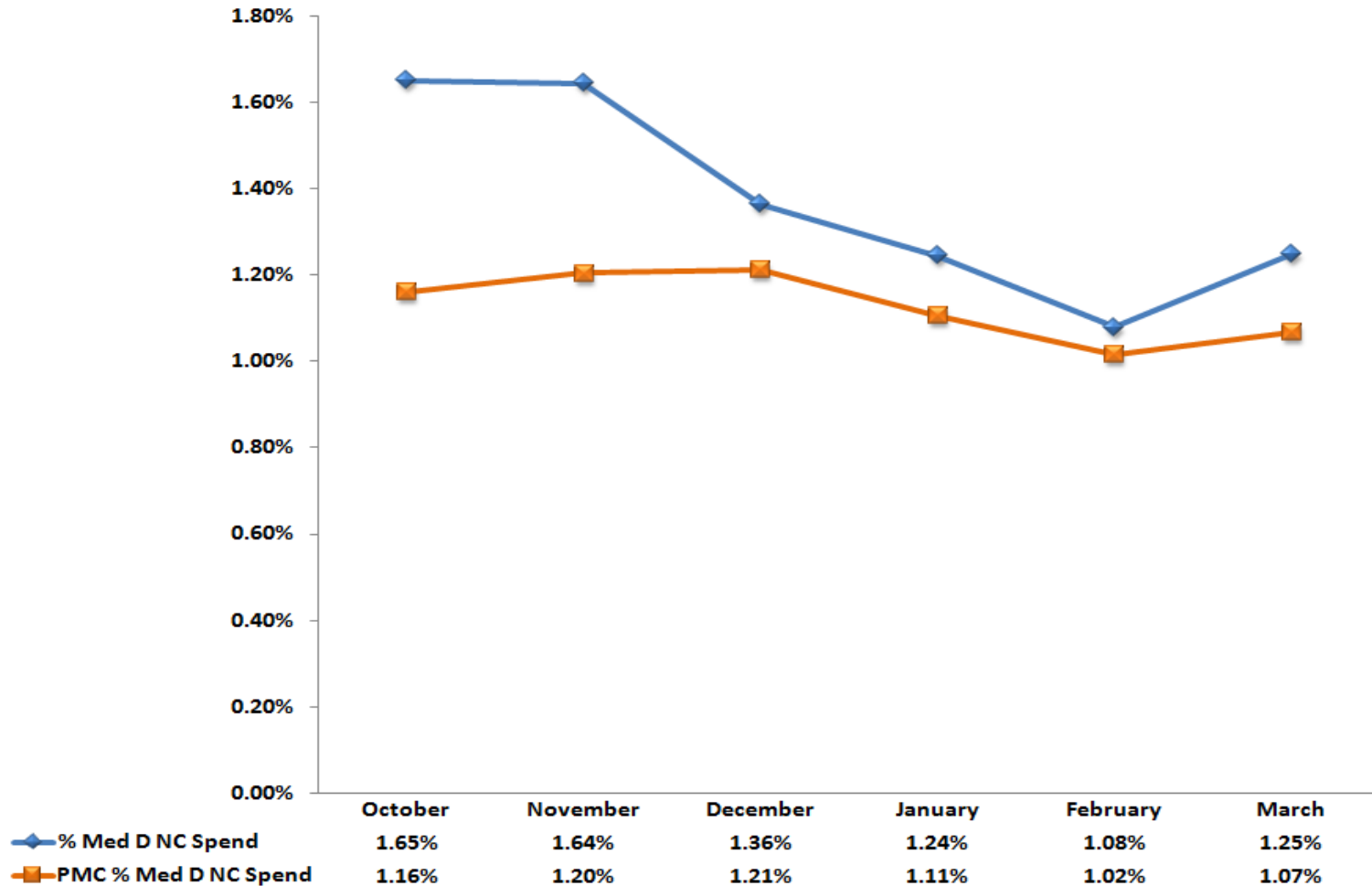
# Medicare Part D Non-covered Spend Analysis





# Medicare Part D Non-Covered Analysis

Sample Corporation Part D Non-Covered Spend as Percentage of Total Medicare D Spend



# Corporate Therapeutic Class Summary (Total Spend)

Therapeutic Class	Current Quarter Total Spend	Previous Quarter Total Spend	Variance from Previous Quarter	Current Quarter % of Total Spend	Current Quarter Cumulative % of Total Spend	Current Quarter Unit Average Cost (UAC)
ANTIPSYCHOTIC AGENTS	\$ 351,652.10	\$ 293,091.55	\$ 58,560.55	8.28%	8.28%	\$ 17.47
ANTICOAGULANTS	\$ 304,607.42	\$ 237,226.20	\$ 67,381.22	7.18%	15.46%	\$ 24.04
INSULINS	\$ 270,379.21	\$ 238,820.51	\$ 31,558.70	6.37%	21.83%	\$ 11.88
ANTIDEPRESSANTS	\$ 201,428.59	\$ 186,163.25	\$ 15,265.34	4.75%	26.57%	\$ 3.47
ANTICONVULSANTS, MISCELLANEOUS	\$ 195,792.19	\$ 173,859.16	\$ 21,933.03	4.61%	31.19%	\$ 2.35
HMG-COA REDUCTASE INHIBITORS	\$ 174,459.01	\$ 149,453.47	\$ 25,005.54	4.11%	35.30%	\$ 5.07
OPIATE AGONISTS	\$ 165,565.17	\$ 155,917.49	\$ 9,647.68	3.90%	39.20%	\$ 2.09
PARASYMPATHOMIMETIC (CHOLINERGIC AGENTS)	\$ 124,709.89	\$ 105,413.36	\$ 19,296.53	2.94%	42.13%	\$ 7.26
BETA-ADRENERGIC AGONISTS	\$ 113,099.88	\$ 91,732.65	\$ 21,367.23	2.66%	44.80%	\$ 1.57
HEMATOPOIETIC AGENTS	\$ 106,517.07	\$ 103,396.74	\$ 3,120.33	2.51%	47.31%	\$ 576.92
<b>TOP 10 (Subtotal)</b>	<b>\$ 2,008,210.53</b>	<b>\$ 1,735,074.38</b>	<b>\$ 273,136.15</b>	<b>47.31%</b>		
<b>TOTAL (All Classes)</b>	<b>\$ 4,244,990.58</b>	<b>\$ 3,807,802.49</b>				

# Corporate Top 20 Drugs by Total Spend and UAC

Drug Name	Current Quarter Total Spend	Current Quarter % of Total Spend	Previous Quarter % of Total Spend	Current Quarter Unit Average Cost (UAC)	Contribution to Total (%)
ENOXAPARIN SODIUM	\$ 193,316.38	4.55%	4.08%	\$ 68.90	0.30%
SIMVASTATIN	\$ 111,027.82	2.62%	2.69%	\$ 3.51	0.02%
SEROQUEL	\$ 106,241.22	2.50%	2.04%	\$ 11.15	0.05%
PLAVIX	\$ 97,619.19	2.30%	2.22%	\$ 6.95	0.03%
DONEPEZIL HCL	\$ 82,542.09	1.94%	1.65%	\$ 7.28	0.03%
ZYVOX	\$ 76,914.30	1.81%	1.81%	\$ 51.21	0.22%
PROCRIT	\$ 74,227.81	1.75%	1.88%	\$ 726.36	3.16%
NOVOLOG	\$ 67,278.46	1.58%	1.64%	\$ 15.25	0.07%
LANTUS	\$ 60,913.15	1.43%	1.33%	\$ 12.06	0.05%
NAMENDA	\$ 60,489.17	1.42%	1.30%	\$ 3.08	0.01%
LEVOFLOXACIN	\$ 59,072.02	1.39%	1.31%	\$ 16.29	0.07%
LEVETIRACETAM	\$ 58,955.98	1.39%	1.40%	\$ 3.21	0.01%
RISPERIDONE	\$ 58,424.88	1.38%	1.55%	\$ 5.60	0.02%
ABILIFY	\$ 56,004.15	1.32%	1.07%	\$ 18.95	0.08%
ADVAIR DISKUS	\$ 52,964.57	1.25%	1.68%	\$ 4.12	0.02%
CARVEDILOL	\$ 52,935.81	1.25%	1.26%	\$ 1.94	0.01%
SPIRIVA	\$ 47,853.25	1.13%	1.05%	\$ 8.35	0.04%
OLANZAPINE	\$ 47,442.63	1.12%	0.72%	\$ 18.80	0.08%
AMLODIPINE BESYLATE	\$ 46,031.21	1.08%	1.13%	\$ 1.95	0.01%
GABAPENTIN	\$ 45,341.72	1.07%	0.97%	\$ 1.41	0.01%
<b>SUBTOTAL</b>	<b>\$ 1,455,595.81</b>	<b>34.29%</b>	<b>32.77%</b>	<b>\$ 986.35</b>	<b>4.30%</b>
All Other Drugs	\$ 2,789,394.77	65.71%	67.23%	\$ 21,978.05	
<b>TOTAL</b>	<b>\$ 4,244,990.58</b>	<b>100.00%</b>	<b>100.00%</b>	<b>\$ 22,964.40</b>	

# Sample Corporation Facility Overview - 1 of X

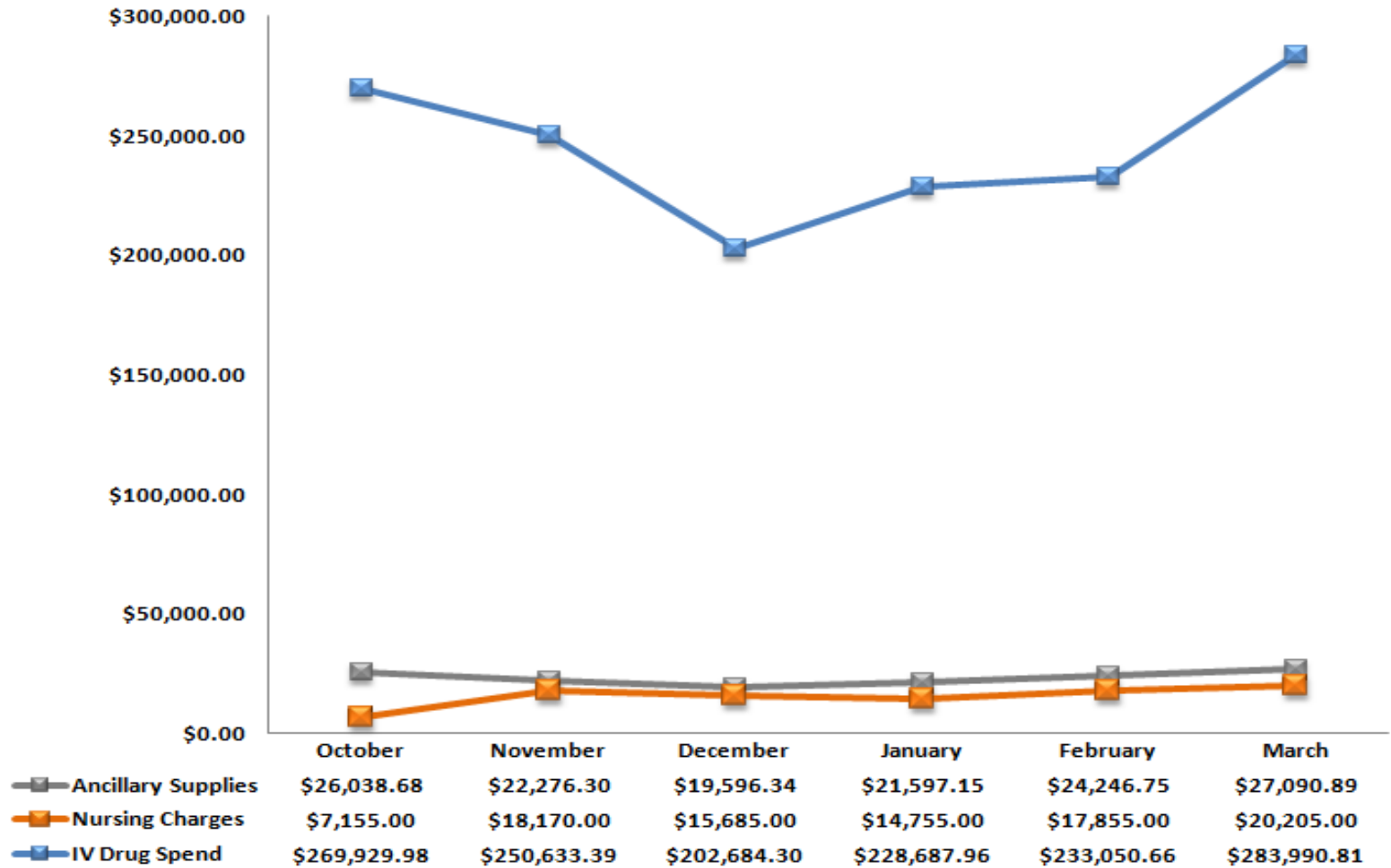
Facility	Current Quarter						Previous Quarter		
	Per Patient Per Day (PPPD) Costs				Total Spend	Avg cost/ prescription/ quarter	PPPD	Variance from Previous Quarter	
	Average	January	February	March				%	\$
Facility 1	\$ 80.83	\$ 81.63	\$ 54.27	\$ 106.61	\$ 14,169.43	\$ 49.89	\$ 73.37	10.18%	\$ 7.47
Facility 2	\$ 75.20	\$ 67.35	\$ 94.43	\$ 63.83	\$ 9,199.69	\$ 52.57	\$ 39.26	91.56%	\$ 35.94
Facility 3	\$ 72.15	\$ 52.96	\$ 89.38	\$ 74.11	\$ 21,058.83	\$ 83.24	\$ 89.18	-19.10%	\$ (17.03)
Facility 4	\$ 71.18	\$ 63.24	\$ 96.32	\$ 53.98	\$ 80,576.17	\$ 62.56	\$ 68.24	4.32%	\$ 2.95
Facility 5	\$ 68.40	\$ 73.60	\$ 63.81	\$ 67.78	\$ 121,029.15	\$ 55.65	\$ 45.44	50.52%	\$ 22.96
Facility 6	\$ 67.50	\$ 61.54	\$ 66.95	\$ 74.02	\$ 77,144.18	\$ 62.62	\$ 55.98	20.58%	\$ 11.52
Facility 7	\$ 62.93	\$ 67.68	\$ 63.69	\$ 57.43	\$ 165,637.39	\$ 55.10	\$ 59.81	5.22%	\$ 3.12
Facility 8	\$ 61.93	\$ 40.87	\$ 60.65	\$ 84.28	\$ 41,628.55	\$ 62.41	\$ 43.40	42.70%	\$ 18.53
Facility 9	\$ 61.78	\$ 61.78	\$ 74.59	\$ 48.96	\$ 51,205.63	\$ 60.96	\$ 43.76	41.16%	\$ 18.01
Facility 10	\$ 61.16	\$ 61.72	\$ 56.20	\$ 65.57	\$ 274,751.12	\$ 59.66	\$ 51.70	18.30%	\$ 9.46

# IV Key Metric Summary

IV Key Metric Summary	Previous Quarter	Current Quarter	Change from Previous Quarter	PMC Benchmark
<b>Total IV Spend (\$)</b>	\$ 832,168.98	\$ 871,479.22	4.72%	
-Rx IV Spend (\$)	\$ 723,247.67	\$ 745,729.43	3.11%	
-Ancillary Supplies IV Spend (\$)	\$ 67,911.32	\$ 72,934.79	7.40%	
-Nursing Charges IV Spend (\$)	\$ 41,010.00	\$ 52,815.00	28.79%	
<b>Total IV PPPD</b>	<b>\$ 8.84</b>	<b>\$ 8.62</b>	<b>-2.52%</b>	<b>\$ 3.56</b>
-Rx IV PPPD	\$ 7.68	\$ 7.37	-4.02%	\$ 2.93
-Ancillary Supplies IV PPPD	\$ 0.72	\$ 0.72	-0.03%	\$ 0.60
-Nursing Charges IV PPPD	\$ 0.44	\$ 0.52	%	\$ 0.02

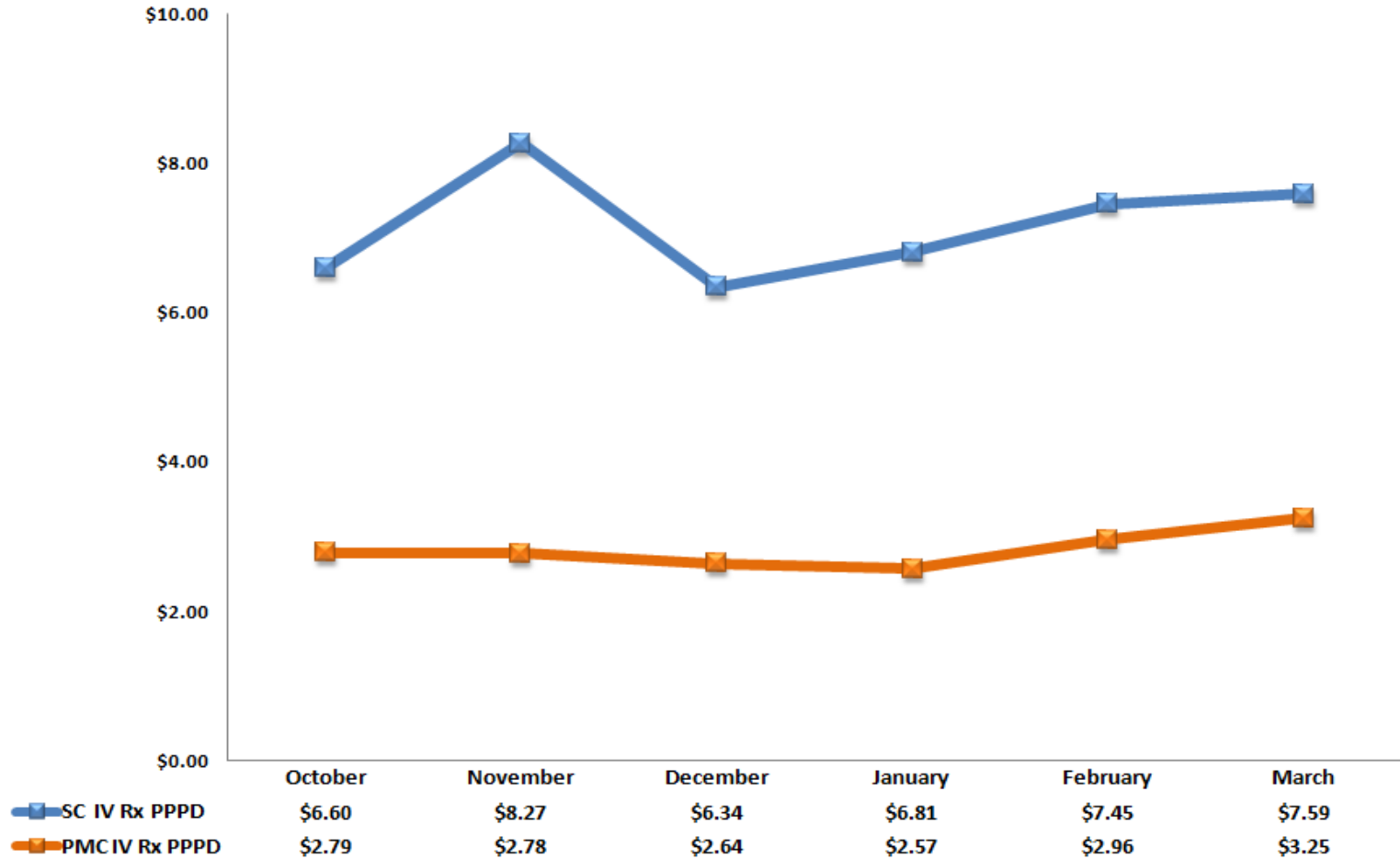
# IV Spend Analysis

Sample Corporation IV Spend Analysis



# IV PPPD Trend Analysis

Sample Corporation vs. PMC IV PPPD Analysis



# Sample Corporation High Cost Residents

Sample Corporation Unit Average Cost per Resident = \$49.08

Resident's for Inclusion:

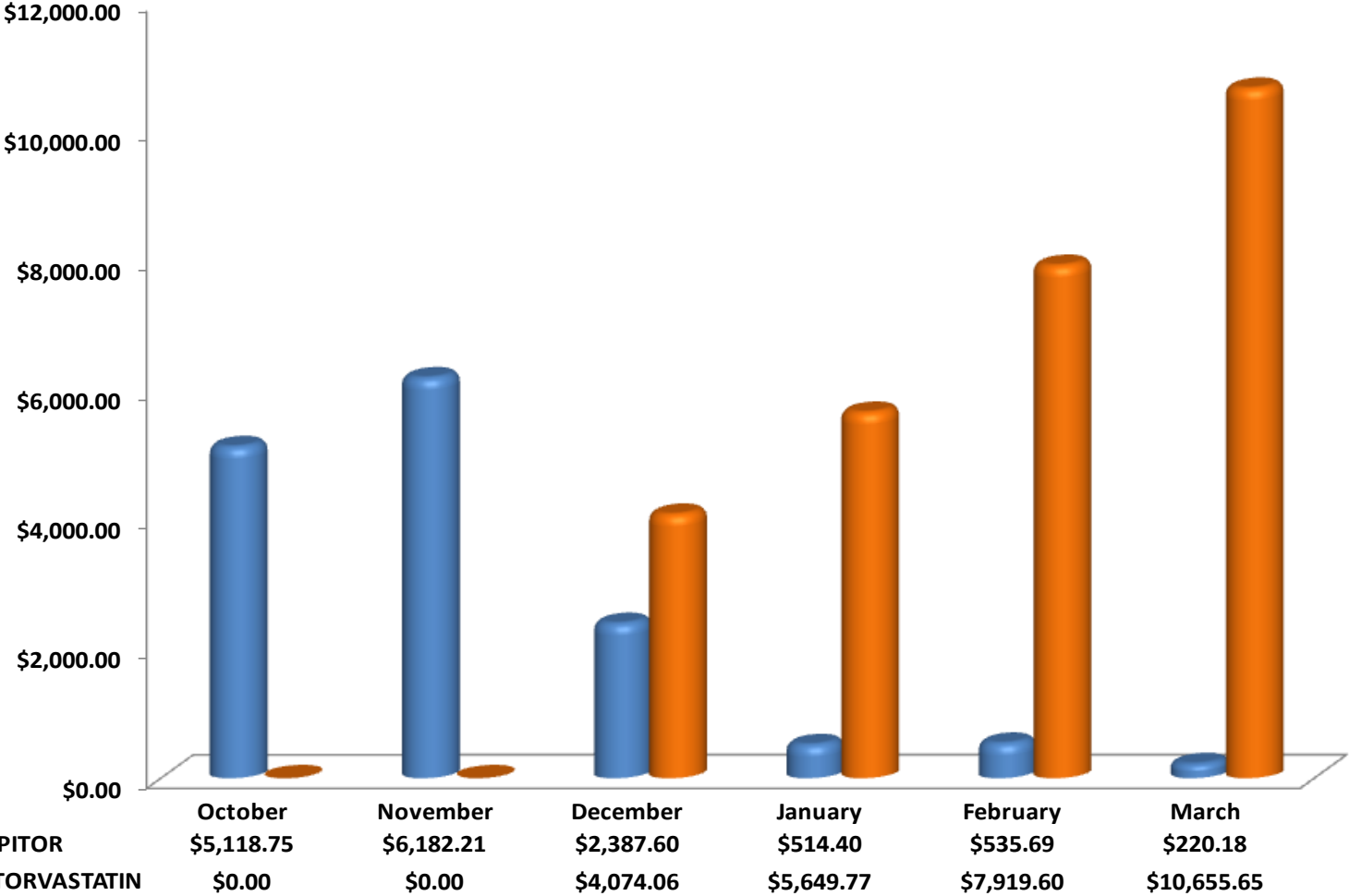
(Two Standard Deviations + ABC UAC) = \$105.40

Facility Name	Resident	Physician	Label Name	UAC	Month	Rx Count
Facility 1	Resident 1	Physician 1	ARANESP 150 MCG/0.3 ML SYRINGE	\$ 3,004.30	JANUARY	2
Facility 1	Resident 2	Physician 2	PROCRIT 20,000 UNITS/ML VIAL	\$ 355.67	JANUARY	2
Facility 1	Resident 3	Physician 3	RISPERDAL CONSTA 25 MG SYR	\$ 283.59	JANUARY	1
Facility 1	Resident 4	Physician 4	EPOGEN 20,000 UNITS/ML VIAL	\$ 275.90	JANUARY	1
Facility 1	Resident 5	Physician 5	EPOGEN 20,000 UNITS/ML VIAL	\$ 275.90	JANUARY	1
Facility 1	Resident 6	Physician 6	BONIVA 150 MG TABLET	\$ 137.71	FEBRUARY	1
Facility 1	Resident 7	Physician 7	BYETTA 10 MCG DOSE PEN INJ	\$ 127.60	JANUARY	2
Facility 1	Resident 8	Physician 8	NEUPOGEN 480 MCG/1.6 ML VIAL	\$ 265.50	FEBRUARY	2
Facility 1	Resident 9	Physician 9	NEUPOGEN 480 MCG/1.6 ML VIAL	\$ 265.50	MARCH	5
Facility 1	Resident 10	Physician 10	NEUPOGEN 300 MCG/ML VIAL	\$ 262.74	JANUARY	3
Facility 1	Resident 11	Physician 11	ENOXAPARIN 120 MG/0.8 ML SYR	\$ 105.78	JANUARY	2
Facility 1	Resident 12	Physician 12	ENOXAPARIN 120 MG/0.8 ML SYR	\$ 105.51	JANUARY	1
Facility 2	Resident 13	Physician 13	PROCRIT 20,000 UNITS/ML VIAL	\$ 349.49	MARCH	1
Facility 2	Resident 14	Physician 14	PROCRIT 20,000 UNITS/ML VIAL	\$ 349.49	FEBRUARY	3
Facility 2	Resident 15	Physician 15	FRAGMIN 5,000 UNITS SYRINGE	\$ 169.56	JANUARY	1
Facility 2	Resident 16	Physician 16	FRAGMIN 5,000 UNITS SYRINGE	\$ 167.03	JANUARY	1
Facility 2	Resident 17	Physician 17	PNEUMOVAX 23 VIAL	\$ 135.16	JANUARY	1
Facility 2	Resident 18	Physician 18	FRAGMIN 5,000 UNITS SYRINGE	\$ 171.53	MARCH	1
Facility 2	Resident 19	Physician 19	FRAGMIN 5,000 UNITS SYRINGE	\$ 167.03	FEBRUARY	1
Facility 2	Resident 20	Physician 20	FRAGMIN 5,000 UNITS SYRINGE	\$ 167.03	MARCH	1
Facility 3	Resident 21	Physician 21	PNEUMOVAX 23 VIAL	\$ 135.16	MARCH	1
Facility 3	Resident 22	Physician 22	FRAGMIN 5,000 UNITS SYRINGE	\$ 167.03	JANUARY	2
Facility 3	Resident 23	Physician 23	FRAGMIN 5,000 UNITS SYRINGE	\$ 167.03	JANUARY	3
Facility 3	Resident 24	Physician 24	PNEUMOVAX 23 VIAL	\$ 135.16	JANUARY	1
Facility 3	Resident 25	Physician 25	GLUCAGEN 1 MG HYPOKIT	\$ 134.09	MARCH	1
Facility 3	Resident 26	Physician 26	CATHFLO ACTIVASE 2 MG VIAL	\$ 109.65	JANUARY	1



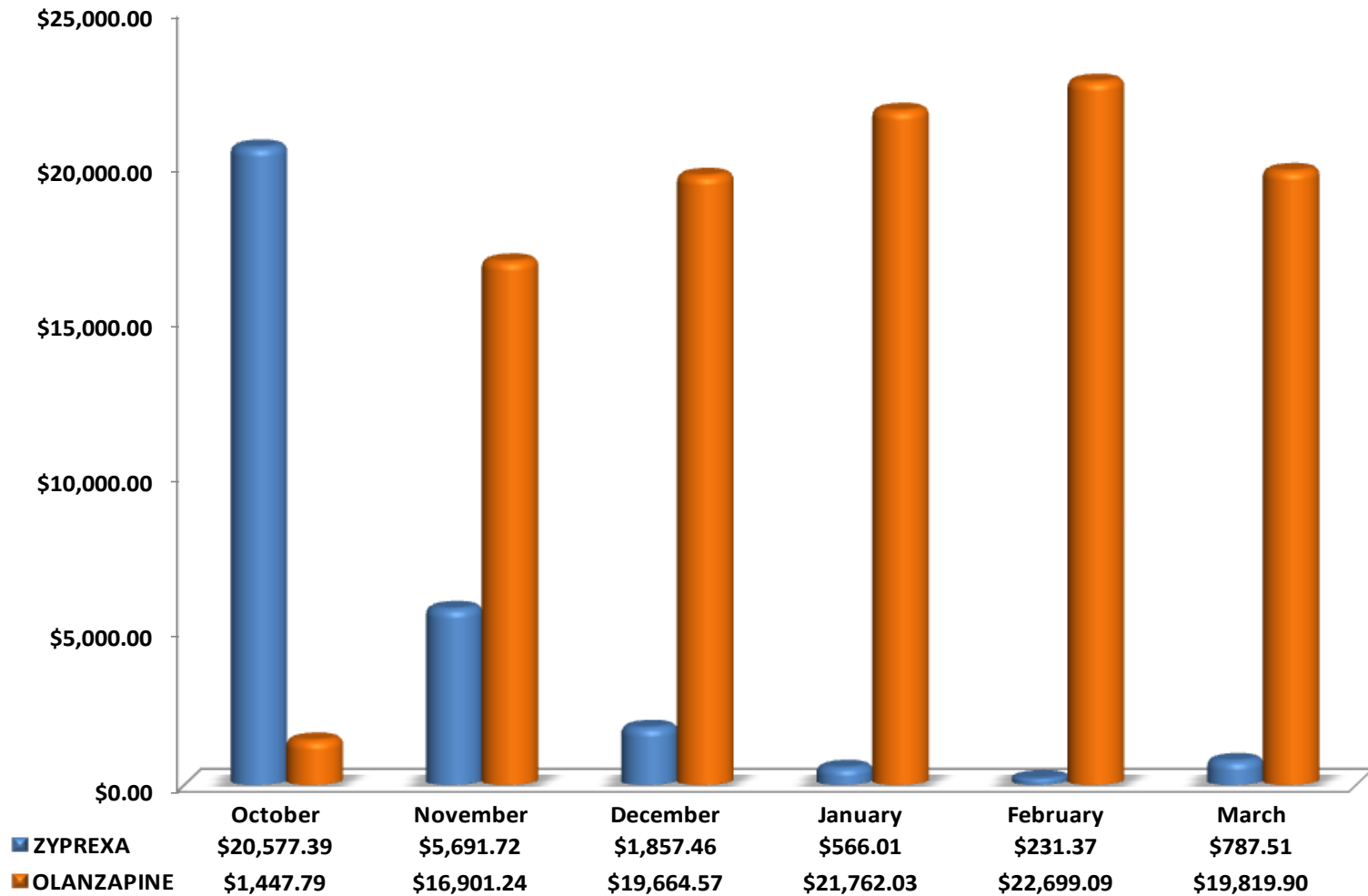
# Lipitor/atorvastatin analysis

Lipitor vs. atorvastatin Spend Analysis



# Zyprexa/olanzapine analysis

Zyprexa/ Zyprexa Zydys vs. olanzapine Spend Analysis



# Cost Containment Opportunities

- Ensure all Low Molecular Weight Heparin (LMWH) orders have stop dates, calculated from the 1st dose as given in the hospital
- Switch enoxaparin 30mg bid (non total-knee) to 40mg qd for maximum savings.
- Atypical Antipsychotic utilization is often very expensive. Although this class can be difficult to change, consider using generic products first upon all new orders and whenever change is warranted.
- For the class of statins (HMG-COA Reductase Inhibitors) continue to change all Crestor, Lipitor and atorvastatin orders to simvastatin for maximum cost savings.
- However, atorvastatin may be clinically superior to high doses of simvastatin and continue to monitor instances of myopathy or muscle pain in patients

# Cost Containment Opportunities

- Albuterol nebulizer formulation is much less expensive and can be as effective as the bronchodilator brand Xopenex.
- Change all brand name Proton Pump Inhibitors (PPI) to generic products for maximum cost savings and best coverage for any potential future Med D plan.
- Forteo is very expensive and should be reserved for those residents who cannot swallow, or are completely non-ambulatory.
- Basal insulin with Lantus and Levemir is now the prevailing standard of therapy for diabetes. Basal insulin can eliminate labor intensive and high cost sliding scale usage, short acting insulin administration and expensive glucagon rescue utilization.
- Advair Diskus, when compared to Symbicort, is clinically superior, cost effective, and requires only 1 inhalation per dose

# PPPD Cost Savings Report

Generic Name	Current Quarter Generic \$	Brand Name	Calculated Brand \$	Estimated Savings	Estimated PPPD Savings
ATORVASTATIN	\$ 24,705.01	LIPITOR	\$ 60,153.60	\$ 35,448.59	\$ 0.35
DONEPEZIL	\$ 82,258.70	ARICEPT	\$ 252,912.60	\$ 170,653.90	\$ 1.69
LATANOPROST	\$ 13,640.92	XALATAN	\$ 15,561.61	\$ 1,920.69	\$ 0.02
LEVOFLOXACIN	\$ 63,135.18	LEVAQUIN	\$ 114,246.60	\$ 51,111.42	\$ 0.51
OLANZAPINE	\$ 63,008.53	ZYPREXA	\$ 103,345.20	\$ 40,336.67	\$ 0.40
<b>Totals</b>	<b>\$246,748.34</b>		<b>\$ 546,219.61</b>	<b>\$299,471.27</b>	<b>\$ 2.96</b>

# Drugs Losing Exclusivity in 2012

2012			Generic
Quarter	Brand	Generic	in
Q1:	Boniva	Ibandronate	✓
Q1:	Geodon	Ziprasidone	✓
Q1:	Lexapro PO & Sol	Escitalopram	✓
Q1:	Seroquel IR	Quetiapine	✓
Q1:	Provigil	Modafinil	✓
Q2:	Avalide	Irbesartan	✓
Q2:	Avapro	Irbesartan	✓
Q2:	Stelevo	Carbidopa/Levod/Entacap	✓
Q2:	Vancocin	Vancomycin Caps	✓
Q2:	Lescol	Fluvastin	
Q2:	Lescol XL	Fluvastin ER	
Q2:	Plavix	Clopidogrel	
Q2:	Viagra	Sildenafil	
Q2:	Viramune	Nevirapine	
Q2:	Ziagen	Abacavir	
Q3:	Actos	Pioglitazone	
Q3:	Clarinx	Desloratadine	
Q3:	Clarinx D	Desloratadine/Pseudo	
Q3:	Detrol	Tolterodine	
Q3:	Diovan	Valsartan	
Q3:	Diovan HCT	Valsartan Hydroc	
Q3:	Emend	Aprepitant	
Q3:	Exforge	Valsartan & Amlodipine	
Q3:	Revatio	Sildenafil Citrate	
Q3:	Singulair (ALL)	Montelukast	
Q3:	TriCor	Fenofibrate	
Q3:	Tygacil	Tigecycline	
Q3:	Xopenex UDV	Levalbuterol	
Q4:	ActoPlus Met	Pioglitazone + Metformin	
Q4:	Atacand	Candesartan Cilexeti	
Q4:	Atacand HCT	Candesartan Cilexeti/Hydro	
Q4:	Maxalt	Rizatriptan	

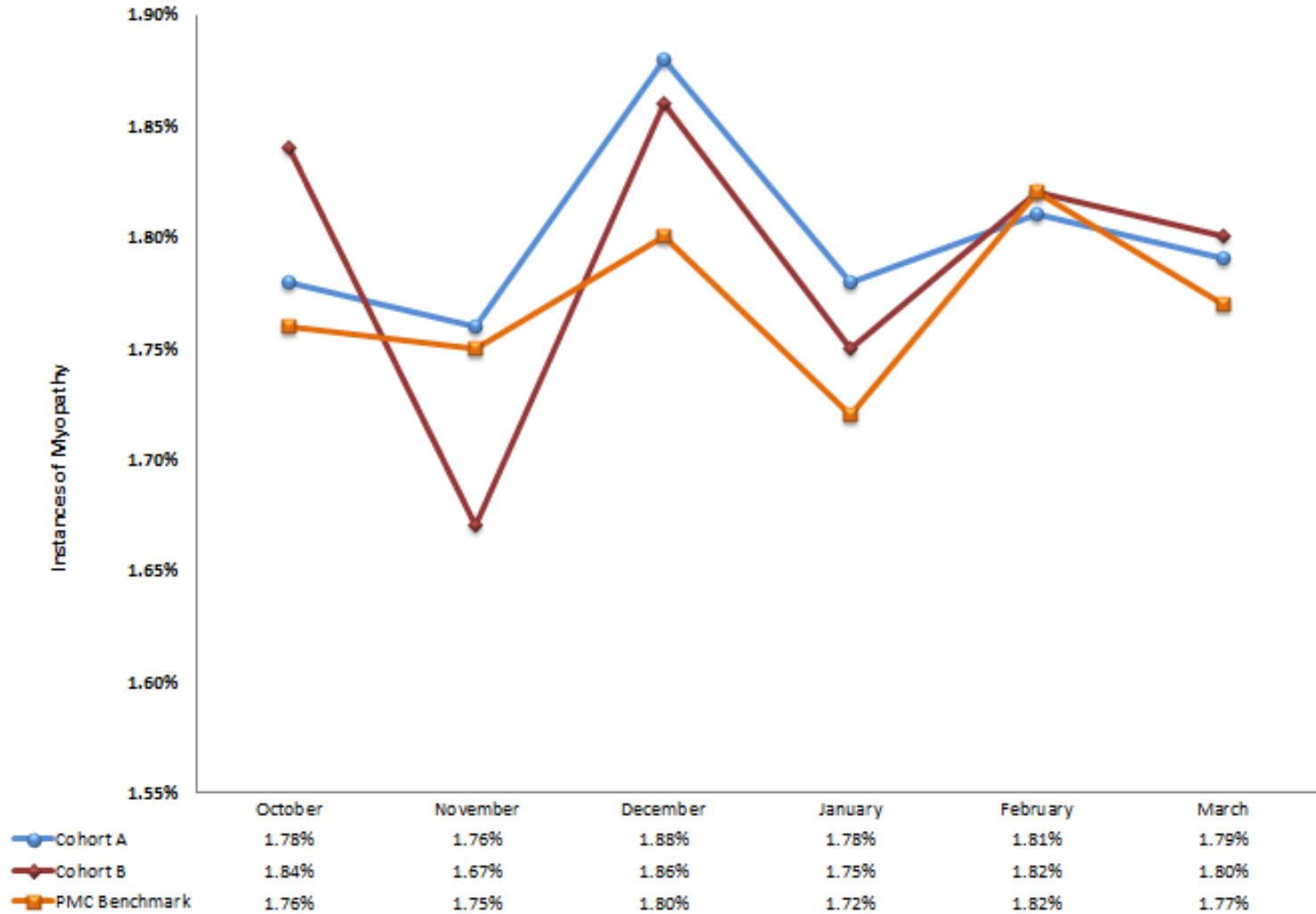
rev. Apr 2012



# Extra Ad-Hoc Reports

# Statin Myopathy Rates

Sample Corporation Statin Induced Myopathy





# CII Utilization Report

- Details of Report:
  - Prevalence of pain medication common in nursing homes
    - Either cancer patients, post-op patients, etc.
  - Monitor utilization patterns and ensure daily Tylenol (APAP) dose was within range (4 grams/day)
    - In cases where APAP utilization exceeded 4 grams/day, the instance was flagged
  - Report also examined cases of Opioid Induced Constipation (OIC)
    - Measures were put in place to ensure patient's don't suffer from OIC.



Questions?