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Is Mail Service Pharmacy Cost Beneficial to Plan Sponsors?

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Abstract

The objective of this study was to describe and compare prescription drug costs charged to a plan sponsor for the top 50 maintenance medications provided through retail and mail service procurement channels. Data were obtained for covered beneficiaries of a health plan sponsored by an employer with just over 3,000 covered employees The analytics team at the PBM administering the plan sponsor's prescription drug benefit provided de-identified claims information for the top 50 maintenance prescription drugs delivered through either mail service or retail procurement methods for this employer over a one year period (7/1/2008 to 6/30/2009). Based on these data, (1) dollar amount difference (mail service minus retail), and (2) percentage difference between mail and retail costs (as a percentage of the lower net cost per day) were computed. The findings revealed that 76 percent of the medication products studied were associated with a lower net cost per day to the plan sponsor through mail service procurement and 24 percent were associated with lower net cost through retail procurement.

Introduction and Study Objective

To control rising healthcare costs, employers often contract with managed care organizations (MCOs) to manage their health benefit costs. Most MCOs, in turn, contract with pharmacy benefit managers (PBMs) to administer prescription drug coverage. The main goal of most PBMs is to control drug costs while administering pharmacy benefits.[1] PBMs are responsible for processing drug claims, administrative services, formulary maintenance, pharmacy network management, mail service, and other associated activities.[4]

Prescription drug procurement through mail service is offered through most major PBMs. A PBM may own its own mail service pharmacy or may have the ability to contract with one or more others.

In its infancy, mail service pharmacy did not develop so much as a tool to lower healthcare costs. Rather, mail service was a concept built in the mid-20th century to function in delivering medications to remote, inaccessible, and rural areas. In 1946, the first organized mail-order pharmacy service was established by the Veterans Administration with the goal of conveniently delivering drugs at no cost to veterans. The program proved to be a success as it expanded to serve millions of veterans who were unable to conveniently obtain their drugs through other means.[2]

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In 1947, The National Retired Teachers' Association (NRTA) was established by Dr. Ethel Percy Andrus to assist retired teachers with their health services, including prescription drugs. Dr. Andrus then expanded her organization by forming The American Association of Retired Persons (AARP). These two organizations joined together and NRTA became one of many divisions of AARP. One of its many services was providing prescription drugs to persons over 65, through mail service, which proved to be an extremely beneficial service to many in the retired community.[3]

As the success of such non-profit programs was established, others saw profit opportunities through the creation of similar programs. It was a novel idea that proved convenient and cost-effective for the consumer and economically advantageous to insurance companies.[4] By the 1980s, mail service procurement for prescription drugs had become developed commercially. Its success can be attributed to the national need to control exponentially growing healthcare costs as well as the increasing numbers of the elderly who required maintenance medications for chronic conditions.[5]

Mail service procurement for prescription drugs relies on the concept of reliability and affordability. Patients who have chronic conditions such as diabetes, hyperlipidemia, hypertension, and depression often need prescription refills year-round which require frequent visits to their pharmacies and co-payments at each visit.[1] In order to provide convenience and to help relieve some financial burden, managed care organizations introduced mail service procurement for prescription drugs to consumers.[6] Through mail service programs, patients on maintenance medications typically are able to receive up to a 90-day supply of their medications for just one co-pay amount.

While savings to consumers have been documented for mail service procurement of prescription drugs[1-9], it is still unclear if managed care organizations (MCOs) pass on savings achieved through different procurement methods back to the plan sponsors (e.g. employer who contracts with the MCO for health care benefits). That is, do MCOs charge plan sponsors different costs for mail service and retail procurement of prescription drugs? To help address this question, the **objective of this study** was to describe and compare prescription drug costs charged to a plan sponsor for the top 50 maintenance medications provided through retail and mail service procurement channels.

Methods

Data were obtained for covered beneficiaries of a health plan sponsored by an employer with just over 3,000 covered employees representing janitors, bus drivers, professors, physicians, secretaries, administrators, and others. The analytics team at the PBM administering this employer's prescription drug benefit provided de-identified claims information for the top 50 maintenance prescription drugs delivered through either mail service or retail procurement methods for this employer over a one year period (7/1/2008 to 6/30/2009).

For each prescription drug product, information supplied included the total number of prescriptions dispensed, the total number of retail and mail service days dispensed, and net costs (the amount charged to the plan sponsor per day). Based on these data, (1) dollar amount difference (mail service minus retail), and (2) percentage difference between mail and retail costs (as a percentage of the lower net cost per day) were computed.

Results

Out of the top 50 maintenance drugs, 38 (76%) were associated with a lower net cost per day to the plan sponsor through mail service procurement and 12 (24%) were associated with lower net cost through retail procurement (Table 1). For the 17 brand name drugs in the analysis, 16 (94%) of them were associated with lower cost to the plan sponsor through mail service procurement (Table 2). In the generic drug category, 22 out of 33 (67%) of these prescription drug products were associated with lower cost to the plan sponsor through mail service (Table 3).

For the 38 products with lower mail service procurement cost, the average difference in cost was 25 cents per day. For the 12 products with lower retail service procurement costs (see Table 4), the average difference in cost was 17 cents per day.

Limitations

This study examined one very specific aspect of cost differences between retail and mail service prescription drug procurement: net cost per day that was charged to the plan sponsor (employer). Other cost differences such as (1) waste from unused prescriptions, (2) duplication of therapy, (3) patient counseling and education associated with medication dispensing, (4) availability of last minute service, (5) avoidance of other health care costs, (6) discontinuity of care from using multiple procurement sources, or (7) other costs such as amounts paid to pharmacies, were not included for investigation. In addition, the use of a PBM claim data file precluded the inclusion of prescription medications for which patients paid cash. With the advent of $4 prescription drug plans in the retail sector, this omission of data could have affected the findings. Moreover, the authors recognize that this study may not be generalizable to other patient populations. Finally, only the top 50 maintenance medications were studied and a complete assessment for all medications used by the study population was not made. Nevertheless, the findings from this study provide descriptive evidence that there are differences in prescription drug costs charged to a plan sponsor for the top 50 maintenance medications provided through retail and mail service procurement channels for an employee health plan.

Discussion and Conclusions

The objective of this study was to describe and compare prescription drug costs charged to a plan sponsor for the top 50 maintenance medications provided through retail and mail service procurement channels. The findings revealed that 76 percent of the medication products studied were associated with a lower net cost per day to the plan sponsor through mail service procurement and 24 percent were associated with lower net cost through retail procurement. It appears the MCO studied did charge the health plan sponsor different costs for mail service and retail procurement of prescription drugs. Findings from this study can be used as a baseline for comparison as other studies in this area are conducted.

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Table 1
Summary of Differences in Net Cost per Day between Retail and Mail Procurement for Top 50 Maintenance Medications (Brand and Generic)

Rank	Drug Name	Retail (n)	Retail Net Cost/Day	Mail (n)	Mail Net Cost/Day	$ Diff. (Mail minus Retail)	Diff. as % of Lower Net Cost/Day
1	Lipitor 10mg tab	3,252	$2.25	235	$1.95	-$0.30	15.4%
2	Hydrochlorothiazide 25mg tab	2,922	$0.05	184	$0.03	-$0.02	66.7%
3	Nexium 40mg cap	2,738	$5.07	163	$4.10	-$0.96	23.4%
4	Lipitor 20mg tab	2,081	$3.27	173	$2.82	-$0.45	15.9%
5	Simvastatin 20mg tab	1,804	$1.77	109	$1.86	$0.09	5.1%
6	Plavix 75mg tab	1,783	$3.82	93	$3.40	-$0.41	12.1%
7	Amlodipine Besylate 5mg tab	1,740	$0.72	89	$0.63	-$0.09	14.3%
8	Metformin HCL 500mg tab	1,673	$0.58	78	$0.60	$0.02	3.4%
9	Amlodipine Besylate 10mg tab	1,511	$0.94	82	$0.87	-$0.07	8.0%
10	Fluticasone Prop 40mcg spray	1,503	$1.08	56	$1.04	-$0.04	3.9%
11	Flomax 0.4 mg cap	1,486	$3.13	92	$2.61	-$0.52	19.9%
12	Fexofenadine HCL 180mg tab	1,441	$1.00	118	$0.92	-$0.08	8.7%
13	Alendronate Sodium 70mg tab	1,409	$1.14	88	$1.07	-$0.07	6.5%
14	Omeprazole 20mg cap	1,366	$1.97	95	$2.03	$0.06	3.0%
15	Singulair 10mg tab	1,335	$2.96	63	$2.57	-$0.39	15.7%
16	Lexapro 10mg tab	1,224	$2.47	33	$2.04	-$0.43	21.0%
17	Simvastatin 40mg tab	1,214	$1.79	80	$1.89	$0.10	5.6%
18	Lisinopril 10mg tab	1,207	$0.39	76	$0.41	$0.03	7.7%
19	Lipitor 40mg tab	1,160	$3.29	110	$2.88	-$0.41	14.2%
20	Nasonex 50mcg nasal spray	1,133	$2.44	40	$1.97	-$0.48	24.3%
21	Pantoprazole 40mg tab	1,117	$2.03	51	$2.01	-$0.02	1.0%
22	Atenolol 50mg tab	1,103	$0.31	54	$0.38	$0.08	25.8%
23	Atenolol 25mg tab	1,082	$0.31	58	$0.30	-$0.01	3.3%
24	Zetia 10mg tab	1,068	$2.56	100	$2.27	-$0.28	12.3%
25	Sertraline HCL 50mg tab	1,051	$1.21	19	$1.41	$0.20	16.5%
26	ProAir HFA 90mcg inhaler	1,036	$1.29	17	$0.81	-$0.47	58.0%
27	Furosemide 40mg tab	992	$0.10	30	$0.09	-$0.02	22.2%
28	Xalatan 0.005% eye drops	991	$2.16	31	$2.60	$0.45	20.8%
29	Hydrochlorothiazide 125mg tab	983	$0.17	43	$0.14	-$0.03	21.4%
30	Lisinopril 20mg tab	971	$0.50	52	$0.47	-$0.03	6.3%
31	Prevacid 30mg cap	936	$5.03	69	$4.77	-$0.25	5.2%
32	Metoprolol Tar 50mg tab	917	$0.38	49	$0.36	-$0.01	2.7%
33	Metformin HCL 1000mg tab	878	$0.96	52	$1.03	$0.07	7.3%
34	Advair 250-50 Diskus	859	$5.39	28	$4.71	-$0.68	14.4%
35	Actonel 35mg tab	832	$2.53	71	$2.22	-$0.31	14.0%
36	Metoprolol Succ ER 50mg tab	809	$0.46	61	$0.37	-$0.09	24.3%
37	Folic Acid 1mg tab	807	$0.06	57	$0.18	$0.12	200%
38	Ibuprofen 800mg tab	799	$0.34	4	$0.33	-$0.01	3.0%
39	Metoprolol Tar 25mg tab	793	$0.19	39	$0.20	$0.01	5.3%
40	Clonazepam 0.5mg tab	784	$0.63	7	$0.87	$0.24	38.1%
41	Lisinopril 40mg tab	761	$0.66	40	$0.59	-$0.07	11.8%

42	Ibuprofen 600mg tab	747	$0.31	3	$0.00	-$0.31	n/a
43	Warfarin Sod 5mg tab	728	$0.34	46	$0.27	-$0.06	22.2%
44	Lisinopril 5mg tab	716	$0.37	43	$0.36	-$0.02	5.5%
45	Furosemide 20mg tab	710	$0.09	13	$0.04	-$0.04	100.0%
46	Metoprolol Succ ER 50mg tab	703	$0.45	32	$0.32	-$0.12	37.5%
47	Finesteride 5mg tab	702	$1.28	63	$1.15	-$0.13	11.3%
48	Yaz 28 tab	700	$1.61	11	$1.43	-$0.17	11.8%
49	Crestor 10mg tab	687	$2.86	59	$2.52	-$0.33	13.1%
50	Sertraline HCL 100mg tab	665	$1.31	22	$1.13	-$0.18	15.9%

Rank = prescription drug products listed in rank order based upon retail procurement.
Retail (n) = number of retail prescriptions dispensed during study period (7/1/2008 to 6/30/2009).
Retail Net Cost/Day = amount charged to the plan sponsor per day.
Mail (n) = number of mail service prescriptions dispensed during study period (7/1/2008 to 6/30/2009).
Mail Net Cost/Day = amount charged to the plan sponsor per day.
$ Diff. (Mail minus Retail) = Mail Net Cost/Day minus Retail Net Cost/Day
Diff. as % of Lower Net Cost/Day = $ Diff. divided by lower cost/day amount (Mail or Retail)

Table 2
Summary of Differences in Net Cost per Day between Retail and Mail Procurement for Top 50 Maintenance Medications (Brand only)

Rank	Drug Name	Retail (n)	Retail Net Cost/Day	Mail (n)	Mail Net Cost/Day	$ Diff. (Mail minus Retail)	Diff. as % of Lower Net Cost/Day
1	Lipitor 10mg tab	3,252	$2.25	235	$1.95	-$0.30	15.4%
2	Nexium 40mg cap	2,738	$5.07	163	$4.10	-$0.96	23.4%
3	Lipitor 20mg tab	2,081	$3.27	173	$2.82	-$0.45	15.9%
4	Plavix 75mg tab	1,783	$3.82	93	$3.40	-$0.41	12.1%
5	Flomax 0.4 mg cap	1,486	$3.13	92	$2.61	-$0.52	19.9%
6	Singulair 10mg tab	1,335	$2.96	63	$2.57	-$0.39	15.7%
7	Lexapro 10mg tab	1,224	$2.47	33	$2.04	-$0.43	21.0%
8	Lipitor 40mg tab	1,160	$3.29	110	$2.88	-$0.41	14.2%
9	Nasonex 50mcg nasal spray	1,133	$2.44	40	$1.97	-$0.48	24.3%
10	Zetia 10mg tab	1,068	$2.56	100	$2.27	-$0.28	12.3%
11	ProAir HFA 90mcg inhaler	1,036	$1.29	17	$0.81	-$0.47	58.0%
12	Xalatan 0.005% eye drops	991	$2.16	31	$2.60	$0.45	20.8%
13	Prevacid 30mg cap	936	$5.03	69	$4.77	-$0.25	5.2%
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$ Diff. (Mail minus Retail) = Mail Net Cost/Day minus Retail Net Cost/Day
Diff. as % of Lower Net Cost/Day = $ Diff. divided by lower cost/day amount (Mail or Retail)

Table 3
Summary of Differences in Net Cost per Day between Retail and Mail Procurement for Top 50 Maintenance Medications (Generic only)

Rank	Drug Name	Retail (n)	Retail Net Cost/Day	Mail (n)	Mail Net Cost/Day	$ Diff. (Mail minus Retail)	Diff. as % of Lower Net Cost/Day
1	Hydrochlorothiazide 25mg tab	2,922	$0.05	184	$0.03	-$0.02	66.7%
2	Simvastatin 20mg tab	1,804	$1.77	109	$1.86	$0.09	5.1%
3	Amlodipine Besylate 5mg tab	1,740	$0.72	89	$0.63	-$0.09	14.3%
4	Metformin HCL 500mg tab	1,673	$0.58	78	$0.60	$0.02	3.4%
5	Amlodipine Besylate 10mg tab	1,511	$0.94	82	$0.87	-$0.07	8.0%
6	Fluticasone Prop 40mcg spray	1,503	$1.08	56	$1.04	-$0.04	3.9%
7	Fexofenadine HCL 180mg tab	1,441	$1.00	118	$0.92	-$0.08	8.7%
8	Alendronate Sodium 70mg tab	1,409	$1.14	88	$1.07	-$0.07	6.5%
9	Omeprazole 20mg cap	1,366	$1.97	95	$2.03	$0.06	3.0%
10	Simvastatin 40mg tab	1,214	$1.79	80	$1.89	$0.10	5.6%
11	Lisinopril 10mg tab	1,207	$0.39	76	$0.41	$0.03	7.7%
12	Pantoprazole 40mg tab	1,117	$2.03	51	$2.01	-$0.02	1.0%
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22	Folic Acid 1mg tab	807	$0.06	57	$0.18	$0.12	200%
23	Ibuprofen 800mg tab	799	$0.34	4	$0.33	-$0.01	3.0%
24	Metoprolol Tar 25mg tab	793	$0.19	39	$0.20	$0.01	5.3%
25	Clonazepam 0.5mg tab	784	$0.63	7	$0.87	$0.24	38.1%
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Mail (n) = number of mail service prescriptions dispensed during study period (7/1/2008 to 6/30/2009).
Mail Net Cost/Day = amount charged to the plan sponsor per day.
$ Diff. (Mail minus Retail) = Mail Net Cost/Day minus Retail Net Cost/Day
Diff. as % of Lower Net Cost/Day = $ Diff. divided by lower cost/day amount (Mail or Retail)

Table 4
Medications Associated with Lower Retail Procurement Cost

Rank	Drug Name	Retail (n)	Retail Net Cost/Day	Mail (n)	Mail Net Cost/Day	$ Diff. (Mail minus Retail)	Diff. as % of Lower Net Cost/Day
1	Simvastatin 20 mg tab	1,804	$1.77	109	$1.86	$0.09	5.1%
2	Metformin HCl 500 mg tab	1,673	$0.58	78	$0.60	$0.02	3.4%
3	Omeprazole 20 mg cap	1,366	$1.97	95	$2.03	$0.06	3.0%
4	Simvastatin 40 mg tab	1,214	$1.79	80	$1.89	$0.10	5.6%
5	Lisinopril 10 mg tab	1,207	$0.39	76	$0.41	$0.03	7.7%
6	Atenolol 50 mg tab	1,103	$0.31	54	$0.38	$0.08	25.8%
7	Sertraline HCl 50 mg tab	1.051	$1.21	19	$1.41	$0.20	16.5%
8	Xalatan 0.005% eye drops	991	$2.16	31	$2.60	$0.45	20.8%
9	Metformin HCl 1000 mg tab	878	$0.96	52	$1.03	$0.07	7.3%
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Mail Net Cost/Day = amount charged to the plan sponsor per day.
$ Diff. (Mail minus Retail) = Mail Net Cost/Day minus Retail Net Cost/Day
Diff. as % of Lower Net Cost/Day = $ Diff. divided by lower cost/day amount (Mail or Retail)