



**MYERS AND  
STAUFFER** LC  
CERTIFIED PUBLIC ACCOUNTANTS

# MASSACHUSETTS EXECUTIVE OFFICE OF HEALTH AND HUMAN SERVICES

Survey of the Average Cost of Dispensing a Medicaid  
Prescription in the State of Massachusetts

February 7, 2017



DEDICATED TO GOVERNMENT HEALTH PROGRAMS



---

## *Table of Contents*

■ Table of Contents.....	2
■ Executive Summary.....	3
• Introduction.....	3
• Massachusetts Survey Distribution .....	3
Table 1.1 Dispensing Cost Survey Response Rate (Massachusetts) .....	4
• Summary of Findings.....	5
Table 1.2 Dispensing Cost for Massachusetts Medicaid Pharmacies .....	5
• Conclusions .....	5

### EXHIBITS

Exhibit 1    Cost of Dispensing Survey Data – Statistical Summary (Massachusetts)



## *Executive Summary*

### Introduction

Under contract to the New England States Consortium Systems Organization (NESCO), Myers and Stauffer LC performed a study of pharmacy dispensing cost for the member states of NESCO which include the state of Massachusetts. The cost of dispensing study included pharmacies that participate in the Medicaid programs of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont. The cost of dispensing survey followed the methodology and used a survey instrument similar to those used by Myers and Stauffer in Medicaid pharmacy engagements in several other states. The methodology was consistent with guidelines from the Centers for Medicare and Medicaid Services (CMS) in its recently finalized rule for Medicaid pharmacy reimbursement regarding the components of pharmacy cost that are appropriately reimbursed by the professional dispensing fee of a state Medicaid program. For a full description of the methodology for the cost of dispensing survey, see the *New England States Consortium Systems Organization Survey of the Average Cost of Dispensing a Medicaid Prescription in the States of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont* dated February 2, 2017.

### Massachusetts Survey Distribution

Myers and Stauffer obtained from the Massachusetts Executive Office of Health and Human Services a list of pharmacy providers currently enrolled in the Massachusetts Medicaid pharmacy program. According to the provider list for the Massachusetts Medicaid program, there were 1,248 pharmacy providers enrolled in the program. Surveys were mailed to all 1,248 pharmacy providers on September 2, 2016. Each surveyed pharmacy received a copy of the cost survey and a letter of explanation from the Executive Office of Health and Human Services.

Concerted efforts to encourage participation were made to enhance the survey response rate. A survey help desk was provided by Myers and Stauffer. A toll-free telephone number and email address were listed on the survey form and pharmacists were instructed to call or email to resolve any questions they had concerning completion of the survey form. The letter of explanation offered pharmacy owners the option of having Myers and Stauffer complete certain sections of the survey for those that were willing to submit copies of financial statements and/or tax returns. For convenience in completing the cost of dispensing survey, the survey forms were also made available in electronic formats. Pharmacies were provided with options to report data using Excel spreadsheets.

Reminder letters were sent on September 19, 2016 to surveyed pharmacies. Additional letters were sent on October 4, 2016 with a further reminder and an extension of the original due date of October 4, 2016 to October 18, 2016.

Providers were given instructions to report themselves as ineligible for the survey if they met certain criteria. Pharmacies were to be deemed ineligible if they had closed their pharmacy, had a change of ownership, or had less than six months of cost data available (e.g., due to a pharmacy that recently opened, or changed ownership). Of the 1,248 surveyed pharmacies enrolled in the



Massachusetts Medicaid program, 8 pharmacies were determined to be ineligible to participate (based on the returned surveys).

Surveys were accepted through November 18, 2016. As indicated in Table 1.1, 1,006 surveyed pharmacies enrolled in the Massachusetts Medicaid program submitted a usable cost survey for this study resulting in a response rate of 80.6%.

Some of the submitted cost surveys contained errors or did not include complete information necessary for full evaluation. For cost surveys with such errors or omissions, the pharmacy was contacted for clarification. There were limited instances in which issues on the cost survey were not resolved in time for inclusion in the final analysis. There were 6 incomplete surveys received on or before November 18, 2016 that were eventually determined to be unusable because they were substantially incomplete or missing essential information. These issues could not be resolved in a timely manner with the submitting pharmacy. These incomplete surveys were not included in the count of 1,006 usable surveys received.

The following table, 1.1, summarizes the dispensing cost survey response rate for pharmacies enrolled in the Massachusetts Medicaid program.

Table 1.1 Dispensing Cost Survey Response Rate (Massachusetts)

Pharmacy Category	Medicaid Enrolled Pharmacies	Pharmacies Exempt or Ineligible from Filing	Eligible Pharmacies	Usable Cost Surveys Received	Response Rate
Chain <sup>1</sup>	996	1	995	881	88.5%
Non-chain	252	7	245	125	49.6%
<b>TOTAL</b>	<b>1,248</b>	<b>8</b>	<b>1,240</b>	<b>1,006</b>	<b>80.6%</b>
In-State Urban <sup>2</sup>	1,193	7	1,186	965	80.9%
In-State Rural	8	0	8	6	75.0%
Out-of-State	47	1	46	35	74.5%
<b>TOTAL</b>	<b>1,248</b>	<b>8</b>	<b>1,240</b>	<b>1,006</b>	<b>80.6%</b>

Myers and Stauffer performed thorough desk review procedures to test completeness and accuracy of all dispensing cost surveys submitted. As needed, pharmacies were contacted to

<sup>1</sup> For purposes of this survey, a chain was defined as an organization having four or more pharmacies under common ownership or control on a national level.

<sup>2</sup> For measurements that refer to the urban or rural location of a pharmacy, Myers and Stauffer used the county of the pharmacies' physical location and tables from the U.S. Census Bureau to determine if the pharmacy was located in a Metropolitan Statistical Area (MSA). Pharmacies in an MSA were assigned an "urban" location flag; other pharmacies were assigned a "rural" Location flag.



clarify their survey responses. Pharmacy-specific cost-finding algorithms were used to calculate the average cost of dispensing at each pharmacy and results from these pharmacies were subjected to statistical analysis.

## Summary of Findings

Per the survey, the median cost of dispensing, weighted by Medicaid volume, for all pharmacies participating in the Massachusetts Medicaid program (including specialty pharmacies<sup>3</sup>) was \$10.02 per prescription.

Table 1.2 Dispensing Cost for Massachusetts Medicaid Pharmacies

	All Pharmacies Inclusive of Specialty
Pharmacies Included in Analysis	1,006
Unweighted Median <sup>A</sup>	\$11.16
Weighted Median <sup>A,B</sup>	\$10.02

<sup>A</sup> Inflated to common point of June 30, 2016 (midpoint of year ending December 31, 2016).

<sup>B</sup> Weighted by Medicaid volume.

Many additional measures of average pharmacy cost of dispensing and measures of variability are included in Exhibit 1.

## Conclusions

Changes in the Massachusetts Medicaid pharmacy reimbursement formula should consider both the dispensing and ingredient components of the payment structure. Rates should take into consideration the final rule regarding Medicaid pharmacy services issued by CMS and published in the Federal Register on February 1, 2016.<sup>4</sup> This rule requires state Medicaid programs to change the current basis for ingredient reimbursement from the currently defined “estimated acquisition cost” (EAC) to the concept of “actual acquisition cost” (AAC). The final rule from CMS reiterated the importance of the pharmacy dispensing fee. CMS indicates that state Medicaid programs that make the switch to an AAC methodology will be required to also implement a professional dispensing fee that reflects the pharmacist’s professional services and costs associated with the dispensing of drug products to Medicaid members. Changes to the pharmacy reimbursement methodology must consider both the ingredient reimbursement and the professional dispensing fee and must be supported by survey data. The final rule has an effective

<sup>3</sup> For purposes of this report, “specialty” pharmacies are those pharmacies that reported sales for intravenous, home infusion, blood factor and/or other specialty services of 10% or more of total prescription sales.

<sup>4</sup> See “Medicaid Program; Covered Outpatient Drugs.” (CMS-2345-FC) Federal Register, 81: 20 (1 February 2016) p 5170.



date of April 1, 2016. State Medicaid programs must comply with its requirements by submitting a State Plan Amendment (SPA) by June 30, 2017 to be effective no later than April 1, 2017.

Based on the results of the study of pharmacy dispensing cost, a single dispensing fee of \$10.02 would reimburse the weighted median cost of dispensing prescriptions to Massachusetts Medicaid members inclusive of both specialty and non-specialty pharmacies.

The use of a single dispensing fee for all pharmacies represents the simplest reimbursement option and is the most widely used methodology for pharmacy dispensing fees among state Medicaid programs. Despite indications that the cost of dispensing in specialty pharmacies varies from the cost of dispensing in non-specialty pharmacies, the use of a differential dispensing fee for specialty pharmacies has been relatively infrequent among state Medicaid programs, though this may change as Medicaid programs transition to ingredient reimbursement based on acquisition cost. Several states have set dispensing fees for all pharmacies based on the cost of dispensing observed at non-specialty pharmacies. Exhibit 1 of this report includes average cost of dispensing measurements for specialty pharmacies which can be considered in the process of evaluating professional dispensing fees for the Massachusetts Medicaid program.

# **Exhibit 1**

## **Cost of Dispensing Survey Data Statistical Summary**

**Pharmacy Cost of Dispensing Survey  
Statistical Summary  
Massachusetts**

Pharmacy Dispensing Cost per Prescription <sup>1</sup>													
Characteristic	n: Number of Pharmacies	Average Total Prescription Volume	Average Medicaid Prescription Volume	Measurements of Central Tendency						Other Statistics			
				Means			Medians			Standard Deviation	95% Confidence Interval for Mean (based on Student t)		
				Mean	Weighted by Total Rx Volume	Weighted by Medicaid Rx Volume	Median	Weighted by Total Rx Volume	Weighted by Medicaid Rx Volume		Lower Bound	Upper Bound	t Value (with n-1 degrees of freedom)
<b>All Pharmacies in Sample</b>	1,006	98,346	10,493	\$15.87	\$11.39	\$11.03	\$11.16	\$10.31	\$10.02	\$56.36	\$12.39	\$19.36	1.96
<b>Non Specialty Pharmacies <sup>2</sup></b>	979	98,408	10,559	\$12.64	\$10.85	\$10.70	\$11.10	\$10.21	\$9.98	\$6.63	\$12.22	\$13.05	1.96
<b>Specialty Pharmacies <sup>2</sup></b>	27	96,101	8,115	\$133.26	\$31.20	\$26.80	\$30.94	\$22.39	\$16.66	\$326.25	\$4.20	\$262.32	2.06
<b>Specialty Pharmacy Breakdown <sup>3</sup></b>													
Blood Factor	3	11,557	1,145	\$640.56	\$100.17	\$128.83	\$126.22	\$77.32	\$126.22	\$933.53	(\$1,678.00)	\$2,959.60	4.30
Compounded Infusion / Intravenous	6	172,298	12,125	\$72.05	\$26.74	\$16.30	\$58.58	\$13.56	\$13.56	\$66.02	\$2.76	\$141.34	2.57
Other	18	84,793	7,940	\$69.11	\$32.66	\$29.69	\$29.68	\$30.40	\$16.66	\$88.80	\$24.95	\$113.27	2.11
Other (340B Pharmacies only)	3	41,578	5,204	\$47.50	\$25.85	\$35.27	\$25.06	\$25.06	\$25.06	\$49.41	(\$75.24)	\$170.23	4.30
<b>Non Specialty Pharmacies Only</b>													
<b>Affiliation:</b>													
Chain	872	99,549	10,006	\$12.30	\$10.71	\$10.51	\$11.00	\$10.16	\$9.90	\$5.44	\$11.94	\$12.66	1.96
Non-chain	107	89,109	15,061	\$15.37	\$12.10	\$11.74	\$12.66	\$11.48	\$11.40	\$12.38	\$13.00	\$17.75	1.98
<b>Affiliation (In State Only):</b>													
Chain (In State)	843	98,150	10,318	\$12.37	\$10.81	\$10.51	\$11.02	\$10.23	\$9.90	\$5.48	\$12.00	\$12.74	1.96
Non-chain (In State)	104	88,291	15,492	\$15.44	\$12.17	\$11.74	\$12.74	\$11.61	\$11.40	\$12.53	\$13.00	\$17.88	1.98
<b>Location (Urban vs. Rural): <sup>4</sup></b>													
In State Urban	941	97,384	10,944	\$12.71	\$10.94	\$10.70	\$11.12	\$10.35	\$9.98	\$6.70	\$12.28	\$13.14	1.96
In State Rural	6	47,458	1,832	\$13.11	\$12.80	\$12.29	\$12.57	\$12.33	\$12.33	\$3.09	\$9.86	\$16.35	2.57
All In State (Urban and Rural)	947	97,067	10,886	\$12.71	\$10.94	\$10.70	\$11.14	\$10.35	\$9.98	\$6.69	\$12.28	\$13.14	1.96
Out of State	32	138,076	871	\$10.43	\$8.93	\$8.99	\$9.18	\$8.23	\$7.90	\$4.00	\$8.99	\$11.87	2.04
<b>Annual Rx Volume:</b>													
0 to 49,999	246	33,521	3,187	\$18.00	\$16.20	\$16.08	\$15.27	\$14.14	\$14.04	\$10.62	\$16.66	\$19.33	1.97
50,000 to 89,999	334	68,031	7,085	\$11.86	\$11.74	\$11.67	\$11.25	\$11.12	\$11.04	\$3.02	\$11.54	\$12.19	1.97
90,000 and Higher	399	163,842	18,011	\$9.98	\$9.87	\$9.79	\$9.63	\$9.63	\$9.43	\$2.36	\$9.75	\$10.21	1.97
<b>Annual Medicaid Rx Volume: <sup>5</sup></b>													
0 to 3,999	343	55,516	2,008	\$15.67	\$12.85	\$14.96	\$13.23	\$11.68	\$12.79	\$9.66	\$14.64	\$16.70	1.97
4,000 to 9,999	311	85,047	6,548	\$11.73	\$11.15	\$11.61	\$11.11	\$10.78	\$11.05	\$3.18	\$11.38	\$12.09	1.97
10,000 and Higher	325	156,461	23,422	\$10.30	\$9.95	\$10.07	\$9.78	\$9.69	\$9.63	\$2.88	\$9.98	\$10.61	1.97
<b>Medicaid Utilization Ratio: <sup>5</sup></b>													
0.00% to 5.99%	355	91,473	3,495	\$13.24	\$11.24	\$11.34	\$11.66	\$10.63	\$10.63	\$5.57	\$12.66	\$13.83	1.97
6.00% to 13.99%	387	102,814	9,381	\$12.08	\$10.81	\$10.80	\$11.01	\$10.31	\$10.23	\$4.78	\$11.61	\$12.56	1.97
14.00% and Higher	237	101,601	23,063	\$12.62	\$10.40	\$10.49	\$10.43	\$9.70	\$9.72	\$9.85	\$11.36	\$13.88	1.97



**Pharmacy Cost of Dispensing Survey  
Statistical Summary  
Massachusetts**

Characteristic	Pharmacy Dispensing Cost per Prescription <sup>1</sup>												
	Measurements of Central Tendency									Other Statistics			
	n: Number of Pharmacies	Average Total Prescription Volume	Average Medicaid Prescription Volume	Means			Medians			Standard Deviation	95% Confidence Interval for Mean (based on Student t)		
				Mean	Weighted by Total Rx Volume	Weighted by Medicaid Rx Volume	Median	Weighted by Total Rx Volume	Weighted by Medicaid Rx Volume		Lower Bound	Upper Bound	t Value (with n-1 degrees of freedom)
<b>Total Rx Volume and Location</b>													
<b>In State Urban Only</b>													
0 to 49,999	239	33,496	3,253	\$18.04	\$16.22	\$16.10	\$15.23	\$14.14	\$14.13	\$10.74	\$16.67	\$19.41	1.97
50,000 to 89,999	322	68,074	7,322	\$11.89	\$11.77	\$11.67	\$11.27	\$11.16	\$11.04	\$3.05	\$11.56	\$12.23	1.97
90,000 and Higher	380	162,402	18,850	\$10.05	\$9.96	\$9.80	\$9.69	\$9.70	\$9.43	\$2.37	\$9.81	\$10.29	1.97
<b>In State Rural only</b>													
0 to 49,999	4	38,064	1,426	\$13.74	\$13.59	\$12.67	\$12.57	\$12.33	\$12.33	\$3.01	\$8.95	\$18.52	3.18
50,000 to 89,999	2	66,246	2,646	\$11.85	\$11.89	\$11.88	\$11.85	\$14.66	\$14.66	\$3.98	(\$23.92)	\$47.61	12.71
90,000 and Higher	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
<b>Institutional:</b>													
LTC Institutional Pharmacies <sup>6</sup>	35	312,188	28,914	\$11.79	\$10.80	\$12.21	\$11.20	\$10.63	\$11.53	\$3.27	\$10.66	\$12.91	2.03
Non-LTC Institutional Pharmacies <sup>6</sup>	944	90,482	9,878	\$12.67	\$10.86	\$10.54	\$11.09	\$10.11	\$9.84	\$6.72	\$12.24	\$13.10	1.96
<b>Unit Dose:</b>													
Does dispense unit dose	31	305,960	29,570	\$11.88	\$10.76	\$12.06	\$11.20	\$10.63	\$11.40	\$4.16	\$10.36	\$13.41	2.04
Does not dispense unit dose	948	91,621	9,937	\$12.66	\$10.86	\$10.57	\$11.09	\$10.13	\$9.85	\$6.69	\$12.23	\$13.09	1.96
<b>340B Pharmacy Status</b>													
Participates in 340B and provides 340B pricing to Medicaid	155	134,452	19,117	\$11.39	\$9.86	\$9.62	\$9.67	\$9.15	\$9.10	\$5.43	\$10.53	\$12.25	1.98
Does not participate in 340B or does not provide 340B pricing to Medicaid	824	91,628	8,949	\$12.87	\$11.13	\$11.14	\$11.25	\$10.55	\$10.44	\$6.81	\$12.40	\$13.34	1.96

**Notes:**

- 1) All pharmacy dispensing costs are inflated to the common point of 6/30/2016 (i.e., midpoint of a fiscal year ending 12/31/2016).
- 2) For purposes of this report a "specialty pharmacy" is one that reported sales for intravenous, home infusion, blood factor and/or other specialty services of 10% or more of total prescription sales.
- 3) For purposes of this report specialty pharmacies were divided into three categories. Blood factor specialty, infusion specialty, and other specialty.
- 4) Myers and Stauffer used the pharmacies' zip code and tables from the U.S. Census Bureau to determine if the pharmacy was located in a Metropolitan Statistical Area. Pharmacies not in a Metropolitan Statistical Area are considered "rural" for purposes of this report.
- 5) Medicaid volume is based on the time period of July 1, 2015 to June 30, 2016.
- 6) For purposes of this report an "LTC Institutional Pharmacy" is one that reported dispensing 25% or more of prescriptions to long-term care facilities.