



**MYERS AND
STAUFFER** LC
CERTIFIED PUBLIC ACCOUNTANTS

Maryland Department of Health

Survey of the Average Cost of Dispensing a Prescription to
Fee-For-Service Maryland Medicaid Participants

January 21, 2020



DEDICATED TO GOVERNMENT HEALTH PROGRAMS



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EXHIBITS

- Exhibit 1 Maryland Medicaid Pharmacy Cost of Dispensing Survey – Survey Form
- Exhibit 2 Letter from the Maryland Department of Health Regarding Pharmacy Dispensing Cost Survey (Independent and Chain Pharmacies)
- Exhibit 3a Letter from Myers and Stauffer Regarding Pharmacy Dispensing Cost Survey (Independent Pharmacies)
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- Exhibit 4 Informational Meeting Flyer
- Exhibit 5 First Survey Reminder Postcard (Independent and Chain Pharmacies)
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Chapter 1: Executive Summary

Introduction

Under contract to the Maryland Department of Health, Maryland Medicaid Pharmacy Program Fee-for-Service (MMPP FFS) Myers and Stauffer LC performed a study of pharmacy dispensing cost. The dispensing study followed the methodology and used a survey instrument similar to those used by Myers and Stauffer in a previous survey for MMPP FFS and Medicaid pharmacy engagements in several other states. The methodology was consistent with guidelines from the Centers for Medicare and Medicaid Services (CMS) regarding the components of pharmacy cost that are appropriately reimbursed by the pharmacy dispensing fee of a state Medicaid program.

Myers and Stauffer obtained from MMPP FFS a list of pharmacy providers currently enrolled in the Maryland Medicaid program. According to the provider list, there were 1,623 pharmacy providers that were enrolled in the Maryland Medicaid program. All 1,623 enrolled pharmacies were requested to submit survey information for this study.

Myers and Stauffer performed basic desk review procedures to test completeness and accuracy of all dispensing cost surveys submitted. Additionally, supplemental review procedures which required the review of supporting documentation from the sample pharmacies were performed for 23 pharmacies to validate reported costs.

There were 1,090 pharmacies that submitted cost surveys that could be included in this analysis. Data from these surveys, in conjunction with 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

The survey of pharmacy cost of dispensing for pharmacies participating in the MMPP FFS yields several measures which can be considered for evaluating appropriate professional dispensing fee(s).

- For all pharmacies, including specialty pharmacies¹, the mean cost of dispensing weighted by Maryland Medicaid FFS volume was \$13.72 per prescription. For the same set of all pharmacies, the median cost of dispensing, weighted by Maryland Medicaid FFS volume, was \$11.16 per prescription.
- For non-specialty pharmacies only, the mean cost of dispensing, weighted by Maryland Medicaid FFS volume was \$12.03 per prescription and the median cost of dispensing, also weighted by Maryland Medicaid FFS volume, was \$10.67 per prescription.

¹ For purposes of this report, "specialty" pharmacies are those pharmacies that reported sales for intravenous, home infusion, clotting factor and/or other specialty products of 30% or more of total prescription sales.



Table 1.1 includes additional measures of the average cost of dispensing.

Table 1.1 Dispensing Cost for Maryland Medicaid Pharmacies

	All Pharmacies Inclusive of Specialty	Non-specialty Pharmacies Only
Pharmacies Included in Analysis	1,090	953
Unweighted Mean (Average) ^A	\$36.14	\$15.79
Weighted Mean (Average) ^{A, B}	\$13.72	\$12.03
Unweighted Median ^A	\$13.58	\$12.72
Weighted Median ^{A, B}	\$11.16	\$10.67

^A Inflated to common point of June 30, 2018 (midpoint of year ending December 31, 2018).

^B Weighted by Maryland Medicaid FFS volume.

Conclusions

Cost of Dispensing Trends

Overall, the cost of dispensing measured in the current survey does not show signs of having increased substantially since the last cost of dispensing survey commissioned by MMPP FFS. While recognizing that most input costs for pharmacies, including pharmacist and other staff labor costs, are subject to inflationary factors, Myers and Stauffer has observed over the course of many cost of dispensing surveys in recent years that the overall average cost of dispensing has not followed the same trajectory. Increases in pharmacy efficiency associated with increased prescription volume and more efficient business practices have had a tempering impact on inflationary factors. For example, more pharmacies are participating in e-prescribing, central fill dispensing and the use of automated dispensing. These changes have made pharmacists and other pharmacy staff more efficient at dispensing medications. All of these trends have resulted in gains in efficiency, and have curtailed the rate of increase in the average cost of dispensing on a per prescription basis.

Myers and Stauffer has performed multiple cost of dispensing studies since 2010 and in most of these surveys we have observed a pattern of very little increase in the average cost of dispensing on a per prescription basis. In some instances, we have even observed a slight decrease in the average cost of dispensing per prescription within the same state over a period of several years. This phenomenon has been observed by other parties as well. For example, national studies of the pharmacy cost of dispensing were sponsored by the National Community Pharmacists Association (NCPA) and the National Association of Chain Drug Stores (NACDS) and conducted in both 2006² and 2015³. The study performed in 2006 reported a national average cost of

² See "National Cost of Dispensing (COD) Study." Grant Thornton LLP, (26 January 2006) p 3.

³ See "National Cost of Dispensing (COD) Study." MPI Group, (September 2015) p 3.



dispensing of \$10.50 and the study performed in 2015 cited a national average cost of dispensing of \$10.55, or a \$0.05 increase in the average cost of dispensing over a nine year period.

Professional Dispensing Fee Options

Federal regulations at 42 CFR § 447.518(d) require that when states propose changes to either the ingredient portion of pharmacy reimbursement or the professional dispensing fee, states must consider both to ensure that total reimbursement to the pharmacy provider is in accordance with requirements of section 1902(a)(30)(A) of the Social Security Act. Furthermore, states must provide adequate data, such as an in-state or other survey of retail pharmacy providers, to support any proposed changes to either the professional dispensing fee or ingredient component of the pharmacy reimbursement methodology.

There are several options which MMPP can consider for the professional dispensing fee portion of reimbursement for the Medicaid FFS pharmacy program. The use of a single professional 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. As an alternative to a reimbursement methodology based on a single professional dispensing fee, a few states have adopted a tiered dispensing fee methodology utilizing tiers that are based on the annual total prescription dispensing volume of pharmacies.

There are indications that the cost of dispensing in specialty pharmacies varies from the cost of dispensing in non-specialty pharmacies. Some states have established multiple professional dispensing fees intended to recognize cost differentials associated with the provision of certain specialty pharmaceutical products. Currently, the use of a differential dispensing fee for specialty pharmacies is relatively infrequent among state Medicaid programs, although the use of differential professional dispensing fees for certain specialty products is increasing. Several states have set dispensing fees based on the cost of dispensing observed at non-specialty pharmacies.

Based on the results of the survey of pharmacy dispensing cost, a single dispensing fee of \$11.16 would reimburse the weighted median cost of dispensing prescriptions to Maryland Medicaid members inclusive of both specialty and non-specialty pharmacies. A single dispensing fee of \$10.67 would reimburse the weighted median cost of dispensing prescriptions to Maryland Medicaid members for non-specialty pharmacies but would not account for the cost of dispensing prescriptions by specialty pharmacies.



Chapter 2: Dispensing Cost Survey and Analysis

MMPP FFS engaged Myers and Stauffer LC to perform a study of costs incurred by pharmacies participating in the Maryland Medicaid FFS pharmacy program to dispense prescription medications. There are two primary components related to the provision of prescription medications: dispensing cost and drug ingredient cost. Dispensing cost consists of the overhead and labor costs incurred by a pharmacy to fill prescription medications.

Dispensing Fees in Medicaid Programs and Private Insurance Plans

The Centers for Medicare and Medicaid Services (CMS) has provided some basic guidelines for appropriate costs to be reimbursed via a Medicaid pharmacy dispensing fee. CMS guidelines state:

“Professional dispensing fee means the fee which—

(1) Is incurred at the point of sale or service and pays for costs in excess of the ingredient cost of a covered outpatient drug each time a covered outpatient drug is dispensed;

(2) Includes only pharmacy costs associated with ensuring that possession of the appropriate covered outpatient drug is transferred to a Medicaid recipient. Pharmacy costs include, but are not limited to, reasonable costs associated with a pharmacist’s time in checking the computer for information about an individual’s coverage, performing drug utilization review and preferred drug list review activities, measurement or mixing of the covered outpatient drug, filling the container, beneficiary counseling, physically providing the completed prescription to the Medicaid beneficiary, delivery, special packaging, and overhead associated with maintaining the facility and equipment necessary to operate the pharmacy; and

(3) Does not include administrative costs incurred by the State in the operation of the covered outpatient drug benefit including systems costs for interfacing with pharmacies.”⁴

The majority of Medicaid programs are in compliance with the Final Rule for Covered Outpatient Drugs (CMS-2345-FC) published by CMS in February 2016 and have implemented professional dispensing fees that are based on the results of survey data. For states in compliance with the Final Rule, there are 29 states that have a single state-wide dispensing fee. These single state-wide dispensing fees range from \$8.96 (Rhode Island) to \$12.46 (North Dakota). There are eight states which have adopted a tiered professional dispensing fee which is based on pharmacy total prescription volume. In these states with volume-based tiers, there are between two and four

⁴ See 42 CFR § 447.502 and “Medicaid Program; Covered Outpatient Drugs.” (CMS-2345-FC) Federal Register, 81: 20 (1 February 2016) p 5349.



tiers. Six states have adopted a differential professional dispensing fees that are based on other criteria. For example, in Alaska professional dispensing fees vary based on whether a pharmacy is located on or off of the state's road system. Professional dispensing fees in some states have been linked to the preferred or non-preferred status of a drug or to the generic dispensing rate of a pharmacy.

In contrast, private third party payers generally reimburse for dispensing fees at rates less than those paid by most Medicaid programs and use ingredient reimbursement methodologies that are based on benchmarks other than average acquisition cost (AAC). On average, dispensing fees paid by private third party payers are less than the dispensing cost of most pharmacies. One recent survey of pharmacy reimbursement rates from third-party payers reported average dispensing fees to retail pharmacies for brand name drugs at \$1.87 for prescriptions with a 30 day supply and \$1.52 for prescriptions with a 90 day supply.⁵ National studies also indicate that in recent years, private payer pharmacy dispensing fees have declined.

Methodology of the Dispensing Cost Survey

In order to determine costs incurred to dispense pharmaceuticals to members of the MMPP FFS, Myers and Stauffer utilized a survey method consistent with federal regulations for the components of a pharmacy dispensing fee (42 CFR § 447.502) and the methodology of previous surveys conducted by Myers and Stauffer in several other states. Myers and Stauffer collaborated with MMPP FFS to refine the survey tool to meet their objectives. All pharmacy providers were invited to participate in an informational meeting on June 13, 2018 with MMPP FFS and Myers and Stauffer representatives to answer questions about the proposed cost of dispensing survey tool and for consideration of further survey tool and methodology refinements.

Survey Distribution

Myers and Stauffer obtained from MMPP FFS a list of pharmacy providers currently enrolled in the Maryland Medicaid FFS pharmacy program. According to the provider list, there were 1,623 pharmacy providers enrolled in the program. Surveys were mailed to all 1,623 pharmacy providers on June 27, 2018. Each surveyed pharmacy received a copy of the cost survey (Exhibit 1), a letter of introduction from MMPP FFS (Exhibit 2), an instructional letter from Myers and Stauffer (Exhibits 3a and 3b), and an invitation to participate in a webinar hosted by Myers and Stauffer (Exhibit 4).

Concerted efforts to encourage participation were made to enhance the survey response rate. A toll-free telephone number and email address were listed on the survey form and pharmacists were instructed to call or email the survey help desk to resolve any questions they had concerning completion of the survey form. For convenience in completing the cost of dispensing survey, the survey forms were made available in both a printed format and in an electronic format (Microsoft Excel). The survey instructions offered pharmacy owners the option of having Myers

⁵ See *2014-2015 Prescription Drug Benefit Cost and Plan Design Report*, Pharmacy Benefits Management Institute, LP and Takeda Pharmaceuticals North America, Inc.



and Stauffer complete certain sections of the survey for those that were willing to submit copies of financial statements and/or tax returns.

Additionally, Myers and Stauffer hosted informational webinars on July 17, 2018 and July 19, 2018. Providers were invited to attend via a web application and a conference call. A brief presentation was given to assist pharmacies in completing the cost of dispensing survey and additional time was allowed to ask questions.

Reminder postcards were sent to pharmacies on July 25, 2018 (Exhibit 5) and August 20, 2018 (Exhibit 6). The second postcard announced an extension of the original due date from August 22, 2018 to September 5, 2018. An email reminder was also sent on August 24, 2018 to all non-respondent pharmacies for which email addresses were available. Additionally, MMPP FFS requested that Myers and Stauffer send a final email to all non-respondent pharmacies on October 15, 2018, allowing them to complete and submit their survey by October 22, 2018.

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 1,623 surveyed pharmacies, 158 pharmacies were determined to be ineligible to participate based on the returned surveys.

Surveys were accepted through November 29, 2018. As indicated in Table 2.1, there were 1,090 surveyed pharmacies that submitted a usable cost survey for this study resulting in a response rate of 74.4%.

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 some instances in which issues on the cost survey were not resolved in time for inclusion in the final analysis.⁶

⁶ There were 62 incomplete surveys received on or before November 29, 2018 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 1,090 usable surveys received.



The following table, 2.1, summarizes the dispensing cost survey response rate.

Table 2.1 Dispensing Cost Survey Response Rate

Pharmacy Category	Medicaid Enrolled Pharmacies	Pharmacies Exempt or Ineligible from Filing	Eligible Pharmacies	Usable Cost Surveys Received	Response Rate
Chain ⁷	935	123	812	746	91.9%
Independent	688	35	653	344	52.7%
TOTAL	1,623	158	1,465	1,090	74.4%
In-State Urban ⁸	1,232	132	1,100	855	77.7%
In-State Rural	63	6	57	45	78.9%
Out-of-State	328	20	308	190	61.7%
TOTAL	1,623	158	1,465	1,090	74.4%

Tests for Reporting Bias

For the pharmacy traits of affiliation (i.e., chain or independent) and location (i.e., urban or rural), the response rates of the submitted surveys were tested to determine if they were representative of the population of Medicaid provider pharmacies. Since the overall response rate of the surveyed pharmacies was less than 100 percent, the possibility of bias in the response rate should be considered. To measure the likelihood of this possible bias, chi-square (χ^2) tests were performed. A χ^2 test evaluates differences between proportions for two or more groups in a data set.

Of the 1,090 usable cost surveys, 746 were from chain pharmacies and 344 were from independent pharmacies. There was a response rate of 91.9% for chain pharmacies compared to a response rate of 52.7% for independent pharmacies. The results of the χ^2 test indicated that the difference in response rate between chain and independent pharmacies was statistically significant at the 5% confidence level. This implies that independent pharmacies were less likely to submit a usable cost of dispensing survey. No adjustments to the cost of dispensing data were made as a result of this observation.

A χ^2 test was also performed with respect to the urban versus rural location for responding pharmacies that were located in the state of Maryland. Of the 1,157 non-exempt pharmacies located in the state of Maryland, 1,100 pharmacies (or 95%) were located in an urban area. The

⁷ 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.

⁸ For measurements that refer to the urban or rural location of a pharmacy, Myers and Stauffer used the pharmacies zip code and the "Zip Code to Carrier Locality File" from the Centers for Medicare & Medicaid Services to determine if the pharmacy was located in an urban or rural area.



remaining 57 pharmacies (or 5%) were located in a rural area. There were 855 usable surveys submitted by in-state pharmacies in an urban location (a response rate of 77.7%). There were 45 usable surveys submitted by in-state pharmacies in a rural location (a response rate of 78.9%). The results of the χ^2 test indicated that the difference in response rate between urban and rural pharmacy locations within the state was not statistically significant at the 5% confidence level.

Desk Review Procedures

A desk review was performed for 100% of surveys received. This review identified incomplete cost surveys; pharmacies submitting these incomplete cost surveys were contacted by telephone and/or email to obtain information necessary for completion. The desk review process also incorporated a number of tests to determine the reasonableness of the reported data. In many instances, pharmacies were contacted to correct or provide confirmation of reported survey data that was flagged for review as a result of these tests for reasonableness.

Supplemental Review Procedures

In addition to the desk review procedures, a random sample of pharmacies that responded to the cost of dispensing survey were selected for on-site field examinations. Selected pharmacies were sent a notification letter (Exhibit 7a and Exhibit 7b) and Myers and Stauffer staff also reached out via telephone to ensure that they would be available for the examinations. The pharmacies were requested to have their financial statements or a tax return available to verify reported expenses, a prescription dispensing report to verify the total number of prescriptions dispensed for the fiscal year, and payroll records to verify reported personnel costs. The on-site examiner also measured the store to verify reported square footage. A table with the results from the supplemental review is included in Exhibit 8.

Several adjustments were made to the sampled surveys resulting in both positive and negative impacts on the cost of dispensing calculated for the individual pharmacies. The average reduction in the calculated cost of dispensing as a result of the supplemental procedures was \$23.73. However, this included several pharmacies with relatively low total prescription volumes which led to outlier results. Excluding these outliers, the overall conclusion of the supplemental procedures was that there was no statistically significant error in overstating or understating costs reported on the survey that would not have been detected through the standard desk review procedures to which all surveys were subjected. Other than the adjustments made to the survey data of the selected pharmacies, Myers and Stauffer has not made any other adjustment to the cost of dispensing data as a result of the supplemental review procedures.

Cost Finding Procedures

For all pharmacies, the basic formula used to determine the average dispensing cost per prescription was to calculate the total dispensing-related cost and divide it by the total number of prescriptions dispensed:

$$\text{Average Dispensing Cost} = \frac{\text{Total (Allowable) Dispensing Related Cost}}{\text{Total Number of Prescriptions Dispensed}}$$



Although the denominator of the cost of dispensing formula (i.e., the “total number of prescriptions dispensed”) is relatively straight-forward, the calculation of the numerator of the formula (i.e., “total (allowable) dispensing related cost”) can be complex. “Cost finding” principles must be applied since not all reported costs were strictly related to the prescription dispensing function of the pharmacy. Most pharmacies are also engaged in lines of business other than the dispensing of prescription drugs. For example, many pharmacies have a retail business with sales of over-the-counter (OTC) drugs and other non-medical items such as groceries or other goods. Some pharmacies are involved in the sale of durable medical equipment and other medical supplies. The existence of these other lines of business necessitates that procedures be taken to isolate the costs involved in the prescription dispensing function of the pharmacy.

“Cost finding” is the process of recasting cost data using rules or formulas in order to accomplish an objective. In this study, the objective is to estimate the cost of dispensing prescriptions to Medicaid members. To accomplish this objective, some pharmacy costs must be allocated between the prescription dispensing function and other business activities. This process identified the reasonable and allowable costs necessary for prescription dispensing to Medicaid members.

Dispensing cost consists of two main components: overhead and labor. The cost finding rules employed to determine the cost of dispensing associated with each of these components are described in the following sections.

Overhead Costs

Overhead cost per prescription was calculated by summing the allocated overhead of each pharmacy and dividing this sum by the number of prescriptions dispensed. Overhead expenses that were reported for the entire pharmacy were allocated to the prescription department based on one of the following methods:

- All, or 100% – overhead costs that are entirely related to prescription functions.
- None, or 0% – overhead costs that are entirely related to non-prescription functions.
- Sales ratio – calculated as prescription sales divided by total sales.
- Area ratio – calculated as prescription department floor space (in square feet) divided by total floor space. The area ratio was increased by a factor of 2.0 from the square footage values reported on the cost survey. The use of this factor creates an allowance for waiting and counseling areas for patients, a prescription department office area and store area needed to access the prescription department. The resulting ratio was adjusted downward, when necessary, not to exceed the sales ratio (in order to avoid allocating 100% of these costs in the instance where the prescription department occupies the majority of the area of the store).

Overhead costs that were considered entirely prescription-related include:

- Prescription department licenses.
- Prescription delivery expense.



- Prescription computer expense.
- Prescription containers and labels. (For many pharmacies the costs associated with prescription containers and labels are captured in their cost of goods sold. Subsequently, it was often the case that a pharmacy was unable to report expenses for prescription containers and labels. In order to maintain consistency, a minimum allowance for prescription containers and labels was determined to use for pharmacies that did not report an expense amount for containers and labels. The allowance was set at the 95th percentile of prescription containers and labels expense per prescription for pharmacies that did report prescription containers and labels expense: \$0.42 per prescription).
- Certain other expenses that were separately identified on Lines (32a) to (32t) of Page 7 of the cost survey (Exhibit 1).⁹

Overhead costs that were not allocated as a prescription expense include:

- Income taxes ¹⁰
- Bad debts ¹¹
- Advertising ¹²
- Charitable Contributions ¹³

⁹ "Other" expenses were individually analyzed to determine the appropriate basis for allocation of each expense: sales ratio, area ratio, 100% related to dispensing cost or 0% (not allocated).

¹⁰ Income taxes are not considered an operational cost because they are based upon the profit of the pharmacy operation.

¹¹ Bad debt expense is not referenced in CMS guidelines for professional dispensing fees at 42 CFR § 447.502. Furthermore, the exclusion of bad debts from the calculation of dispensing costs is consistent with Medicare cost reporting principles. See Provider Reimbursement Manual, CMS Pub.15-1, Section 304:

"The allowance of unrecovered costs attributable to such bad debts in the calculation of reimbursement by the Program results from the expressed intent of Congress that the costs of services covered by the Program will not be borne by individuals not covered, and the costs of services not covered by the Program will not be borne by the Program."

It is recognized that some bad debts may be the result of Medicaid co-payments that were not collected. However, it was not possible to isolate the amount of bad debts attributable to uncollected Medicaid co-payments from the survey data. Additionally, there may be programmatic policy reasons to exclude uncollected Medicaid co-payments from the calculation of the cost of dispensing. Inclusion of cost for uncollected co-payments in the dispensing fee might serve to remove incentives for pharmacies to collect Medicaid co-payments when applicable. Given that co-payments were established to bring about some measure of cost containment, it may not be in the best interest of a Medicaid pharmacy program to allow uncollected co-payments to essentially be recaptured in a pharmacy professional dispensing fee.

¹² Advertising expense is not referenced in CMS guidelines for professional dispensing fees at 42 CFR § 447.502. Furthermore, the exclusion of most types of advertising expense is consistent with Medicare cost reporting principles. See Provider Reimbursement Manual, CMS Pub. 15.1, Section 2136.2:

"Costs of advertising to the general public which seeks to increase patient utilization of the provider's facilities are not allowable."

¹³ Charitable contributions are not referenced in CMS guidelines for professional dispensing fees at 42 CFR § 447.502. Individual proprietors and partners are not allowed to deduct charitable contributions as a business expense for federal income tax purposes. Any contributions made by their business are deducted along with personal contributions as itemized deductions. However, corporations are allowed to deduct contributions as a business expense for federal income tax purposes. Thus, while Line 13 on the cost report recorded the business contributions of a corporation, none of these costs were allocated as a prescription expense. This provides equal treatment for each type of ownership.



- Credit Card Processing Fees ¹⁴
- Certain costs reported on Lines (32a) through (32t) of Page 7 of the cost survey (Exhibit 1) were excluded if the expense was not related to the dispensing of prescription drugs.

The remaining expenses were assumed to be related to both prescription and nonprescription sales and were allocated using either an area ratio or a sales ratio. Joint cost allocation is necessary to avoid understating or overstating the cost of filling a prescription.

Overhead costs allocated using the sales ratio include:

- Personal property taxes
- Other taxes
- Insurance
- Interest
- Accounting and legal fees
- Telephone and supplies
- Dues and publications

Those overhead costs allocated on the area ratio include: ¹⁵

- Depreciation
- Real estate taxes
- Rent ¹⁶
- Repairs
- Utilities

¹⁴ Credit card processing fees were not allowed on the basis that prescriptions for Medicaid members are not predominantly paid through credit or debit card payments.

¹⁵ Allocation of certain expenses using a ratio based on square footage is consistent with Medicare cost reporting principles. See Provider Reimbursement Manual, CMS Pub. 15-2, Section 3617.

¹⁶ The survey instrument included special instructions for reporting rent and requested that pharmacies report "ownership expenses of interest, taxes, insurance and maintenance if building is leased from a related party". This treatment of related-party expenses is consistent with Medicare cost reporting principles. See Provider Reimbursement Manual, CMS Pub. 15-2, Section 3614:

"Cost applicable to home office costs, services, facilities, and supplies furnished to you by organizations related to you by common ownership or control are includable in your allowable cost at the cost to the related organizations. However, such cost must not exceed the amount a prudent and cost conscious buyer pays for comparable services, facilities, or supplies that are purchased elsewhere."



Labor Costs

Labor costs are calculated by allocating total salaries, payroll taxes, and benefits based on the percent of time spent in the prescription department. The allocations for each labor category were summed and then divided by the number of prescriptions dispensed to calculate labor cost per prescription. There are various classifications of salaries and wages requested on the cost survey (Lines (1) to (12) of Page 5 of the cost survey – Exhibit 1) due to the different cost treatment given to each labor classification.

Although some employee pharmacists spent a portion of their time performing nonprescription duties, it was assumed in this study that their economic productivity when performing nonprescription functions was less than their productivity when performing prescription duties. The total salaries, payroll taxes, and benefits of employee pharmacists were multiplied by a factor based upon the percent of prescription time. Therefore, a higher percentage of salaries, payroll taxes, and benefits was allocated to prescription labor costs than would have been allocated if a simple percent of time allocation were utilized. Specifically, the percent of prescription time indicated was adjusted by the following formula:¹⁷

$$\frac{(2)(\%Rx\ Time)}{(1 + (\%Rx\ Time))}$$

The allocation of salaries, payroll taxes, and benefits for all other prescription employees (Line (2) and Lines (4) to (12) of Page 5 of the cost survey – Exhibit 1) was based directly upon the percentage of time spent in the prescription department as indicated on the individual cost survey. For example, if the reported percentage of prescription time was 75 percent and total salaries were \$10,000, then the allocated prescription cost would be \$7,500.

Owner Compensation Issues

Since compensation reported for owners are not costs that have arisen from arm's length negotiations, they are not similar to other costs. Accordingly, limitations were placed upon the allocated salaries, payroll taxes, and benefits of owners. A pharmacy owner may have a different approach toward other expenses than toward his/her own salary. Owners may pay themselves above the market costs of securing the services of an employee. In this case, paying themselves above market cost effectively represents a withdrawal of business profits, not a cost of dispensing. In contrast, owners who pay themselves below market cost for business reasons also misrepresent the true dispensing cost.

¹⁷ Example: An employee pharmacist spends 90 percent of his/her time in the prescription department. The 90 percent factor would be modified to 95 percent:

$$(2)(0.9)/(1+0.9) = 0.95$$

Thus, 95 percent of the reported salaries, payroll taxes, and benefits would be allocated to the prescription department. It should be noted that most employee pharmacists spent 100 percent of their time in the prescription department.



To estimate the cost that would have been incurred had an employee been hired to perform the prescription-related functions actually performed by the owner, upper and lower limits were imposed on owner salaries and benefits. For purposes of setting owner's compensation limits, owners who are pharmacists were considered separately from owners who are not pharmacists. Constraints for owners were set using upper and lower thresholds for hourly compensation that represented approximately the 95th and 40th percentiles of employee salaries and benefits for pharmacists and non-pharmacists (adjusted by reported FTEs to estimate hourly wages). These upper and lower constraints are shown in Table 2.2. No adjustments were made to owner salaries and benefits unless they were in below the lower limit or in excess of the upper limit in which case the amount was adjusted up or down to the respective limit.

Table 2.2 Hourly Wage and Benefit Limits for Owners

Owner Type	Lower Limit (Hourly)	Upper Limit (Hourly)
Pharmacist	\$52.07	\$79.61
Non-Pharmacist	\$15.34	\$57.69

A sensitivity analysis of the owner labor limits was performed in order to determine the impact of the limits on the overall analysis of pharmacy dispensing cost. Of the 1,090 pharmacies in the cost analysis, owner limits impacted 144 pharmacies, or 13.2%. Of these, 61 pharmacies had costs reduced as a result of application of these limits (on the basis that a portion of owner salary "cost" appeared to represent a withdrawal of profits from the business), and 83 pharmacies had costs increased as a result of the limits (on the basis that owner salaries appeared to be below their market value). In total, the final estimate of average pharmacy dispensing cost per prescription was decreased by less than \$0.02 as a result of the owner salary limits.

Overall Labor Cost Constraints

An overall constraint was placed on the proportion of total reported labor that could be allocated as prescription labor. The constraint assumes that a functional relationship exists between the proportion of allocated prescription labor to total labor and the proportion of prescription sales to total sales. It is also assumed that a higher input of labor costs is necessary to generate prescription sales than nonprescription sales, within limits.

The parameters of the applied labor constraint are based upon an examination of data submitted by all pharmacies. These parameters are set in such a way that any resulting adjustment affects only those pharmacies with a percentage of prescription labor deemed unreasonable. For example, the constraint would come into play for an operation that reported 75 percent pharmacy sales but 100 percent pharmacy labor since, some labor must be devoted to generating the 25 percent nonprescription sales.



To determine the maximum percentage of total labor allowed, the following calculation was made:

$$\frac{0.3(\text{Sales Ratio})}{0.1 + (0.2)(\text{Sales Ratio})}$$

A sensitivity analysis of the labor cost restraint was performed in order to determine the impact of the limit on the overall analysis of pharmacy cost. The analysis indicates that of the 1,090 pharmacies included in the dispensing cost analysis, this limit was applied to 68 pharmacies. In total, the final estimate of average pharmacy dispensing cost per prescription was decreased by less than \$0.01 as a result of the labor cost restraint.

Inflation Factors

All allocated costs for overhead and labor were totaled and multiplied by an inflation factor. Inflation factors are intended to reflect cost changes from the middle of the reporting period of a particular pharmacy to a common fiscal period ending December 31, 2018 (specifically from the midpoint of the pharmacy's fiscal year to June 30, 2018 which is the midpoint of the fiscal period ending December 31, 2018). The midpoint and terminal month indices used were taken from the Employment Cost Index, (all civilian, all workers; seasonally adjusted) published by the Bureau of Labor Statistics (BLS) (Exhibit 9). The use of inflation factors is typically preferred in order for pharmacy cost data from various fiscal years to be compared uniformly. The majority of submitted cost surveys were based on a fiscal year which ended on or within four months of December 31, 2017.

Dispensing Cost Analysis and Findings

The dispensing costs for surveyed pharmacies are summarized in the following tables and paragraphs. Findings for pharmacies are presented collectively and additionally are presented for subsets of the surveyed population based on pharmacy characteristics.

There are several statistical measurements that may be used to express the central tendency of a distribution, the most common of which are the mean and the median. Findings are presented in the forms of means and medians, both weighted and unweighted.

The measures of central tendency used in this report include the following:

Unweighted mean: the arithmetic average cost for all pharmacies.

Weighted mean: the average cost of all prescriptions dispensed by surveyed pharmacies, weighted by prescription volume. The resulting number is the average cost for all prescriptions, rather than the average for all pharmacies as in the unweighted mean. This implies that low volume pharmacies have a smaller impact on the weighted average than high volume pharmacies. This approach, in effect, sums all costs from surveyed pharmacies and divides that sum by the total of all prescriptions from surveyed



pharmacies. The weighting factor can be either total prescription volume or Medicaid prescription volume.

Median: the value that divides a set of observations (such as dispensing cost) in half. In the case of this survey, the median is the dispensing cost such that the cost of one half of the pharmacies in the set are less than or equal to the median and the dispensing costs of the other half are greater than or equal to the median.

Weighted Median: this is determined by finding the pharmacy observation that encompasses the middle value prescription. The implication is that one half of the prescriptions were dispensed at a cost of the weighted median or less, and one half were dispensed at the cost of the weighted median or more. Suppose, for example, that one wanted to calculate the median weighted by Medicaid volume and that there were 1,000,000 Medicaid prescriptions dispensed by the surveyed pharmacies. If the dispensing cost of each of these prescriptions were arrayed in order of the dispensing cost, the median weighted by Medicaid volume, is the dispensing cost of the pharmacy that dispensed the middle, or 500,000th prescription.

As is typically the case with dispensing cost surveys, statistical “outliers” are a common occurrence. These outlier pharmacies have dispensing costs that are not typical of the majority of pharmacies. Medians are sometimes preferred to averages (i.e., the arithmetic mean) in situations where the magnitude of outlier values results in an average that does not represent what is thought of as “average” or normal in the common sense. The use of weighting factors also tends to mitigate the impact of many outlier values.

For all pharmacies, the cost of dispensing findings are presented in Table 2.3.

Table 2.3 Dispensing Cost per Prescription – All Pharmacies

	Dispensing Cost
Unweighted Mean	\$36.14
Mean Weighted by Medicaid Volume	\$13.72
Unweighted Median	\$13.58
Median Weighted by Medicaid Volume	\$11.16

n=1,090 pharmacies

Dispensing costs have been inflated to the common point of June 30, 2018 (midpoint of year ending December 31, 2018).

See Exhibit 10 for a histogram of the dispensing cost for all pharmacies. There was a large range between the highest and the lowest dispensing cost observed with the majority of pharmacies having an average cost of dispensing of less than \$14.

Exhibit 11 includes a statistical summary with a wide variety of measures of pharmacy dispensing cost with breakdowns for many pharmacy attributes potentially of interest. For measurements that refer to the urban or rural location of a pharmacy, Myers and Stauffer used the pharmacies’ zip code and the “Zip Code to Carrier Locality File” from the Centers for Medicare & Medicaid Services to determine if the pharmacy was located in an urban or rural area.



Specialty Pharmacies

Several pharmacies included in the cost analysis were identified as specialty pharmacies. For purposes of this report, “specialty pharmacies” are pharmacies that reported sales for intravenous, home infusion, clotting factor and/or other specialty products of 30% or more of total prescription sales. The analysis revealed significantly higher cost of dispensing associated with pharmacies meeting this criteria.¹⁸

The difference in dispensing costs that were observed for providers of specialty products compared to those pharmacies that did not dispense significant levels of specialty products is summarized in Table 2.4.

Table 2.4 Dispensing Cost per Prescription - Specialty versus Other Pharmacies

Type of Pharmacy	Number of Pharmacies	Average Total Annual Prescription Volume (mean and median)	Average Medicaid Prescription Volume (mean and median)	Mean Weighted by Medicaid Volume	Median Weighted by Medicaid Volume
Specialty Pharmacies	137	Mean: 183,365 Median: 45,154	Mean: 2,263 Median: 34	\$30.11	\$18.28
Other Pharmacies	953	Mean: 136,402 Median: 57,303	Mean: 3,151 Median: 2,225	\$12.03	\$10.67

n= 1,090 pharmacies

Dispensing costs have been inflated to the common point of June 30, 2018 (midpoint of year ending December 31, 2018).

Pharmacies that dispense specialty prescriptions as a significant part of their business often have dispensing costs in excess of those found in a traditional pharmacy. As part of the survey, pharmacies that dispense specialty drugs were requested to provide a breakdown of sales and prescriptions dispensed for categories of specialty products dispensed. Based on the data obtained on the survey, Myers and Stauffer categorized specialty pharmacies into three primary categories:

- Pharmacies that dispense clotting factor products.
- Pharmacies that provide compounded infusion and other custom-prepared intravenous products.
- Pharmacies that provide other specialty products (e.g., prefilled injectable products, oral specialty medications).

¹⁸ In every pharmacy cost of dispensing study in which information on clotting factor, intravenous solution, home infusion and other specialty dispensing activity has been collected by Myers and Stauffer, such activity has been found to be associated with higher dispensing costs. Discussions with pharmacists providing these services indicate that the activities and costs involved for these types of prescriptions are significantly different from the costs incurred by other pharmacies. The reasons for this difference include:

- Costs of special equipment for mixing and storage of clotting factor, intravenous, infusion and other specialty products.
- Costs of additional services relating to patient education, compliance programs, monitoring, reporting and other support for specialty products.
- Higher direct labor costs due to more intensive activities to prepare certain specialty prescriptions in the pharmacy.



Some pharmacies dispensed products which included more than one category of services described above. However, for purposes of analysis, Myers and Stauffer organized pharmacies using a hierarchical approach giving priority in the order of 1) dispensing clotting factor products and 2) dispensing compounded infusion or other custom-prepared intravenous products. The cost of dispensing results for these categories of specialty pharmacies is summarized in Table 2.5.

Table 2.5 Dispensing Cost per Prescription – Categories of Specialty Pharmacies

Type of Pharmacy	Number of Pharmacies	Average Total Annual Prescription Volume (mean and median)	Average Medicaid Prescription Volume (mean and median)	Mean Weighted by Medicaid Volume	Median Weighted by Medicaid Volume
Clotting factor	27	Mean: 48,453 Median: 7,198	Mean: 301 Median: 6	\$181.09	\$177.91
Compounded Infusion / Intravenous Products	11	Mean: 92,122 Median: 39,143	Mean: 378 Median: 95	\$102.07	\$59.38
Other Specialty Pharmacies	99	Mean: 230,298 Median: 69,854	Mean: 3,008 Median: 54	\$24.98	\$18.24

n= 137 pharmacies

Dispensing costs have been inflated to the common point of June 30, 2018 (midpoint of year ending December 31, 2018).

Non-specialty Pharmacies

The analyses summarized in Tables 2.6 through 2.11 below exclude the specialty pharmacy providers. In making this exclusion, no representation is made that the cost structure of specialty pharmacies is not important to understand. However, it is reasonable to address issues relevant to those pharmacies separately from the cost structure of the vast majority of pharmacy providers that provide “traditional” pharmacy services. Table 2.6 restates the measurements noted in Table 2.3 excluding pharmacies that dispensed significant volumes of specialty prescriptions.

Table 2.6 Dispensing Cost per Prescription – Excluding Specialty Pharmacies

	Dispensing Cost
Unweighted Mean	\$15.79
Mean Weighted by Medicaid Volume	\$12.03
Unweighted Median	\$12.72
Median Weighted by Medicaid Volume	\$10.67

n=953 pharmacies

Dispensing costs have been inflated to the common point of June 30, 2018 (midpoint of year ending December 31, 2018).

Relationship of Dispensing Cost with Prescription Volume

There is a significant correlation between a pharmacy’s total prescription volume and the dispensing cost per prescription. This result is not surprising because many of the costs associated with a business operation, including the dispensing of prescriptions, have a fixed component that does not vary significantly with increased volume. For stores with a higher total



prescription volume, these fixed costs are spread over a greater number of prescriptions resulting in lower costs per prescription. A number of relatively low volume pharmacies in the survey skew the distribution of dispensing cost and increase the measurement of the unweighted average (mean) cost of dispensing. Means and medians weighted by either Medicaid volume or total prescription volume may provide a more realistic measurement of typical dispensing cost.

Pharmacies were classified into meaningful groups based upon their differences in total prescription volume. Dispensing costs were then analyzed based upon these volume classifications. Table 2.7 displays the calculated cost of dispensing for non-specialty pharmacies arrayed into tiers based on total annual prescription volume. Table 2.8 displays total prescription volume for the same set of pharmacies, but is further broken down by the chain or independent affiliation status of the pharmacy.

Table 2.7 Dispensing Cost by Pharmacy Total Annual Prescription Volume

Total Annual Prescription Volume of Pharmacy	Number of Pharmacies ^A	Mean Weighted by Medicaid Volume	Median Weighted by Medicaid Volume
0 to 39,999	309	\$17.41	\$16.00
40,000 to 77,999	335	\$12.72	\$12.37
78,000 and Higher	309	\$9.97	\$9.06

n= 953 pharmacies

^A Excludes specialty pharmacies, which for purposes of this report are those pharmacies that reported sales for intravenous, home infusion, clotting factor and/or other specialty products of 30% or more of total prescription sales.

Dispensing costs have been inflated to the common point of June 30, 2018 (midpoint of year ending December 31, 2018).

Table 2.8 Dispensing Cost by Pharmacy Total Annual Prescription Volume (with Chain vs. Independent Affiliation Status)

Total Annual Prescription Volume of Pharmacy	Chain Pharmacies			Independent Pharmacies		
	Number of Pharmacies ^A	Mean Weighted by Medicaid Volume	Median Weighted by Medicaid Volume	Number of Pharmacies ^A	Mean Weighted by Medicaid Volume	Median Weighted by Medicaid Volume
0 to 39,999	166	\$20.50	\$17.90	143	\$15.78	\$13.11
40,000 to 77,999	276	\$12.83	\$12.46	59	\$12.38	\$12.16
78,000 and Higher	257	\$9.50	\$8.82	52	\$11.89	\$10.43

n= 953 pharmacies

^A Excludes specialty pharmacies, which for purposes of this report are those pharmacies that reported sales for intravenous, home infusion, clotting factor and/or other specialty products of 30% or more of total prescription sales.

Dispensing costs have been inflated to the common point of June 30, 2018 (midpoint of year ending December 31, 2018).



Table 2.9 provides statistics for the distribution of pharmacy annual prescription volume.

Table 2.9 Statistics for Pharmacy Total Annual Prescription Volume

Statistic	Value ^A
Mean	136,402
Standard Deviation	898,639
10 th Percentile	18,699
25 th Percentile	32,643
Median	57,303
75 th Percentile	91,139
90 th Percentile	140,605

n= 953 pharmacies

^A Excludes specialty pharmacies, which for purposes of this report are those pharmacies that reported sales for intravenous, home infusion, clotting factor and/or other specialty products of 30% or more of total prescription sales.

A histogram of pharmacy total annual prescription volume and a scatter-plot of the relationship between dispensing cost per prescription and total prescription volume are included in Exhibit 12.

Myers and Stauffer noted that the mean prescription volume for pharmacies participating in the 2018 cost of dispensing survey (136,402) was higher than the mean prescription volume noted for the 2011 cost of dispensing survey (94,865) which was also performed by Myers and Stauffer. In part, the higher average volume can be attributed to several high volume pharmacies that responded to the 2018 survey. Of note, there were 15 non-specialty pharmacies which had total annual prescription volumes of 400,000 or greater (of which 8 non-specialty pharmacies had total annual prescription volumes of 1,000,000 or greater). Several of these high volume facilities predominately dispensed prescriptions through the mail. These pharmacies had a significant impact on the mean prescription volume. However, other measures of prescription volume, such as the median prescription volume, showed only a slight increase from the 2011 survey (53,540 in the 2011 survey versus 57,303 in the 2018 survey). It is also noted that for many of these very high volume mail-order pharmacies, their Maryland Medicaid FFS prescription volume was relatively low. Accordingly, these pharmacies had only a minimal impact on the calculation of average cost of dispensing measurements that are weighted by Maryland Medicaid FFS volume.

Other Observations Associated with Dispensing Cost and Pharmacy Attributes

The dispensing cost of the surveyed pharmacies have been broken down into the various components of overhead and labor related costs. Table 2.10 displays the percentage for various components of cost for non-specialty pharmacies. As shown in this table, labor-related expenses accounted for approximately 68% of overall prescription dispensing costs.



Table 2.10 Components of Prescription Dispensing Cost

Type of Expense	Description and Comments	Percentage of Average Cost of Dispensing
Owner Professional Labor	Owner's labor costs were subject to constraints in recognition of its special circumstances as previously noted.	6%
Employee Professional and Other Labor	Includes employee pharmacists. Other labor includes the cost of delivery persons, interns, technicians, clerks and any other employee with time spent performing the prescription dispensing function of the pharmacy.	62%
Building and Equipment	Includes depreciation, rent, building ownership costs, repairs, utilities and any other expenses related to building and equipment.	13%
Prescription Specific Expenses (including delivery)	Includes pharmacist-related dues and subscriptions, prescription containers and labels, prescription-specific computer expenses, prescription-specific delivery expenses (other than direct labor costs) and any other expenses that are specific to the prescription dispensing function of the pharmacy.	8%
Other Overhead Expenses	Consists of all other expenses that were allocated to the prescription dispensing function of the pharmacy including interest, insurance, telephone, and legal and professional fees.	11%
Total		100%

In addition to pharmacy dispensing cost data, several pharmacy attributes were collected on the cost survey. A summary of those attributes is provided at Exhibit 13.

Expenses Not Allocated to the Cost of Dispensing

In the following Table 2.11, measurements are provided for certain expenses that were not included in the cost of dispensing. Reasons for not including these costs were previously discussed in the "Overhead Costs" section of the report (page 13). For all of the expenses below, average cost per prescription was calculated using a sales ratio as the basis for allocation.

Table 2.11 Non-Allocated Expenses per Prescription

Expense Category	Mean Weighted by Medicaid Volume ^A
Bad Debts	\$0.047
Charitable Contributions	\$0.005
Advertising	\$0.267

n= 953 pharmacies

^A Excludes specialty pharmacies, which for purposes of this report are those pharmacies that reported sales for intravenous, home infusion, clotting factor and/or other specialty products of 30% or more of total prescription sales.

Dispensing costs have been inflated to the common point of June 30, 2018 (midpoint of year ending December 31, 2018).

Exhibit 1
Maryland Medicaid Pharmacy Cost of
Dispensing Survey



MARYLAND Department of Health

M&S Use Only

Return Completed Forms to:
Myers and Stauffer LC
700 W. 47th Street, Suite 1100
Kansas City, Missouri 64112

ROUND ALL AMOUNTS TO NEAREST DOLLAR OR WHOLE NUMBER

Complete and return by **August 22, 2018**

Call toll free (800) 374-6858 or email disp_survey@mslc.com if you have any questions.

An electronic version of the Maryland Medicaid Pharmacy Program - FFS Mandatory Cost of Dispensing Survey is available. The electronic version is in Excel format. The electronic version aids the user by calculating totals and transferring information to the reconciliation to help ensure the accuracy of the data. Please send an email to disp_survey@mslc.com to request the electronic version of the survey. Completed surveys can be returned via email to disp_survey@mslc.com.

Name of Pharmacy _____ NPI Number _____

Telephone No. _____ Email _____

Street Address _____

City _____ County _____ State _____ Zip Code _____

DECLARATION BY OWNER AND PREPARER

I declare that I have examined this cost survey including accompanying schedules and statements, and to the best of my knowledge and belief, it is true, correct, complete, and in agreement with the related financial statements or federal income tax return, except as explained in the reconciliation. Declaration of preparer (other than owner) is based on all information of which preparer has any knowledge.

Signature of Owner _____ Printed Name _____ Title/Position _____ Date _____

Preparer's Signature (if other than owner) _____ Printed Name _____ Title/Position _____ Date _____

Preparer's Street Address _____ City and State _____ Zip _____

() _____

Phone Number _____ email address _____

DECLARATION OF EXEMPTION

All Maryland Medicaid pharmacies are required to complete all pages of this survey unless you meet the following criteria:

1. New pharmacies that were in business less than **six months** during the most recently completed fiscal year.

Enter date the pharmacy opened: _____

2. Pharmacies with a change in ownership that resulted in less than **six months** in business during the most recently completed fiscal year.

Enter the date pharmacy changed ownership: _____

If your pharmacy meets either of the above criteria, check the box next to the explanation describing your situation and report the relevant date. Pharmacies which are considered "exempt" do not need to complete the remaining portions of the survey. If you have any questions as to the status of your pharmacy please call Myers and Stauffer at (800)374-6858 or email disp_survey@mslc.com for assistance.

**MARYLAND MEDICAID PHARMACY PROGRAM - FFS
MANDATORY COST OF DISPENSING SURVEY**

SECTION IA -- PHARMACY ATTRIBUTES

The following information is from fiscal / tax year ending _____
 Complete these forms using your most recently completed fiscal year for which financial records are available and complete (e.g., December 31, 2017, or December 31, 2016, if 2017 records are not yet complete). **(Include month/day/year).**

All Pharmacies should complete lines (a) through (q).

List the total number of all prescriptions dispensed during your most recently completed fiscal year as follows:

(a) 1. New _____ 2. Refill _____ 3. Total _____

"Prescriptions Dispensed." Report the total number of all prescriptions filled during the fiscal year being reported on this cost survey. This information may be kept on a daily or monthly log or on your computer.

(b) **Sales and Floor Space**

	Pharmacy Department Only	Total Store (Retail and Pharmacy Department)
Sales (Excluding Sales Tax)	_____	_____
Cost of Goods Sold	_____	_____
Floor Space (see instructions below)	_____ Sq. Ft.	_____ Sq. Ft.

Store sales excluding sales tax. Total store sales and cost of goods sold can usually be obtained from a financial statement or a federal income tax return (if the tax return solely includes the store being surveyed). "Pharmacy Department" sales refer only to sales of prescription drugs and should not include non-prescription over the counter drugs, durable medical equipment or other non-prescription items.

Cost of Goods Sold. If pharmacy department cost of goods sold is not readily available, leave that line blank.

Floor Space. Provide square footage for pharmacy department dispensing area and total store square footage (pharmacy department + retail area). Since floor space will be used in allocating certain expenses, accuracy is important.

For simplicity, when measuring the pharmacy department exclude all of the following:

- > Patient waiting area > Counseling area > Pharmacy department office space > Pharmacy department storage

The before mentioned areas should be included in total store area, but not pharmacy department square footage. A factor will be added to the pharmacy department to account for waiting area, counseling area, pharmacy department office space and pharmacy department storage. When measuring the total store square footage exclude any storage area (e.g., basement, attic, off-the-premises areas or freight in-out areas).

(c) Amount of State Sales Tax collected during fiscal year used for survey (round to nearest whole dollar) \$ _____

What is the approximate percentage of **prescriptions dispensed** for the following classifications?

(d) 1. Medicaid (fee for service) _____ % 2. Medicaid Managed Care _____ %
 3. Other Third Party _____ % 4. Cash _____ %

What is the approximate percentage of **payments received** from the following classifications?

(e) 1. Medicaid (fee for service) _____ % 2. Medicaid Managed Care _____ %
 3. Other Third Party _____ % 4. Cash _____ %

(f) **Ownership Affiliation**
 1. Independent (1 to 3 units) 2. Chain (4 or more units)
 3. Institutional (service to LTC facilities only) 4. Other (specify) _____

(g) **Type of Ownership**
 1. Individual 2. Corporation 3. Partnership 4. Other (specify) _____

(h) **Location of Pharmacy (please check one)**
 1. Medical Office Building 2. Shopping Center
 3. Stand Alone Building 4. Grocery Store / Mass Merchant
 5. Outpatient Hospital 6. Other (specify) _____

(i) **Does your pharmacy purchase drugs through the 340B Drug Pricing Program?**
 1. Yes 2. No

If yes, are prescriptions dispensed to Maryland Medicaid participants provided from 340B inventory?
 1. Yes 2. No

(j) **Do you own your building or lease from a related party (i.e., yourself, family member, or related corporation)? If so, mark yes and refer to page 6, line 5 for instructions for reporting rent to a related party.**
 1. Yes 2. No

**MARYLAND MEDICAID PHARMACY PROGRAM - FFS
MANDATORY COST OF DISPENSING SURVEY**

SECTION IA -- PHARMACY ATTRIBUTES, CONTINUED

(k)	How many hours per week is your pharmacy open? _____ Hours	
(l)	How many years has a pharmacy operated at this location? _____ Years	
(m)	Do you provide 24-hour emergency services for pharmaceuticals?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
(n)	What percentage of prescriptions dispensed were generic products? _____%	
(o)	Does your pharmacy dispense nutritional products?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
(p)	What are the total number of nutritional prescriptions dispensed (all payors)? _____ What are the total number of nutritional prescriptions dispensed to participants of Maryland Medicaid FFS? _____	

(q)	Does your pharmacy specialize in providing medications for a specific disease state? _____ If yes, what disease state do you specialize in? _____	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
	1. <input type="checkbox"/> Hemophilia 2. <input type="checkbox"/> HIV/AIDS treatment 3. <input type="checkbox"/> Hepatitis C 4. <input type="checkbox"/> Diabetes Management 5. <input type="checkbox"/> Enteral Nutrition Products 6. <input type="checkbox"/> Other (please specify) _____	

If your pharmacy dispenses prescriptions to long-term care facilities, complete lines (r) through (t).

(r)	What is the approximate percent of your prescriptions dispensed to long-term care facilities? _____%	
(s)	Do you dispense in unit dose packaging to long-term care facilities (e.g., medisets, blister packs, etc.)? 1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No	
(t)	What is the approximate percent of all prescriptions dispensed in unit dose packaging? _____% If you provide unit dose packaging, what percent of unit dose packaging is: 1. Purchased from manufacturers _____% 2. Prepared in the pharmacy _____%	

If your pharmacy provides delivery or mail order, complete lines (u) through (ac) as applicable.

(u)	What percent of total prescriptions filled are delivered? _____%	
(v)	What percent of Medicaid prescriptions filled are delivered? _____%	
(w)	Do you deliver nutritional products?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
(x)	What is the approximate percentage of nutritional products that are delivered? _____%	
(y)	What is the approximate percentage of nutritional products that are delivered to participants of Maryland Medicaid FFS? _____%	
(z)	What is the percentage of all delivered products sent by U.S. Postal Service, FedEx, UPS, courier service, etc.? _____%	
(aa)	What is the percentage of all delivered products that are delivered by a pharmacy employee using a personal or company vehicle? _____%	
(ab)	What is the cost of shipping supplies, shipping products and special packaging? \$ _____	
(ac)	What is the total delivery/shipping cost for your pharmacy? \$ _____	

If your pharmacy provides specialty or compounding services, complete lines (ad) through (ae) as applicable.

(ad)	Are you presently providing specialty products or services (e.g., intravenous, infusion, enteral nutrition, clotting factors or derivatives, other pre-filled injectable or oral specialty products)? 1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No	
If yes, you must complete the product breakdown in section IC on page 4.		
(ae)	What is the approximate percent of your prescriptions dispensed that are compounded? _____%	
	For prescriptions that are compounded, what is the average number of minutes spent preparing a prescription by pharmacists and technicians? Pharmacist: _____ Technician: _____	

SECTION IB -- OTHER INFORMATION

List any additional information you feel contributes significantly to your cost of filling a prescription. Attach additional pages if needed.

MARYLAND MEDICAID PHARMACY PROGRAM - FFS MANDATORY COST OF DISPENSING SURVEY

SECTION IC -- PHARMACEUTICAL PRODUCT BREAKDOWN

If you answered yes to question (ad) in section IA, provide a breakdown of the specialty and non-specialty products dispensed in your pharmacy using the categories described below or other categories as appropriate. Please report the number of prescriptions and dollar amount of sales in one category only, for example some clotting factor can be prefilled, however place it in "clotting factor or derivatives" only and not in "prefilled or ready to inject products". Number of prescriptions dispensed and sales should match your fiscal reporting period for the cost survey and reconcile to prescriptions and sales reported on lines (a) and (b) in Section IA. You should also respond to the questions below the product breakdown regarding services provided in association with the dispensing of specialty products.

Product Category	Number of Prescriptions	Dollar Amount of Sales	Line No.
Infusion Products			
Compounded infusion products			(1a)
Total Parenteral Nutrition (TPN) products			(1b)
Clotting factor or derivatives			(1c)
Infusion supplies (e.g., tubing, needles, catheter flushes, IV site dressings, etc.)			(1d)
Total for Infusion Products			(1e)
Specialty/High Cost Products			
Prefilled or ready to inject products			(2a)
HIV Antivirals			(2b)
Hepatitis C Antivirals			(2c)
Other Oral Specialty Medication			(2d)
Total Specialty/High Cost Products			(2e)
Non-specialty Products			
Orals			(3a)
Topicals			(3b)
Injectables			(3c)
Compounded (non-infusion)			(3d)
Enteral nutrition			(3e)
Other (including ophthalmic, otic, etc.)			(3f)
Total for Non-specialty Products			
Total (Should reconcile to prescriptions and Pharmacy Department sales reported in Section IA)			(4)

Additional Pharmacy Attribute Questions for Pharmacies Dispensing Specialty/High Cost Products

(a) - Are supplies provided for patient use and administration; such as syringes, gloves, gauze, tubing, etc. included in the cost of goods sold reported in section IA? 1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
(b) - Please provide the total dollar amount of expenses for supplies provided for patient use and administration: \$ _____
(c) Are supplies provided for patient administration billed separately to the Medicaid program as a separate prescription or as DME, etc.? 1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
(d) What percentage of prescriptions dispensed were for products with REMS (Risk Evaluation and Mitigation Strategy) reporting requirements? _____%
(e) What percentage of prescriptions dispensed were for products that had patient monitoring and compliance activities in place? _____%
(f) What percentage of prescriptions dispensed were for products that had special storage requirements (e.g., refrigeration, etc.)? _____%
(g) For how many states does this facility ship specialty products to Medicaid participants? _____

SECTION ID -- OTHER INFORMATION

Use the section below to provide additional narrative description of the specialty products and services that are provided by your pharmacy. Use this section to describe any patient monitoring programs, patient compliance programs, case management services or disease management services provided by your pharmacy. Describe any specialized equipment used in your pharmacy. Attach additional pages as necessary.

**MARYLAND MEDICAID PHARMACY PROGRAM - FFS
MANDATORY COST OF DISPENSING SURVEY**

SECTION IIA -- PERSONNEL COSTS

Complete each employee classification line in aggregate. If there are no employees in a specific category, please leave blank. Provide your best estimate of the percentage of time spent working in each category, the rows must equal 100%. Complete these forms using the **same fiscal year as listed on page 2** and used for reporting overhead expenses.

Employee Classification	Estimate of FTEs ¹	Total Salaries (including bonuses and draws for owners) ²	Percent of Time Spent				Line No.
			Dispensing Activities ³	Other RX Related Duties ⁴	Non Rx Related Duties ⁵	Total ⁶	
Owner: Registered Pharmacist (if applicable)							(1)
Owner: Non-Pharmacist (if applicable)							(2)
Pharmacist							(3)
Technician							(4)
Delivery							(5)
Nurses							(6)
Customer service representatives							(7)
Billing							(8)
Other Admin							(9)
Contract Labor (Pharmacist)							(10)
Contract Labor (other)							(11)
Staff not related to RX dispensing			0.0%	0.0%	100.0%	100.0%	(12)
		Total Salaries	(13)				
		Pension and Profit Sharing	(14)				
		Other Employee Benefits ⁷	(15)				
		Total Labor Expenses	(16)				

¹ FTE: Full-time Equivalent. Take the total number of weekly hours worked by job category and divide by 40 hours to determine the total number of full time equivalent positions. Answer can be a decimal. Round answer to nearest tenth. Ex. 3 pharmacists, pharmacist 1 = 38 hours per week, Pharmacist 2 = 22 hours per week, Pharmacist 3 = 16 hours per week. Calculation = 38 + 22 + 16 = 76 ÷ 40 = 1.90 FTE.

² Total Salaries should include any bonuses and/or draws from the owners.

³ Dispensing Activities should include any direct prescription dispensing activities. Direct prescription dispensing activities as defined in the Centers for Medicare & Medicaid Services final rule (2/1/2016) at §447.502 include the pharmacist time associated with ensuring that possession of the appropriate covered outpatient drug is transferred to a Medicaid beneficiary. This category includes, but is not limited to, a pharmacist's time in checking the computer for information about an individual's coverage, performing drug utilization review and preferred drug list review activities, measurement or mixing of the covered outpatient drug, filling the container, beneficiary counseling, physically providing the completed prescription to the Medicaid beneficiary, delivery, and special packaging.

⁴ Other Rx Related Duties include, but are not limited to, time spent maintaining the facility and equipment necessary to operate the pharmacy, third party reimbursement claims management, ordering and stocking prescription ingredients, taking inventory and maintaining prescription files.

⁵ Non Rx Related Duties should include any duties that are not related to the pharmacy department.

⁶ Totals for the Percent of Time Spent Breakdown. Columns must total 100%

⁷ Other Employee Benefits includes employee medical insurance, disability insurance, education assistance, etc.

**MARYLAND MEDICAID PHARMACY PROGRAM - FFS
MANDATORY COST OF DISPENSING SURVEY**

SECTION IIB -- OVERHEAD EXPENSES

Complete this section using your internal financial statement or tax return for the **fiscal year ending listed on Page 2**. You should only use a tax return if the only store reported on the return is the store being surveyed. If you are using a tax return, the line numbers in the left columns correspond to federal income tax return lines. Use your most recently completed fiscal year for which financial records are available and complete (e.g., December 31, 2017, or December 31, 2016, if 2017 records are not yet complete). **If you prefer, you may submit a copy of your financial statement and/or tax return (including all applicable schedules) and Myers and Stauffer can complete Sections IIB and III (pages 6, 7, and 8).**

*** Notes about tax return line references**

Form 1040, Schedule C, line 27a is for "other expenses" and a detailed breakdown of this category is typically reported on page 2, Part V of the form. Form 1065 (line 20), Form 1120 (line 26) and Form 1120S (line 19) are for "other deductions" and there are typically detailed breakdowns of the expenses in this category in the "Statements" attached to the returns.

2017 Tax Form					Round all amounts to nearest dollar or whole number.	Expense Amount Reported	Myers and Stauffer Use Only	Line No.
1040 Schedule C	1065	1120	1120S					
13	16a	20	14	Depreciation (this fiscal year only - not accumulated)				(1)
23	14	17	12	Taxes	(a) Personal Property Taxes Paid			(2)
23	14	17	12		(b) Real Estate Taxes			(3)
23	14	17	12		(c) Payroll Taxes			(4)
					Any other taxes should be itemized separately on page 7.			
20b	13	16	11	Rent - Building (if building is leased from a related party then report ownership expenses of interest, taxes, insurance and maintenance)				(5)
20a	13	16	11	Rent - Equipment and Other				(6)
21	11	14	9	Repairs & maintenance				(7)
15	20*	26*	19*	Insurance (other than employee medical)				(8)
16a&b	15	18	13	Interest				(9)
17	20*	26*	19*	Legal and Professional Fees				(10)
27a*	20*	26*	19*	Dues, Publications, and Subscriptions				(11)
27a*	12	15	10	Bad Debts (this fiscal year only - not accumulated)				(12)
n/a	n/a	19	n/a	Charitable Contributions				(13)
25	20*	26*	19*	Utilities	(a) Telephone			(14)
25	20*	26*	19*		(b) Heat, Water, Lights, Sewer, Trash and other Utilities			(15)
18&22	20*	26*	19*	Operating and Office Supplies (exclude prescription containers and labels)				(16)
8	20*	22	16	Advertising/Marketing				(17)
27a*	20*	26*	19*	Computer Expenses (systems, software, maintenance, etc.)				(18)
9,27a*	20*	26*	19*	Prescription Delivery Expenses (wages to a driver should only be reported on pg. 5)				(19)
27a*	20*	26*	19*	Prescription Containers and Labels				(20)
24a&b	20*	26*	19*	Travel, Meals and Entertainment				(21)
27a*	20*	26*	19*	Switching / E-Prescribing Fees				(22)
27a*	20*	26*	19*	Security / Alarm				(23)
27a*	20*	26*	19*	Bank Charges				(24)
27a*	20*	26*	19*	Credit Card Processing Fees				(25)
27a*	20*	26*	19*	Interior Maintenance (housekeeping, janitorial, etc.)				(26)
27a*	20*	26*	19*	Exterior Maintenance (lawn care, snow removal etc.)				(27)
27a*	20*	26*	19*	Pharmacy Licenses / Permits				(28)
27a*	20*	26*	19*	Employee Training and Certification				(29)
27a*	20*	26*	19*	Continuing Education				(30)
Total Page 6 overhead expenses (lines 1 to 30)								(31)

**MARYLAND MEDICAID PHARMACY PROGRAM - FFS
MANDATORY COST OF DISPENSING SURVEY**

SECTION IIB -- OVERHEAD EXPENSES, CONTINUED

(Round all amounts to nearest dollar or whole number.)

Other non-labor expenses not included on lines (1) through (30)

Examples: Franchise fees, other taxes not reported in Section IIB (a) (page 6), accreditation and/or certification fees, restocking fees, postage, administrative expenses, amortization, etc. Specify each item and the corresponding amount. **Note that labor expenses are reported in Section IIA (page 5).** For corporate overhead expenses allocated to the individual store, please attach documentation to establish the expenses included in the allocation and describe the allocation basis.

Expense Description	Expense Amount Reported	Myers and Stauffer Use Only	Line No.
			(32a)
			(32b)
			(32c)
			(32d)
			(32e)
			(32f)
			(32g)
			(32h)
			(32i)
			(32j)
			(32k)
			(32l)
			(32m)
			(32n)
			(32o)
			(32p)
			(32q)
			(32r)
			(32s)
			(32t)
Total page 7 overhead expenses (lines 32a to 32t)			(33)

**MARYLAND MEDICAID PHARMACY PROGRAM - FFS
MANDATORY COST OF DISPENSING SURVEY**

SECTION III -- RECONCILIATION WITH FINANCIAL STATEMENT OR TAX RETURN

The purpose of this reconciliation is to ensure that all expenses have been included and that none have been duplicated. Complete these forms using the same fiscal year which was used to report overhead and labor expenses.

	Cost Survey Amounts	Financial Statement or Tax Return Amounts
(1) Total Expenses per Financial Statement or Tax Return ¹		
(2) Total Labor Expenses (total from page 5, line 16)		
(3) Overhead Expenses (total from page 6, line 31)		
(4) Overhead Expenses, Continued (total from page 7, line 33)		
(5) Total Expenses per Cost Survey [add Lines (2), (3), and (4)]		
Specify Items with Amounts that are on Cost Survey but not on Financial Statement or Tax Return		
(6a)		
(6b)		
(6c)		
(6d)		
(6e)		
Specify Items with Amounts that are on Financial Statement or Tax Return but not on this Cost Survey		
(7a)		
(7b)		
(7c)		
(7d)		
(7e)		
(8) Total [add Lines (1) to (7e)] Column Totals should be Equal		

¹ If you used a tax form to complete the cost of dispensing survey, the total expenses per tax return will be found on the following lines for 2017 tax forms:

- 1040C - Line 28
- 1065 - line 21
- 1120 - line 27
- 1120S - line 20

Exhibit 2
**Letter from the Maryland Department of
Health Regarding Pharmacy Dispensing
Cost Survey**



MARYLAND Department of Health

Larry Hogan, Governor · Boyd K. Rutherford, Lt. Governor · Robert R. Neall, Secretary

MEMORANDUM

DATE: June 27, 2018

TO: Maryland Medicaid Pharmacy Program Providers

FROM: Craig Smalls, Assistant Chief Information Officer
Office of Systems, Operations and Pharmacy

RE: 2018 Mandatory Pharmacy Cost of Dispensing Survey

Background:

The Maryland Department of Health has contracted with the firm Myers and Stauffer LC, Certified Public Accountants, to assist in the development, implementation, and maintenance of its Medicaid fee-for-service pharmacy reimbursement methodology. As part of the effort to refine pharmacy reimbursement for the Maryland Medicaid Pharmacy Program (MMPP), Myers and Stauffer LC will conduct a comprehensive study to determine the cost of dispensing drugs to Maryland Medicaid fee-for-service participants.

The Centers for Medicare and Medicaid Services (CMS) published regulation, Federal Covered Outpatient Drugs Final Rule (CMS-2345-FC), requires State Medicaid agencies to adopt pharmacy reimbursement methodologies to pay pharmacies for the actual acquisition cost of drugs plus a professional dispensing fee. The pharmacy cost of dispensing survey will provide MMPP with information to evaluate the professional dispensing fee component of the Maryland Medicaid fee-for-service pharmacy reimbursement.

Survey participation is mandatory for all providers enrolled in the MMPP. Participation and document production is required under COMAR 10.09.03.03E, COMAR 10.09.03.03R, and COMAR 10.09.03.07A.

Survey:

To accomplish the amount of work which must be performed and to ensure an accurate and valid measurement of dispensing costs, all forms must be completed as quickly and accurately as possible. Both MMPP and Myers and Stauffer LC guarantee confidentiality of your survey response(s).

You should return completed survey(s) directly to Myers and Stauffer LC, no later than August 22, 2018.

Contacts:

The enclosed survey materials include a toll-free number and email address for Myers and Stauffer LC to assist you in completing the survey. If you have questions or concerns that Myers and Stauffer LC are unable to answer, call James Demery at (410)767-1455, or email: MDH.MMPP@maryland.gov.

Thank you for your cooperation and continued support of the Maryland Medicaid Pharmacy Program.

Exhibit 3a
Letter from Myers and Stauffer LC
Regarding Pharmacy Dispensing Cost
Survey (Independent Pharmacies)



June 27, 2018

**Re: Maryland Medicaid Pharmacy Program
Mandatory Cost of Dispensing Survey**

Dear Pharmacy Owner/Manager:

The Maryland Department of Health has contracted with Myers and Stauffer LC, a national Certified Public Accounting firm, to conduct a pharmacy cost of dispensing survey as part of the process to evaluate the professional dispensing fee component of the Maryland Medicaid fee-for-service pharmacy reimbursement. All Maryland Medicaid Pharmacy Program (MMPP) providers are required to participate in the survey according to the following instructions:

1. Complete the enclosed “Maryland Medicaid Pharmacy Program - FFS, Mandatory Cost of Dispensing Survey”.
2. For your convenience, Myers and Stauffer LC will complete Section IIB “Overhead Expenses” and Section III “Reconciliation with Financial Statement or Tax Return” for you if you submit a copy of your store financial statements or your business federal income tax return (Forms 1065, 1120, 1120S or Schedule C of Form 1040 and accompanying schedules). The financial statements or federal income tax form must include information for only a single store/location. You will still need to complete other sections of the survey.
3. If your financial statements or tax return have not been completed for your most recent fiscal year, complete the survey using your prior year's financial statements (or tax return) and the corresponding prescription data for that year. Myers and Stauffer will apply an appropriate inflation factor.
4. Retain a copy of the completed survey forms for your records.

It is very important that all pharmacies cooperate fully by filing an accurate cost survey. Pharmacies are encouraged to return the required information as soon as possible, **but forms must be returned no later than August 22, 2018.**

Electronic format of the survey tool:

We strongly encourage pharmacies to respond in an electronic format. You may obtain an Excel spreadsheet version of the survey by contacting Myers and Stauffer LC at (800) 374-6858 or by email at disp_survey@mslc.com. You may download the survey form from www.mslc.com/Maryland/MD_COD.aspx. The electronic version of the survey collects the same information as the paper version and will automatically complete certain calculations. Surveys that are completed electronically may be returned via email to the same address with the Excel survey file and other supporting documentation attached.

If you prefer to respond in a paper format:

Send completed forms to:

Myers and Stauffer LC
Certified Public Accountants
Attn: Maryland Medicaid Pharmacy Cost of Dispensing Survey
700 W. 47th Street, Suite 1100
Kansas City, MO 64112

You may return the survey using the enclosed Business Reply Label with any envelope. Postage will be paid by Myers and Stauffer LC.

MMPP has designated participation in this survey as **mandatory** for all providers. Pharmacies are encouraged to return the requested information as soon as possible, **but forms must be returned no later than August 22, 2018.**

It is very important that pharmacies respond with accurate information. All submitted surveys will be reviewed and validated by staff at Myers and Stauffer LC. If the review yields the need for additional inquiries, Myers and Stauffer LC staff will contact you. A random sample of pharmacies will be selected for an on-site review. Pharmacies will be notified upon selection for on-site review.

Cost of dispensing surveys and supporting documentation submitted to Myers and Stauffer LC for this project will remain strictly confidential.

Myers and Stauffer LC will be conducting informational meetings via telephonic/ Internet-based webinars to further explain the survey. At these meetings, Myers and

Maryland Medicaid Pharmacy Program
Mandatory Cost of Dispensing Survey
June 27, 2018
Page 3 of 3

Stauffer LC will present more details about the survey process, discuss what information is being requested and answer any questions about regarding the survey form. Please refer to the enclosed information meeting flyer for further information on the dates and times of these webinar meetings and instructions for registration.

If you have any questions, please call toll free at 1-800-374-6858 or send an email to disp_survey@mslc.com.

Your cooperation in providing the information for this survey is greatly appreciated.

Sincerely,

A handwritten signature in black ink that reads "T. Allan Hansen". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

T. Allan Hansen
Principal
ahansen@mslc.com

Enclosures: Maryland Medicaid Pharmacy Program FFS, Mandatory Cost of
Dispensing Survey
Myers and Stauffer LC Business Reply Label
Informational Meeting Invitation

Exhibit 3b
Letter from Myers and Stauffer LC
Regarding Pharmacy Dispensing Cost
Survey (Chain Pharmacies)



June 27, 2018

**Re: Maryland Medicaid Pharmacy Program
Mandatory Cost of Dispensing Survey**

Dear Pharmacy Owner/Manager:

The Maryland Department of Health has contracted with Myers and Stauffer LC, a national Certified Public Accounting firm, to conduct a pharmacy cost of dispensing survey as part of the process to evaluate the professional dispensing fee component of the Maryland Medicaid fee-for-service pharmacy reimbursement. All Maryland Medicaid Pharmacy Program (MMPP) providers are required to participate in the survey.

Enclosed is the “Maryland Medicaid Pharmacy Program Fee-for-Service Mandatory Cost of Dispensing Survey” form. You may respond to the survey using either a paper or electronic format. You will need to submit survey information for each pharmacy that participates in the MMPP. In past surveys performed by Myers and Stauffer LC, most pharmacy chains have preferred to respond to the survey in electronic format.

We have also enclosed a list of your pharmacies which participate in the MMPP. Pharmacy information is presented as shown in records from the MMPP. If this list is inaccurate, please notify Myers and Stauffer LC.

It is very important that all pharmacies cooperate fully by filing an accurate cost survey. Pharmacies are encouraged to return the required information as soon as possible, **but forms must be returned no later than August 22, 2018.**

If you prefer to respond in a paper format:

You must submit a completed survey for each store on the attached list and any additional stores/locations that participate in the MMPP. You may make copies of the enclosed survey form as needed or contact Myers and Stauffer LC and request additional copies of the survey form. Please send completed forms to:

Myers and Stauffer LC
Certified Public Accountants
Maryland Medicaid Pharmacy Cost of Dispensing Survey
700 W. 47th Street, Suite 1100
Kansas City, MO 64112

You may return the surveys using the enclosed Business Reply Label with an envelope. Postage will be paid by Myers and Stauffer LC.

If you prefer to respond in an electronic format:

You will still be required to submit survey data for each store on the attached list and any additional stores/locations that participate in the MMPP using an Excel spreadsheet template provided by Myers and Stauffer LC. To obtain the Excel spreadsheet, send a request by email to disp_survey@mslc.com or contact Myers and Stauffer LC staff directly (contact information below). You may download the survey form from www.mslc.com/Maryland/MD_COD.aspx. Surveys that are completed electronically may be submitted via email or contact Myers and Stauffer for access to our Secure File Transfer Protocol portal.

Whether you complete the survey in paper or electronic format, we recommend that you retain a copy of the completed survey forms for your records. Also, please describe any cost allocations used in preparing the income statement such as administrative expense, etc. Warehousing and distribution costs should be shown in cost of goods sold or listed separately.

MMPP has designated participation in this survey as **mandatory** for all providers. Pharmacies are encouraged to return the required information as soon as possible, **but forms must be returned no later than August 22, 2018.**

It is very important that pharmacies respond with accurate information. All submitted surveys will be reviewed and validated by staff at Myers and Stauffer LC. If the review yields the need for additional inquiries, Myers and Stauffer LC staff will contact you. A random sample of pharmacies will be selected for an on-site review. Pharmacies will be notified upon selection for on-site review.

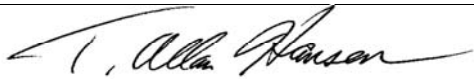
Cost of dispensing surveys and supporting documentation submitted to Myers and Stauffer LC for this project will remain strictly confidential.

Myers and Stauffer LC will be conducting informational meetings via telephonic/ Internet-based webinars to further explain the survey. At these meetings, Myers and Stauffer LC will present more details about the survey process, discuss what information is being requested and answer any questions about regarding the survey form. Please refer to the enclosed information meeting flyer for further information on the dates and times of these webinar meetings and instructions for registration.

Maryland Medicaid Pharmacy Program
Mandatory Pharmacy Cost of Dispensing Survey
June 27, 2018
Page 3 of 3

If you have any questions, please call toll free at 1-800-374-6858 or send an email to disp_survey@mslc.com. Your cooperation in providing the information for this survey is greatly appreciated.

Sincerely,



T. Allan Hansen
Principal
ahansen@mslc.com

Enclosures: Maryland Medicaid Pharmacy Program - FFS, Mandatory Cost of
Dispensing Survey
Myers and Stauffer LC Business Reply Label
Informational Meeting Invitation

Exhibit 4
Informational Meeting Flyer



MARYLAND
Department of Health

Informational Meetings Maryland Medicaid Pharmacy Program Pharmacy Cost of Dispensing Survey

The Maryland Medicaid Pharmacy Program (MMPP) is conducting a pharmacy cost of dispensing survey. The survey results will be used to evaluate the Maryland Medicaid fee-for-service pharmacy reimbursement methodology.

The MMPP has engaged Myers and Stauffer LC to perform the pharmacy cost of dispensing study. To help prepare pharmacy owners and managers participate in the survey, Myers and Stauffer LC, will be conducting informational meetings via telephonic/internet-based webinars. At these meetings, Myers and Stauffer LC will present more details about the survey process, discuss what information is being requested and answer questions regarding the survey form.

Pharmacies are invited to attend one of the informational meetings. **Attendance at one of the webinar sessions requires a reservation.** Please call or email Myers and Stauffer LC for a reservation and further meeting details.

If you are unable to attend a webinar or have questions about the survey, Myers and Stauffer LC offers a help desk to answer survey questions.

To reach Myers and Stauffer LC:

1-800-374-6858

-or-

disp_survey@mslc.com

Schedule of Informational Meetings (via telephone and Internet)

Date	Time (Eastern)
Tuesday July 17	3:00 PM – 4:00 PM
Thursday July 19	8:30 AM – 9:30 AM



**MYERS AND
STAUFFER**_{LC}
CERTIFIED PUBLIC ACCOUNTANTS

Exhibit 5
First Survey Reminder Postcard

REMINDER

Survey Due August 22, 2018

Mandatory Pharmacy Cost of Dispensing Survey

Maryland Medicaid Pharmacy Programs



MARYLAND
Department of Health

The Maryland Department of Health has contracted with Myers and Stauffer LC, to conduct a pharmacy cost of dispensing survey. All pharmacy providers that participate in the Maryland Medicaid Pharmacy Program (MMPP) are required to participate in the survey.

You should have received a letter from MMPP, Myers and Stauffer LC, and a copy of the mandatory pharmacy cost of dispensing survey form. Your participation in the cost of dispensing survey is important. This survey is being used by the MMPP to evaluate future reimbursement rates. All pharmacy providers that participate in the MMPP are required to participate in the survey.

*In accordance with COMAR 10.09.03.03E, COMAR 10.09.03.03R, and COMAR 10.09.03.07A, your compliance with this survey is **mandatory** to continue participating in the Maryland Medicaid fee-for-service program. Failure to participate could result in actions being taken against the provider.*

If you have not received a survey form or have misplaced your survey form, you can contact Myers and Stauffer LC. If you have any questions regarding the survey or need the Excel version of the survey, please contact Myers and Stauffer LC toll free at (800) 374-6858 or via email to disp_survey@mslc.com.

Surveys are due no later than **August 22, 2018**



MARYLAND
Department of Health

Exhibit 6
Second Survey Reminder / Extension
Postcard

FINAL REMINDER

Due Date Extended to September 5, 2018

Mandatory Pharmacy Cost of Dispensing Survey

Maryland Medicaid Pharmacy Programs



The Maryland Department of Health has contracted with Myers and Stauffer LC, to conduct a pharmacy cost of dispensing survey. All pharmacy providers that participate in the Maryland Medicaid Pharmacy Program (MMPP) are required to participate in the survey.

Several weeks ago you should have received a letter from MMPP, Myers and Stauffer LC, and a copy of the mandatory pharmacy cost of dispensing survey form. Your participation in the cost of dispensing survey is important. This survey is being used by the MMPP to evaluate future reimbursement rates. All pharmacy providers that participate in the MMPP are required to participate in the survey.

*In accordance with COMAR 10.09.03.03E, COMAR 10.09.03.03R, and COMAR 10.09.03.07A, your compliance with this survey is **mandatory** to continue participating in the Maryland Medicaid fee-for-service program. Failure to participate could result in actions being taken against the provider.*

If you have not received a survey form or have misplaced your survey form, you can contact Myers and Stauffer LC. If you have any questions regarding the survey or need the Excel version of the survey, please contact Myers and Stauffer LC toll free at (800) 374-6858 or via email to disp_survey@mslc.com.

Surveys are due no later than September 5, 2018



Exhibit 7a
Field Examination Notification Letter
(Independent Pharmacies)



September 20, 2018

Pharmacy Name
Attention:
Address
City, State Zip Code

Re: Maryland Medicaid Pharmacy Program (MMPP) Fee-for-Service (FFS) Cost of Dispensing Survey: On-site Visits to Validate Surveys

Dear Pharmacy Owner or Manager:

The Maryland Department of Health has contracted with Myers and Stauffer LC, a national Certified Public Accounting firm, to conduct a pharmacy cost of dispensing survey as part of the process to evaluate the professional dispensing fee component of the Maryland Medicaid fee-for-service pharmacy reimbursement. Myers and Stauffer recently received a survey from your pharmacy and we thank you for your participation in the survey process.

It is very important that accurate information is reported to the MMPP. Accordingly, Myers and Stauffer is required to review and validate all surveys received. You may have previously been contacted by Myers and Stauffer with follow-up questions regarding your submitted survey.

Additionally, in accordance with our contract with the Maryland Department of Health, Myers and Stauffer will be performing on-site field visits to randomly selected pharmacies to perform further validation procedures. The purpose of these visits is to further verify the accuracy of data submitted on the cost survey.

Your pharmacy has been selected for an on-site field visit.

The details of the on-site field examination are as follows:

Date of On-site Field Examination:	
Location:	
Anticipated Time of Arrival:	

Our on-site field visit program has been designed so as to minimize any inconvenience to you. The records that will be needed during the validation visit are the following items that were used to prepare the MMPP FFS cost of dispensing survey:

- Financial statements and/or tax returns for the fiscal year reported on the survey.
- Prescription reports corresponding to the fiscal year reported on the survey to verify the total number of prescriptions dispensed.
- Any other work papers you relied upon to complete the cost of dispensing survey.

The visit will take from one to two hours; however we will make every attempt to minimize the time spent with you or your pharmacist.

If you have any questions concerning the proposed field visit, please call Myers and Stauffer:

Matt Hill		Kip Stephenson
mhill@mslc.com		kstephen@mslc.com
Toll free: (800) 374-6858	or	Toll free: (800) 374-6858
Direct: (816) 945-5322		Direct: (816) 945-5365

Thank you for your assistance and cooperation.

Sincerely,



T. Allan Hansen
Principal

Exhibit 7b
Field Examination Notification Letter
(Chain Pharmacies)



September 20, 2018

Pharmacy Name
Attention:
Address
City, State Zip COde

Re: Maryland Medicaid Pharmacy Program (MMPP) Fee-for-Service (FFS) Cost of Dispensing Survey: On-site Visits to Validate Surveys

Salutation:

The Maryland Department of Health has contracted with Myers and Stauffer LC, a national Certified Public Accounting firm, to conduct a pharmacy cost of dispensing survey as part of the process to evaluate the professional dispensing fee component of the Maryland Medicaid fee-for-service pharmacy reimbursement. Myers and Stauffer recently received surveys from your organization and we thank you for your participation in the survey process.

It is very important that accurate information is reported to the MMPP. Accordingly, Myers and Stauffer is required to review and validate all surveys received. You may have previously been contacted by Myers and Stauffer with follow-up questions regarding your submitted survey.

Additionally, in accordance with our contract with the Maryland Department of Health, Myers and Stauffer will be performing on-site field visits to randomly selected pharmacies to perform further validation procedures. The purpose of these visits is to further verify the accuracy of data submitted on the cost survey.

The pharmacies listed below have been selected for on-site field visits.

NPI	Provider Name	Provider Address	City	State	Zip

Myers and Stauffer will be scheduling visits for the stores listed above to occur during the week of October 1, 2018. Alternately, if meeting with your pharmacy staff in a district or regional office to review the required documentation is preferred, we can arrange a single appointment to complete the field examination procedures for all selected stores. Myers and Stauffer will contact you to determine the ideal scheduling arrangement.

The records that will be needed during the validation visit are the following items that were used to prepare the MMPP FFS cost of dispensing survey:

- Store-specific financial statements for the fiscal year reported on the survey.
- Prescription reports corresponding to the fiscal year reported on the survey sufficient to verify the total number of prescriptions dispensed.
- Any other work papers you relied upon to complete the cost of dispensing survey.

If you have any questions concerning the proposed field visits, please contact Matt Hill with Myers and Stauffer:

Matt Hill
mhill@mslc.com
Toll free: (800) 374-6858
Direct: (816) 945-5322

Thank you for your assistance and cooperation.

Sincerely,



T. Allan Hansen
Principal
ahansen@mslc.com
(816) 945-5318

Exhibit 8
Summary of Field Examination
Findings

Summary of Supplemental Review Findings (Non-Specialty Pharmacies)
Maryland Department of Health

Assigned Number	Exceptions and Comments	Dispensing Cost per Prescription (Increase / Decrease)		
		Original	Revised	
MD00163	Adjusted overhead expenses to financial statements / tax return.	\$10.27	\$10.89	\$0.62
MD01824	No changes noted.	\$12.07	\$12.07	\$0.00
MD02095	Adjusted square footage to measurements. Adjust overhead expenses to financial statement.	\$52.23	\$13.48	(\$38.75)
MD02121	Adjusted prescription count, total store revenue, personnel costs and overhead expenses to financial statement.	\$14.00	\$11.23	(\$2.77)
MD04197	Adjusted prescription count, total store revenue, personnel costs and overhead expenses to financial statement.	\$12.92	\$10.07	(\$2.85)
MD04249	Adjusted pharmacy sales and total sales to financial statements. Adjusted square footage to measurements. Adjusted overhead expenses to financial statements.	\$16.48	\$16.78	\$0.30
MD04394	Adjusted prescription count to pharmacy report. Adjusted total pharmacy revenue and overhead expenses to financial statements / tax returns.	\$108.25	\$12.50	(\$95.75)
MD04486	Adjusted square footage to measurements. Adjusted total sales to financial statement. Adjust overhead expenses to financial statement.	\$10.74	\$10.80	\$0.06
MD05434	Adjusted prescription count to pharmacy report. Adjusted square footage to measurements.	\$9.41	\$10.18	\$0.77
MD05586	No changes noted.	\$14.96	\$14.96	\$0.00
MD05925	Adjusted personnel cost to pharmacy labor report. Adjusted overhead expenses to financial statement / tax return.	\$15.09	\$16.49	\$1.40
MD05944	Adjusted prescription count, total store revenue, personnel costs and overhead expenses to financial statement.	\$12.29	\$10.79	(\$1.50)
MD06028	Adjusted square footage to measurements. Adjusted personnel costs to pharmacy labor report. Adjusted overhead expenses to financial statement / tax return.	\$21.65	\$29.54	\$7.89
MD06982	No changes noted.	\$8.86	\$8.86	\$0.00
MD07013	Adjusted prescription count, total store revenue, personnel costs and overhead expenses to financial statement.	\$12.53	\$10.15	(\$2.38)
MD07930	Adjusted prescription count. Adjusted prescription department sales and total sales. Adjusted personnel costs to financial statement / tax return.	\$510.31	\$128.16	(\$382.15)
MD08623	Adjusted square footage to store diagram. Adjust overhead expenses to financial statement.	\$7.11	\$12.16	\$5.05
MD09454	Adjusted prescription count, adjusted RX only sales, adjusted personnel cost and overhead expenses to tax return.	\$8.26	\$8.13	(\$0.13)
MD09455	Adjusted overhead expenses to financial statements / tax return.	\$13.33	\$14.85	\$1.52
MD09472	Adjusted square footage to measurements. Adjusted overhead expenses to financial statements / tax return.	\$44.66	\$33.92	(\$10.74)
MD09596	No changes noted.	\$21.22	\$21.79	\$0.57
MD09709	Adjusted prescription count, total store revenue, personnel costs and overhead expenses to financial statement.	\$13.64	\$10.48	(\$3.16)
	Mean Change per Pharmacy			(\$23.73)
	Standard Deviation			\$82.97
	Number of Pharmacies			23
	95% Confidence Interval for Mean Change Due to Supplemental Reviews			
	Lower Bound			(\$57.64)
	Upper Bound			\$10.18

Exhibit 9
Table of Inflation Factors for Dispensing
Cost Survey

Table of Inflation Factors for Dispensing Cost Survey Maryland Department of Health

Fiscal Year End Date	Midpoint Date	Terminal Month		Inflation Factor	Number of Stores with Year End Date
		Midpoint Index ₁	Index (6/30/2018) ₁		
12/31/2015	6/30/2015	123.8	133.3	1.077	5
12/31/2016	6/30/2016	126.7	133.3	1.052	40
1/31/2017	7/31/2016	126.9	133.3	1.05	1
2/28/2017	8/31/2016	127.2	133.3	1.048	0
3/31/2017	9/30/2016	127.4	133.3	1.046	2
4/30/2017	10/31/2016	127.6	133.3	1.045	0
5/31/2017	11/30/2016	127.8	133.3	1.043	0
6/30/2017	12/31/2016	128.0	133.3	1.041	8
7/31/2017	1/31/2017	128.3	133.3	1.039	0
8/31/2017	2/28/2017	128.7	133.3	1.036	86
9/30/2017	3/31/2017	129.0	133.3	1.033	10
10/31/2017	4/30/2017	129.2	133.3	1.032	0
11/30/2017	5/31/2017	129.5	133.3	1.029	1
12/31/2017	6/30/2017	129.7	133.3	1.028	682
1/31/2018	7/31/2017	130.0	133.3	1.025	85
2/28/2018	8/31/2017	130.3	133.3	1.023	135
3/31/2018	9/30/2017	130.6	133.3	1.021	0
4/30/2018	10/31/2017	130.9	133.3	1.018	0
5/31/2018	11/30/2017	131.1	133.3	1.017	1
6/30/2018	12/31/2017	131.4	133.3	1.014	33
7/31/2018	1/31/2018	131.8	133.3	1.011	1

Total Number of Stores	1,090
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¹ Midpoint and terminal month indices were obtained from the Employment Cost Index, (all civilian; seasonally adjusted) as published by the Bureau of Labor Statistics (BLS). Quarterly indices published by BLS were applied to last month in each quarter; indices for other months are estimated by linear interpolation.

Inflation factors are intended to reflect cost changes from the middle of the reporting period of a particular pharmacy to a common fiscal period ending December 31, 2018 (specifically from the midpoint of the pharmacy's fiscal year to June 30, 2018 which is the midpoint of the fiscal period ending December 31, 2018).

Exhibit 10
Histogram of Pharmacy Dispensing Cost

Histogram of Pharmacy Dispensing Cost

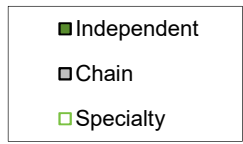
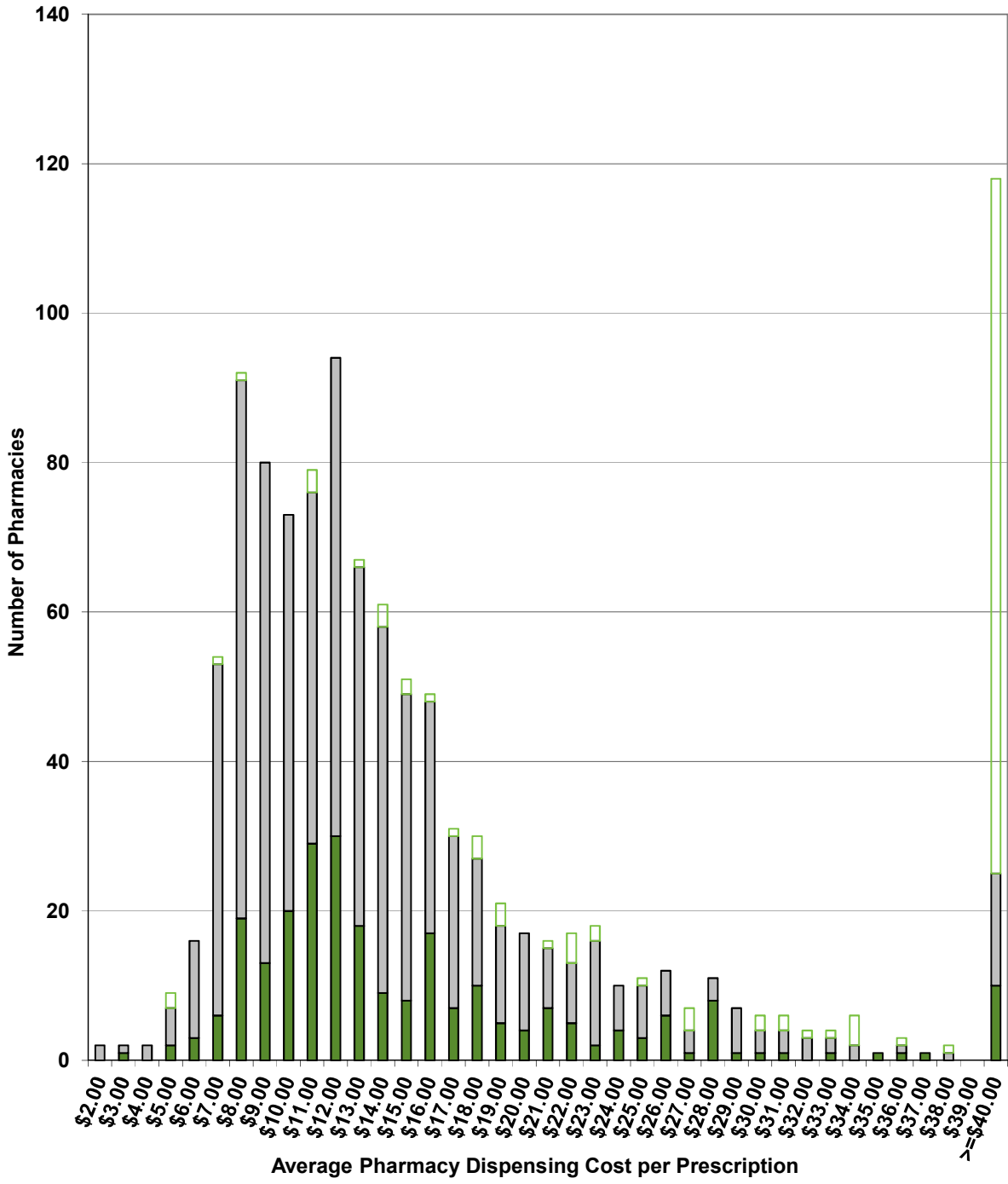


Exhibit 11
Pharmacy Cost of Dispensing Survey
Data - Statistical Summary

Pharmacy Cost of Dispensing Survey
Statistical Summary
Maryland Department of Health

Characteristic	Pharmacy Dispensing Cost per Prescription ¹												
	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)
All Pharmacies in Sample	1,090	142,305	3,040	\$36.14	\$15.72	\$13.72	\$13.58	\$9.11	\$11.16	\$132.84	\$28.25	\$44.04	1.96
Non Specialty Pharmacies ²	953	136,402	3,151	\$15.79	\$9.42	\$12.03	\$12.72	\$8.90	\$10.67	\$21.16	\$14.45	\$17.14	1.96
Specialty Pharmacies ²	137	183,365	2,263	\$177.70	\$48.32	\$30.11	\$72.05	\$38.09	\$18.28	\$339.23	\$120.39	\$235.02	1.98
Specialty Pharmacy Breakdowns ³													
Clotting Factor	27	48,453	301	\$524.67	\$94.47	\$181.09	\$264.08	\$67.72	\$177.91	\$606.00	\$284.94	\$764.39	2.06
Compounded Infusion / Intravenous	11	92,122	378	\$146.64	\$99.90	\$102.07	\$115.26	\$57.35	\$59.38	\$136.75	\$54.77	\$238.51	2.23
Other	99	230,298	3,008	\$86.53	\$43.38	\$24.98	\$53.06	\$34.00	\$18.24	\$136.69	\$59.27	\$113.79	1.98
Dispense Hep C Antivirals ⁴	12	76,324	3,983	\$99.52	\$38.94	\$31.19	\$68.82	\$22.53	\$5.24	\$108.36	\$30.67	\$168.36	2.20
Dispense HIV Antivirals ⁴	18	229,950	6,101	\$34.15	\$11.23	\$35.29	\$27.32	\$5.84	\$30.96	\$27.19	\$20.63	\$47.67	2.11
Pharmacies that Dispense Nutritional Products ⁵													
Nutritional Dispensing > 21 Rxs	11	78,112	3,501	\$115.29	\$106.68	\$55.47	\$59.38	\$115.26	\$18.89	\$142.42	\$19.61	\$210.97	2.23
Non Specialty Pharmacies Only													
Affiliation:													
Chain	699	129,150	3,054	\$14.61	\$8.81	\$11.43	\$12.59	\$8.29	\$9.94	\$8.74	\$13.96	\$15.26	1.96
Independent	254	156,360	3,419	\$19.05	\$10.81	\$13.49	\$13.09	\$9.03	\$12.18	\$38.19	\$14.33	\$23.77	1.97
Location (Urban vs. Rural): ⁶													
In State Urban	814	67,488	3,418	\$15.92	\$12.46	\$12.09	\$12.84	\$10.74	\$10.78	\$22.53	\$14.37	\$17.47	1.96
In State Rural	45	62,064	4,186	\$13.14	\$10.71	\$10.48	\$10.94	\$9.79	\$9.62	\$7.19	\$10.98	\$15.30	2.02
All In State (Urban and Rural)	859	67,204	3,458	\$15.78	\$12.37	\$11.99	\$12.75	\$10.61	\$10.63	\$22.00	\$14.31	\$17.25	1.96
Out of State	94	768,750	349	\$15.90	\$7.06	\$15.78	\$12.35	\$6.96	\$15.53	\$10.78	\$13.69	\$18.11	1.99
Affiliation and Location													
Chain (In State)	646	72,055	3,279	\$14.48	\$12.23	\$11.41	\$12.58	\$10.37	\$9.94	\$8.37	\$13.84	\$15.13	1.96
Chain (In State Urban)	619	72,020	3,233	\$14.59	\$12.31	\$11.48	\$12.62	\$10.38	\$9.94	\$8.47	\$13.92	\$15.26	1.96
Chain (In State Rural)	27	72,872	4,329	\$11.97	\$10.30	\$10.34	\$10.94	\$9.79	\$10.25	\$4.89	\$10.03	\$13.90	2.06
Chain (Out of State)	53	825,053	311	\$16.11	\$5.17	\$14.05	\$12.81	\$2.77	\$12.23	\$12.44	\$12.69	\$19.54	2.01
Independent (In State)	213	52,492	4,000	\$19.71	\$12.98	\$13.42	\$13.43	\$11.73	\$12.18	\$41.53	\$14.10	\$25.32	1.97
Independent (In State Urban)	195	53,105	4,002	\$20.15	\$13.08	\$13.66	\$13.52	\$11.73	\$12.35	\$43.30	\$14.04	\$26.27	1.97
Independent (In State Rural)	18	45,851	3,972	\$14.90	\$11.70	\$10.72	\$11.20	\$9.62	\$9.62	\$9.58	\$10.13	\$19.66	2.11
Independent (Out of State)	41	695,968	399	\$15.62	\$9.96	\$17.51	\$12.14	\$9.03	\$21.09	\$8.31	\$13.00	\$18.25	2.02
Annual Rx Volume:													
0 to 39,999	309	23,858	1,630	\$22.82	\$18.24	\$17.41	\$17.97	\$16.68	\$16.00	\$35.12	\$18.89	\$26.75	1.97
40,000 to 77,999	335	57,929	2,635	\$13.65	\$13.43	\$12.72	\$12.75	\$12.62	\$12.37	\$5.73	\$13.04	\$14.27	1.97
78,000 and Higher	309	334,021	5,231	\$11.07	\$8.04	\$9.97	\$9.49	\$7.65	\$9.06	\$6.10	\$10.39	\$11.76	1.97

**Pharmacy Cost of Dispensing Survey
Statistical Summary
Maryland Department of Health**

Characteristic	Pharmacy Dispensing Cost per Prescription ¹												
	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)
Non Specialty Pharmacies Only													
Annual Medicaid Rx Volume: ⁷													
0 to 1,099	269	259,648	478	\$23.57	\$7.59	\$22.22	\$17.35	\$5.71	\$18.42	\$37.94	\$19.02	\$28.13	1.97
1,100 to 3,099	342	53,620	2,015	\$14.30	\$13.27	\$13.78	\$13.47	\$12.59	\$12.95	\$5.19	\$13.75	\$14.85	1.97
3,1000 and Higher	342	122,245	6,390	\$11.16	\$10.79	\$10.88	\$10.12	\$9.26	\$9.94	\$4.47	\$10.69	\$11.64	1.97
Medicaid Utilization Ratio: ⁷													
0.0% to 2.99%	310	279,055	1,057	\$18.59	\$8.42	\$14.72	\$14.35	\$6.96	\$12.92	\$34.37	\$14.75	\$22.43	1.97
3.0% to 5.49%	340	75,162	3,111	\$13.73	\$11.21	\$11.16	\$12.25	\$10.33	\$10.08	\$7.17	\$12.97	\$14.50	1.97
5.50% and Higher	303	59,171	5,339	\$15.22	\$11.72	\$12.05	\$12.40	\$10.94	\$11.17	\$11.41	\$13.93	\$16.51	1.97
Institutional:													
LTC Institutional Pharmacies ⁸	34	595,428	6,326	\$13.38	\$10.66	\$11.57	\$11.81	\$10.43	\$10.43	\$6.04	\$11.27	\$15.48	2.03
Non-LTC Institutional Pharmacies ⁸	919	119,419	3,034	\$15.88	\$9.19	\$12.06	\$12.78	\$8.15	\$10.74	\$21.51	\$14.49	\$17.27	1.96
Unit Dose:													
Does dispense unit dose	42	583,693	5,741	\$12.80	\$9.11	\$11.17	\$11.73	\$7.94	\$10.43	\$5.54	\$11.07	\$14.52	2.02
Does not dispense unit dose	911	115,780	3,032	\$15.93	\$9.50	\$12.10	\$12.83	\$9.03	\$10.76	\$21.60	\$14.52	\$17.33	1.96
Provision of Compounding Services													
Provides compounding (>=10% of Rx)	7	53,831	2,611	\$110.32	\$20.99	\$21.84	\$22.25	\$22.25	\$22.25	\$214.95	(\$88.47)	\$309.12	2.45
Compounding <10% of Rx	946	137,013	3,155	\$15.09	\$9.39	\$11.97	\$12.69	\$8.90	\$10.61	\$9.53	\$14.48	\$15.70	1.96

Notes:

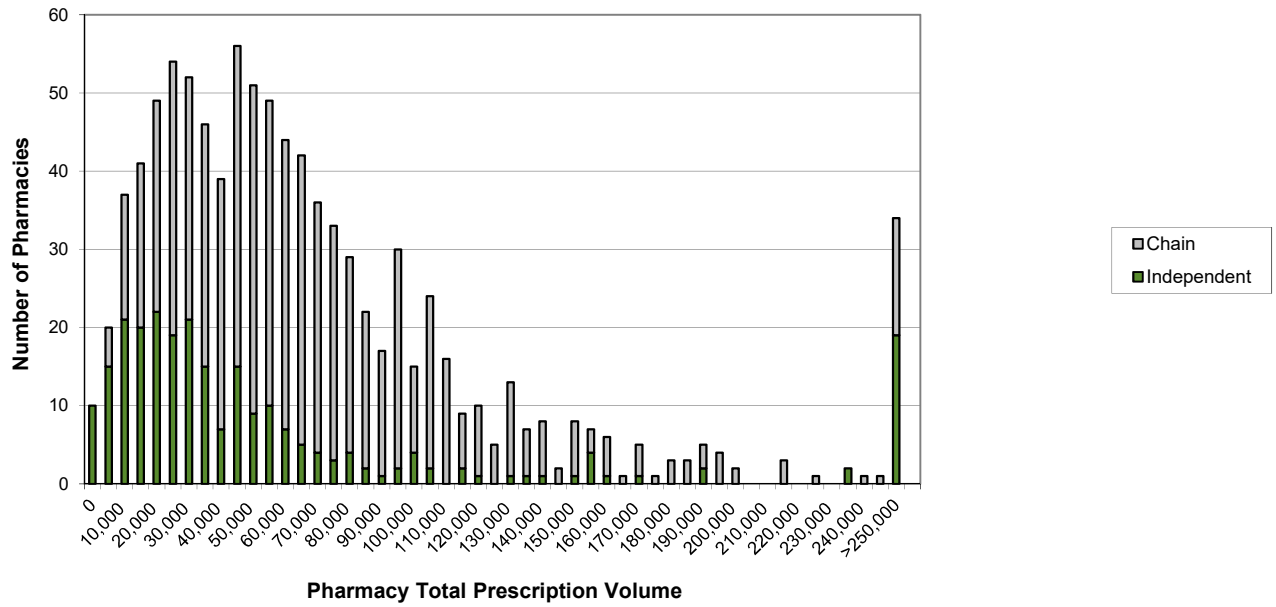
- 1) All pharmacy dispensing costs are inflated to the common point of 6/30/2018 (i.e., midpoint of a fiscal year ending 12/31/2018).
- 2) For purposes of this report a "specialty pharmacy" is one that self-reported sales for intravenous, home infusion, clotting factor and/or other specialty products of 30% or more of total prescription sales.
- 3) For the purposes of this report, specialty pharmacies were divided into three main categories: clotting factor, infusion specialty, and other specialty.
- 4) Hep C antivirals and HIV antivirals were self-reported by providers on the pharmaceutical product breakdown page of the cost of dispensing survey. Both categories are also included in the "Other" category above.
- 5) For the purpose of this report pharmacies that dispense nutritional products is defined as pharmacies that dispensed 21 or more nutritional prescriptions to Fee-for-Service Maryland Medicaid participants from 5/31/2018 to 10/31/2018.
- 6) Myers and Stauffer used the pharmacies zip code and the "Zip Code to Carrier Locality File" from the Centers for Medicare & Medicaid Services to determine if the pharmacy was located in an urban or rural area.
- 7) Medicaid volume is based on the time period of July 1, 2017 to June 30, 2018.
- 8) For purposes of this report an "LTC Institutional Pharmacy" is one that reported dispensing 25% or more of prescriptions to long-term care facilities.
- 9) This excludes pharmacies classified as specialty pharmacies.

Exhibit 12
**Charts Relating to Pharmacy Total
Prescription Volume:**

**A: Histogram of Pharmacy Total
Prescription Volume**

**B: Scatter-Plot of Relationship between
Dispensing Cost per Prescription and
Total Prescription Volume**

Histogram of Pharmacy Total Prescription Volume



Scatter Plot of Relationship Between Dispensing Cost per Prescription and Total Prescription Volume (Non-Specialty Pharmacies, Total Prescription Volume < 300,000)

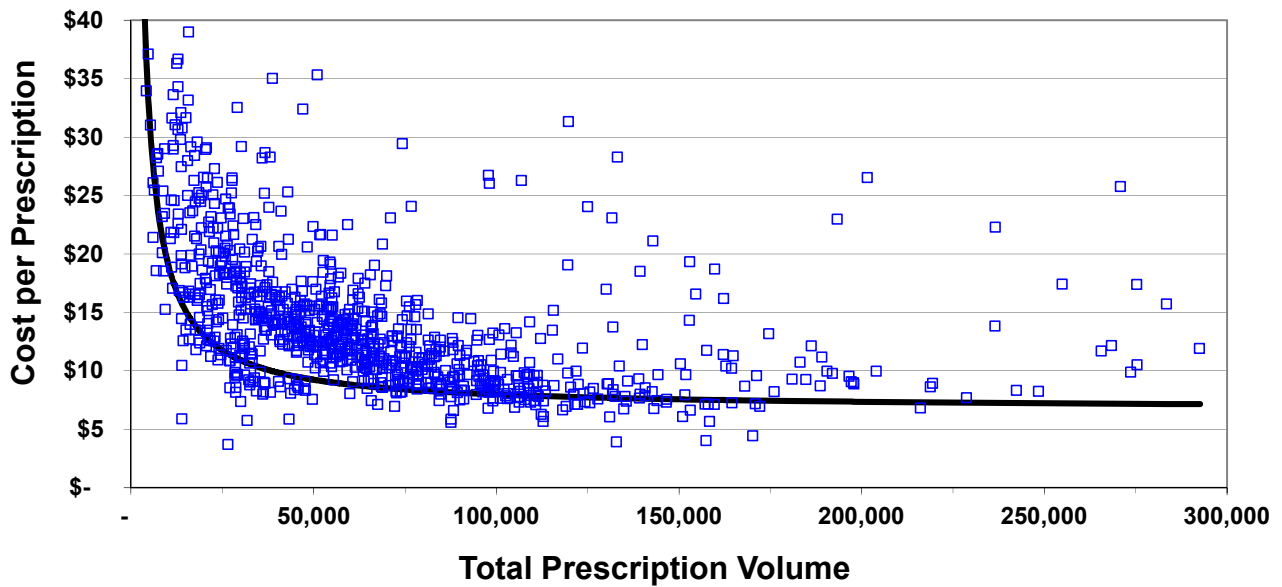


Exhibit 13
Summary of Pharmacy Attributes

Summary of Pharmacy Attributes
Maryland Department of Health

Attribute	Number of Pharmacies Responding	Statistics for Responding Pharmacies		
		Response	Count	Percent
Payer Type: percent of prescriptions (averages)	983	Medicaid fee for service	N/A	7.7%
		Medicaid managed care	N/A	14.6%
		Other third party	N/A	72.0%
		Cash	N/A	5.7%
		<i>Total</i>	N/A	100.0%
Payer Type: percent of payments (averages)	972	Medicaid fee for service	N/A	10.0%
		Medicaid managed care	N/A	10.1%
		Other third party	N/A	76.3%
		Cash	N/A	3.5%
		<i>Total</i>	N/A	100.0%
Type of ownership	1,090	Individual	22	2.0%
		Corporation	996	91.4%
		Partnership	17	1.6%
		Other	55	5.0%
		<i>Total</i>	1,090	100.0%
Location	1,090	Medical office building	110	10.1%
		Shopping center	174	16.0%
		Stand alone building	386	35.4%
		Grocery store / mass merchant	321	29.4%
		Outpatient Hospital	14	1.3%
		Other	85	7.8%
		<i>Total</i>	1,090	100.0%
Purchase drugs through 340B pricing	1,090	Yes	70	6.4%
		No	1,020	93.6%
		<i>Total</i>	1,090	100.0%
Provision of 340B inventory to Medicaid (for those that indicated they purchase drugs through 340B pricing)	70	Yes	23	32.9%
		No	47	67.1%
		<i>Total</i>	70	100.0%
Building ownership (or rented from related party)	1,090	Yes, (own building or rent from related party)	167	15.3%
		No	923	84.7%
		<i>Total</i>	1,090	100.0%
Hours open per week	863	68.6 hours (average)	N/A	N/A
Years pharmacy has operated at current location	1,050	18.5 years (average)	N/A	N/A
Provision of 24 hour emergency services	1,090	Yes	225	20.6%
		No	865	79.4%
		<i>Total</i>	1,090	100.0%
Percent of prescriptions to generic products	916	Percent of prescriptions dispensed that were generic products	916	80.4%
Provision of specialty products or service (e.g., intravenous or home infusion, enteral nutrition, clotting factor or derivatives prescriptions)	1,090	Yes	137	12.6%
		No	953	87.4%
		<i>Total</i>	1,090	100.0%
Specialize in providing medications for a specific disease state	N/A	Hemophilia treatment	22	N/A
		HIV/AIDS treatment	28	N/A
		Hepatitis C treatment	50	N/A
		Diabetes management	39	N/A
		Enteral nutrition products	10	N/A
Percent of prescriptions to long-term care facilities	1,090	Yes (Average of 41.3% of prescriptions were to long-term care facilities for those pharmacies indicating dispensation to long-term care facilities)	92	8.4%
		No	998	91.6%
		<i>Total</i>	1,090	100.0%

Summary of Pharmacy Attributes
Maryland Department of Health

Attribute	Number of Pharmacies Responding	Statistics for Responding Pharmacies		
		Response	Count	Percent
Provision of unit dose services	1,090	Yes (average of 47.6% of prescriptions for pharmacies indicating provision of unit dose prescriptions. Approximately 85.0% of unit dose prescriptions were reported as prepared in the pharmacy with 15.0% reported as purchased already prepared from a manufacturer)	90	8.3%
		No	1,000	91.7%
		<i>Total</i>	<i>1,090</i>	<i>100.0%</i>
Percent of total prescriptions delivered	1,090	Yes (Average of 46.5% of prescriptions were delivered for those pharmacies indicating delivery)	342	31.4%
		No	748	68.6%
		<i>Total</i>	<i>1,090</i>	<i>100.0%</i>
Percent of Medicaid prescriptions delivered	1,090	Yes (Average of 50.3% of Medicaid prescriptions were delivered for those pharmacies indicating delivery)	306	28.1%
		No	784	71.9%
		<i>Total</i>	<i>1,090</i>	<i>100.0%</i>
Percent of prescriptions dispensed by mail	1,090	Yes (Average of 56.5% of prescriptions were delivered by mail for those pharmacies indicating delivery)	235	21.6%
		No	855	78.4%
		<i>Total</i>	<i>1,090</i>	<i>100.0%</i>
Dispense nutritional products	1,090	Yes	174	16.0%
		No	916	84.0%
		<i>Total</i>	<i>1,090</i>	<i>100.0%</i>
Percent of total nutritional prescriptions delivered	1,090	Yes (Average of 52% of nutritional prescriptions were delivered for those pharmacies indicating delivery of nutritional products)	72	6.6%
		No	1,018	93.4%
		<i>Total</i>	<i>1,090</i>	<i>100.0%</i>
Percent of Medicaid FFS nutritional prescriptions delivered	1,090	Yes (Average of 7% of Medicaid nutritional prescriptions were delivered for those pharmacies indicating nutritional delivery)	25	2.3%
		No	1,065	97.7%
		<i>Total</i>	<i>1,090</i>	<i>100.0%</i>
Percent of prescriptions compounded	1,090	Yes (Average of 3.2% of total prescriptions were compounded for those pharmacies indicating compounding)	691	63.4%
		No	399	36.6%
		<i>Total</i>	<i>1,090</i>	<i>100.0%</i>