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PROFESSIONAL DISPENSING FEE AND ACTUAL ACQUISITION COST ANALYSIS FOR MEDI-CAL — PHARMACY SURVEY REPORT

STATE OF CALIFORNIA

JANUARY 4, 2017

MARSH & McLENNAN COMPANIES

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Executive Summary

Background

Historically, state Medicaid programs have reimbursed pharmacy providers within their fee-for-service (FFS) network based on an "estimated acquisition cost" (EAC). In an effort to make reimbursement policies more closely match the actual cost of obtaining and filling prescriptions, the Centers for Medicare & Medicaid Services (CMS) released a draft rule in February 2012 that would change the basis of payment for Medicaid-covered drugs from EAC to an "actual acquisition cost" (AAC). CMS proposed this change because it feels that AAC will more accurately reflect the actual prices that pharmacies pay to acquire drugs.[1]

On January 21, 2016, CMS published the Federal Covered Outpatient Drugs Final Rule (CMS-2345-FC). Under the final rule, each state is responsible for establishing a Medicaid FFS payment methodology that reimburses outpatient pharmacy providers based on AAC plus a professional dispensing fee (PDF) established by the state. To prepare for compliance with the final rule, the California Department of Health Care Services (DHCS) engaged Mercer Government Human Services Consulting (Mercer), a division of Mercer Health & Benefits LLC, to conduct a study on outpatient pharmacy provider costs associated with purchasing and dispensing covered outpatient prescription drugs to Medi-Cal members.

Approach

Data for the study was obtained via two different surveys; a PDF survey, which collected provider data necessary to calculate the average cost of dispensing a prescription by providers serving Medi-Cal members, and an AAC survey, which identified Medi-Cal outpatient pharmacy providers' purchase prices for brand and generic drugs and benchmarked those results to industry standards. The results of both surveys were analyzed and Mercer developed implementation alternatives consistent with the new federal requirements for DHCS consideration.

Mercer's PDF survey requested data for the most recent fiscal year completed by the providers, with the period of service most often reported being calendar year 2015 (CY2015). Mercer calculated a pharmacy's average cost to dispense by dividing the prescription department's operational, labor and allocated overhead costs by the total number of Medicaid and non-Medicaid prescriptions dispensed. All Medi-Cal FFS enrolled pharmacies that dispense outpatient prescriptions were encouraged to participate in the PDF survey process.

[1] Bruen, B & Young, K, Paying for Prescribed Drugs in Medicaid: Current Policy and Upcoming Changes, The Kaiser Commission on Medicaid and the Uninsured, May 2014 Issue Brief.

The AAC survey requested pharmacy providers' June 2016 pharmacy purchase invoices. Mercer aggregated the survey data and measured it against CMS's National Average Drug Acquisition Cost (NADAC) list based on June 2016 data, Medi-Cal's current ingredient cost reimbursement methodology, and other industry benchmarks. A statistically-valid random sample of 600 pharmacies was selected for this study, along with all 61 of the Medi-Cal blood factor providers. In order to ensure that the selection of the 600 pharmacies was representative of all Medi-Cal participating pharmacies, the sample selection took into account the following four pharmacy characteristics:

- Chain or non-chain pharmacy.
- Metropolitan or non-metropolitan pharmacy.
- Number of Medi-Cal FFS prescriptions filled by pharmacy.
- Medi-Cal FFS prescription paid amount by pharmacy.

Mercer and DHCS held three stakeholder events prior to the launch of the PDF and AAC surveys. The events engaged the provider community in the survey process, informed them of the goals and timelines, and solicited their feedback regarding all aspects of the process, including survey design, survey operations, due dates, and DHCS's implementation plan of reimbursement changes. An additional stakeholder event was held during the survey collection period to provide technical assistance with survey completion and submission. Additionally, Mercer operated a survey helpdesk to assist providers with questions throughout the survey process. The month-long survey collection period was extended by one week to lessen the burden on providers.

Upon completion of the survey collection period, Mercer aggregated and analyzed the survey data, drafted a report summarizing the results, and collaborated with DHCS to develop final conclusions and implementation options.

Summary of Findings and Implementation Alternatives

Professional Dispensing Fee Survey

Mercer has concluded that there are three potentially viable PDF alternatives for DHCS consideration, which are presented below. For an in-depth analysis on each alternative, please refer to Chapter 3 of this report.

PDF Alternative 1: Single Professional Dispensing Fee

The first PDF alternative is the establishment of one single PDF across retail community pharmacies. Based on analysis of the PDF survey data submitted, Mercer believes that the winsorized mean (a more robust estimator that is less sensitive to outliers) weighted by response probability of $12.29 best represents the average cost of dispensing a prescription across retail community pharmacies, which consist of retail chain, independent retail, and long term-care (LTC) pharmacies within the State of California (State). This alternative has less administrative burden to the State, yet rewards efficiency of high volume pharmacies.

The winsorized mean weighted on response probability minimizes the impact of outlier costs and reflects the mix of the pharmacies in the sample that was representative of those in the study population.

The weighted mean cost to dispense by "total" prescription volume ($11.34) and the weighted mean cost by "Medicaid" prescription volume ($10.42) are also viable options to consider. However, the weighted mean cost of dispensing by prescription volume under-weights the costs related to pharmacies with low prescription volume and over-weights the costs related to pharmacies with high prescription volume. Average costs for PDFs based on total Medicaid and non-Medicaid prescription volume more accurately represented the response data than average costs based on Medicaid prescription volume.

PDF Alternative 2: Two (2) Tier Professional Dispensing Fee

This alternative proposes two dispensing fee tiers based upon a pharmacy provider's total annual prescription volume, as presented in Table 1 below. Generally speaking, this alternative requires more complexity to implement claims system changes than PDF Alternative 1 above. PDF Alternative 2 more accurately represents the significantly reduced cost of dispensing for higher claim volume pharmacies. A tiered dispensing fee introduces additional operational considerations in order to set and maintain the prescription volume tier to which each pharmacy belongs, however other states have adopted these processes and can be examined for best practices.

Table 1: Winsorized Average Cost of Dispensing — Two Tiers Based on Prescription Volume

	Total Prescription Volume	***Winsorized Mean Weighted by Response Probability***	***Winsorized Mean Weighted by Total Volume***	***Winsorized Mean Weighted by Medicaid Volume***
Retail Community & LTC Pharmacies	0–89,999	$13.20	$12.69	$11.84
	90,000 or more	$10.05	$10.24	$ 9.76

PDF Alternative 3: Four (4) Tier Professional Dispensing Fee

PDF Alternative 3 proposes four dispensing fee tiers based upon a pharmacy provider's total annual prescription volume, as presented in Table 2. PDF Alternative 3 requires slightly more complex claims system changes to implement than PDF Alternative 2, yet even further accurately represents the reduced cost of dispensing across various annual claim volumes. The same operational consideration holds true regarding setting and maintaining the tier to which each pharmacy belongs, but with a higher degree of administrative burden since there are four tiers as opposed to two as presented in PDF Alternative 2. PDF Alternative 3 with four tiers will likely result in more movement between tiers by individual pharmacies each year.

Table 2: Winsorized Average Costs of Dispensing — Four Tiers Based on Prescription Volume

	Total Prescription Volume	*Winsorized Mean Weighted by Response Probability*	*Winsorized Mean Weighted by Total Volume*	*Winsorized Mean Weighted by Medicaid Volume*
Retail Community & LTC Pharmacies	0–39,999	$14.93	$16.38	$14.47
	40,000–64,999	$13.21	$13.55	$13.27
	65,000–89,999	$11.63	$11.36	$10.97
	90,000 or more	$10.05	$10.24	$ 9.76

Budgetary Impact of PDF Changes

Table 3 below shows the increase in dispensing fees paid by Medi-Cal for each of the PDF alternatives described above.

Table 3: Budgetary Impact of Dispensing Fee Changes

Estimated Dispensing Fee Comparison — 12 Months' Utilization (June 2014–May 2015)						
Retail Community Pharmacies	**Prescription Count**	**Current Dispensing Fee**	**Projected Dispensing Fee Amount**	**Difference from Current Methodology**	**Projected Dispensing Fee Increase**	**Difference from PDF Alternative 1**
Single Dispensing Fee (PDF Alternative 1)	14,879,000	$108,755,000	$182,863,000	$74,108,000	68.1%	N/A
Two-Tiered Dispensing Fee (PDF Alternative 2)	14,879,000	$108,755,000	$168,493,000	$59,738,000	54.9%	($14,370,000)
Four-Tiered Dispensing Fee (PDF Alternative 3)	14,879,000	$108,755,000	$164,639,000	$55,884,000	51.4%	($18,224,000)

*Uses projected tier assignment for pharmacies that did not respond to the PDF Survey

PDF Survey Population Considerations

In spite of the numerous channels of communication leveraged and extensive direct stakeholder outreach requesting participation, costs of dispensing for clinic/outpatient, compounding, federally qualified health center/rural health clinic (FQHC/RHC) and specialty pharmacies could not be estimated because of the low number of responses for these pharmacy types. Additionally, only one pharmacy with usable response data reported to be a 340B Covered Entity, and therefore 340B Covered Entities were not analyzed separately from community retail pharmacies that were not 340B Covered Entities.

Analysis of the PDF survey data found that a number of pharmacy characteristics accounted for a significant proportion of the variation in the observed cost of dispensing a prescription:

- Home infusion pharmacies had significantly higher costs than retail community pharmacies.
- Pharmacies with a *total* prescription volume of 90,000 or more had significantly lower costs than the statistical base-case pharmacy (defined in the regression analysis section).
- Pharmacies with a *Medicaid* prescription volume of 5–14.99% of total prescriptions had higher costs while pharmacies with a *Medicaid* prescription volume of more than 15% of total prescriptions had lower costs than pharmacies with a *Medicaid* prescription volume of 0–1.99% of total prescriptions.

As a result of this analysis, considerations may be given to selected pharmacy characteristics when establishing a dispensing fee for Medicaid pharmacy providers, especially Medicaid or total prescription volume.

Actual Acquisition Cost Survey

Mercer has concluded that there are three potential implementation alternatives for DHCS consideration for the adoption of an AAC ingredient cost reimbursement methodology. An overview of each alternative is presented below. For a more in-depth discussion on each, please refer to Chapter 4 of this report.

AAC Alternative 1: Adopt NADAC Rates for Brand and Generic Products

The first drug pricing alternative is to adopt NADAC rates for Medi-Cal FFS pharmacy claims. Based on Mercer's analysis of one year's worth of Medi-Cal FFS claims that had both NADAC and usable AAC rates (five or more price observations), this strategy would reduce ingredient cost expenditures for this set of drugs by approximately 4.4%, or $126 million annually. AAC Alternative 1 would offer the simplicity of a single-list reference point for reimbursement of most products covered by Medi-Cal. The main challenge with this approach is the lack of NADAC rates for many specialty drugs and supplies covered by the Medi-Cal pharmacy program.

Mercer's analysis of Medi-Cal's claims data indicates approximately 10% of all drug claims in the study period would not have a NADAC rate on file for reimbursement. In those cases, Medi-Cal would need to designate a secondary benchmark reimbursement rate, such as a Wholesale Acquisition Cost (WAC) or Average Wholesale Price (AWP) discount. Medi-Cal's current reimbursement structure of AWP - 17% is roughly equivalent to WAC+0%, resulting in approximately the same ingredient cost as currently is in place for this subset of drugs. Mercer is aware of other states using WAC+0% as a FFS reimbursement metric.

AAC Alternative 2: Adopt Brand and Generic AAC Rates Based on Medi-Cal Provider Surveys

Another drug pricing alternative Medi-Cal can consider is to adopt Medi-Cal specific AAC rates for Medi-Cal FFS pharmacy claims. On the same subset of drugs as AAC Alternative 1 above, this strategy would reduce ingredient cost expenditures by approximately 6.1% of drug spend (approximately $174 million based on 12 months' Medi-Cal FFS utilization). This option would

require a vendor contracting process to establish, maintain, and update AAC rates as well as provide a provider help desk to handle inquiries or rate disputes. For NADAC, this ongoing work is handled by the CMS vendor at no charge to Medi-Cal.

AAC Alternative 3: Adopt NADAC for Brand Drugs and a NADAC Discount for Generic Products

Based on Mercer's analysis, the NADAC rates established by CMS are very similar to the brand AAC rates calculated based on Medi-Cal provider invoices. Therefore, Mercer would not recommend a discount be applied to NADAC for brand products. However, Medi-Cal may want to consider implementing a NADAC discount for generic products to approximate the Medi-Cal AAC rate based on this analysis. The generic claim effective NADAC discount that approximates the Medi-Cal AAC rate based on this analysis would be NADAC minus 38.2% for generic products. In 2016, Texas introduced a "NADAC-minus" price point for certain aspects of their program, establishing a precedent for other states to consider in their reimbursement logic.

Implementing a NADAC-minus 38.2% effective discount for all generics would provide approximately $46 million in additional cost savings annually when compared to simply using NADAC for all claims, providing an estimated cost savings to DHCS of $172 million for this alternative.

If Medi-Cal were to implement a NADAC discount, Mercer recommends that the effective discount be reviewed annually to ensure that any variance between NADAC rates and Medi-Cal provider AAC be identified timely, and necessary adjustments be made to the reimbursement process.

Blood Factor Pharmacies

(Note: After this report section was developed, DHCS received verbal feedback from CMS indicating that maintaining the current reimbursement methodology for blood factors is not acceptable at this time. CMS is pending official guidance on this topic, and as a result, the blood factor alternatives presented in this report are likely to be updated.)

The blood factor product invoice analysis examined AAC rates for all blood factor product purchases by Medi-Cal blood factor designated pharmacies. As a result of this analysis, Mercer has concluded there are two viable alternatives for the pricing of blood factors, presented below. For a more in-depth discussion on these alternatives, please refer to Chapter 4. Mercer notes that for the PDF survey, there were not enough responses from blood factor pharmacies to determine a dispensing fee, and further study may be warranted for these pharmacies.

Blood Factor Alternative 1: Lesser of CA Average Sales Price (ASP) + 20%, or Usual and Customary (U&C) (DCHS Current Reimbursement Strategy)

The first blood factor drug pricing alternative is to maintain the current pricing logic. Mercer's analysis shows that the current paid amount based on paid claims is very similar to an implementation of a blood factor AAC rate schedule based on Medi-Cal submitted invoices. This alternative would require no system or regulatory changes, and no provider education for modified billing instructions. However, Mercer would recommend some type of auditing to be considered to ensure that providers are truly submitting AACs on all blood factor claims. Without an audit process to ensure compliance, some providers may not be passing through U&C or AAC costs (for example, 340B discounted rate) on the claims.

Blood Factor Alternative 2: Lesser of ASP + 6%, or U&C

The second blood factor pricing alternative is to adjust the current lesser of ASP + 20% or U&C logic to be the lesser of ASP + 6% or U&C. ASP + 6% is a common rate in the industry, including being very similar to the base rate that CMS uses for Medicare Part B drugs (does not include CMS' per unit clotting factor "furnishing fee"). Mercer's analysis shows that this rate strategy projects an estimated $20 million cost savings as compared to one-years' worth of blood factor drug claims paid at ASP + 20%. This alternative would require system updates and provider education, but would potentially protect Medi-Cal from unexpected budgetary outlay if a larger number of claims were to come from providers who would get reimbursed at the ASP +20% rate. However, Medi-Cal will need to consider total reimbursement (ingredient cost plus PDF) as alternative reimbursement options are considered.

Other options may for blood factor ingredient cost reimbursement include the establishment of (1) maximum allowable ingredient cost (MAIC) rates for blood factor products split for 340B versus non-340B providers (current North Carolina model), or (2) MAIC rates for blood factors incentivizing high volume pharmacies with rates more closely aligned with significant volume or 340B discounts, or (3) an effective WAC discount equivalent to the Medi-Cal AAC for the blood factor products. This is an approach similar to some commercial pharmacy benefit manager (PBM) reimbursement and other state Medicaid FFS programs (For example, Wisconsin [WAC - 10%] or TennCare [range of AWP - 16% to AWP - 26%] or Texas [WAC - 8% for all specialty including hemophilia and separate 340B hemophilia pricing].

Budgetary Impact

The overall budgetary impact of the program changes will depend on which alternative is chosen for both the dispensing fee and ingredient cost. As Table 4 shows below, Medi-Cal can expect an overall estimated total annual savings ranging from approximately $52 million to $119 million.

Table 4: Budgetary Impact of Dispensing Fee and Ingredient Cost Options

Estimated Overall Fiscal Impact - 12 months' utilization (June 2014 - May 2015)				
	Current Dispensing Fee (all claims*) + Ingredient Cost (drugs with both AAC & NADAC rates)	**Single Dispensing Fee (PDF Alternative 1)**	**Two-Tiered Dispensing Fee (PDF Alternative 2)**	**Four-Tiered Dispensing Fee (PDF Alternative 3)**
Current Dispensing Fee (all claims) + Ingredient Cost (drugs with both AAC & NADAC rates)	$2,988,147,000			
Adopt NADAC Rates (AAC Alternative 1)		($52,325,000)	($66,695,000)	($70,549,000)
Adopt AAC Rates (AAC Alternative 2)		($100,411,000)	($114,781,000)	($118,635,000)
Adopt NADAC Brand Rates and NADAC - 38.2% Generic Rates (AAC Alternative 3)		($98,600,000)	($112,970,000)	($116,824,000)

*Dispensing fee projections based on claim count of 14,879,000

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Project Overview

Introduction

As noted in the Executive Summary, on January 21, 2016, CMS published the Federal Covered Outpatient Drugs Final Rule (CMS-2345-FC). The federal regulation addresses transparency in prescription cost reimbursement and the rise in prescription drug costs by requiring that Medicaid programs review, and if necessary, reform their pharmacy reimbursement methodologies to reimburse providers based on actual costs incurred by the pharmacy providers. Under the final rule, each state is responsible for establishing a payment methodology that reimburses pharmacy providers based on AAC plus a PDF established by the state. When establishing this payment methodology, the state is responsible for ensuring that pharmacy reimbursement is consistent with the requirements of section 1902(a)(30)(A) of the Social Security Act, which specify that provider reimbursement rates should be consistent with efficiency, economy and quality of care while assuring sufficient Medicaid beneficiary access.

The final rule's effective date is April 1, 2016; however, states have until June 2017 to submit a State Plan Amendment (SPA) implementing the final rule's provisions relating to ingredient cost reimbursement and PDFs with an effective date no later than April 1, 2017.

The California Welfare and Institutions Code, Section 14105.45, establishes the authority for DHCS to establish an acquisition cost-based methodology that represents the AAC paid for drugs by Medi-Cal pharmacy providers. The acquisition cost can be established in various ways, detailed in 14105.45(b)(5)(A), including but not limited to a vendor conducting a provider survey of purchase prices or the use of a national pricing benchmark such as the NADAC.

In order to obtain the information necessary to comply with the final rule, DHCS contracted with Mercer to conduct a PDF survey and an AAC survey. The surveys obtained information on the costs associated with purchasing covered outpatient drugs and dispensing them to California Medi-Cal members.

DHCS contracted with Mercer for the project because Mercer has extensive experience working with state Medicaid pharmacy programs, including maintaining State Maximum Allowable Cost (SMAC) and AAC lists in multiple states since 2001 and performing PDF studies in multiple states over the last two years. In 2016, Mercer implemented a full AAC reimbursement methodology changeover for a state Medicaid program, and processed almost 8,000 pharmacy cost of dispensing surveys. Additionally, Mercer has been DHCS's Medi-Cal managed care actuarial vendor since 2005, providing a wide range of services, including pharmacy consulting services related to pharmacy efficiency metrics and policy consultation.

Methodology

Mercer's PDF and AAC study methodologies included the following tasks:

- Held a project kick-off meeting with DHCS to identify the population to be surveyed, to review the PDF and AAC surveys' objectives and tools, to identify timelines to complete the surveys, and to produce a final report.
- Requested a list from DHCS of enrolled Medi-Cal pharmacy providers who billed the State for prescription drugs, including available contact and address information and identified the universe of providers (study population) to be surveyed. Mercer surveyed all pharmacy providers for the PDF survey. For the AAC survey, Mercer surveyed a statistically-valid random sample of 600 pharmacy providers.
- Used DHCS's Medi-Cal NewsFlash service to inform the respective providers of the pending surveys, stakeholder meetings and to highlight the need to comply with the final rule.
- Held three stakeholder meetings and gave providers an opportunity to provide input on the surveys and survey process.
- Developed and updated the PDF and AAC survey tools based on the project objectives and feedback from the kick-off meeting and stakeholder comments.
- Distributed the PDF survey tool, instructions and a letter from the DHCS to all respective providers that dispensed prescription drugs to Medi-Cal members during CY2015. DHCS's letter highlighted the importance of the survey and provided methods for submission of the requested information needed for the dispensing fee analysis.
- Distributed the AAC survey letter to a statistically-valid sample of pharmacies that dispensed prescription drugs to Medi-Cal members during CY2015. Mercer distributed a concurrent census AAC survey to all pharmacies participating in the Medi-Cal blood factor provider program. The AAC letter provided instructions on how to submit June 2016 pharmacy purchase invoices.
- Operated a provider call center and dedicated email address to answer provider questions throughout the survey period.
- Provided an extension to the survey period. The original survey period of July 15, 2016 – August 15, 2016 was extended by one week to August 22, 2016.
- Held a technical assistance stakeholder meeting during the survey collection period to offer providers further assistance completing the surveys.
- Received completed surveys from pharmacies and sent follow-up reminder letters (email and direct mail) to pharmacies that had not submitted the survey by the due date.
- Initiated phone calls to remind non-responsive providers of the due date.
- Screened survey responses for completeness of the data and contacted pharmacies if needed.
- Compiled data into a Mercer database and performed initial cost analysis of the data.
- Conducted a statistical analysis of the PDF data to determine an average cost and percentile distribution of cost of dispensing a prescription to Medi-Cal members.
- Conducted a statistical analysis of the AAC data to determine similarities to and differences from CMS's NADAC list, Medi-Cal's current reimbursement, and other industry standard benchmarks.
- Prepared the draft report.
- Reviewed the draft report with DHCS.

- Finalized the report.

Survey Instrument Development

The 2016 Medi-Cal PDF survey focused on collecting the actual cost incurred by providers that dispense prescription drugs to Medi-Cal members. The survey included independent and chain pharmacies, clinic outpatient pharmacies, LTC pharmacies, home infusion pharmacies, compounding pharmacies, specialty pharmacies, and FQHC/RHC pharmacies. Pharmacies were also asked if they participated in the 340B pricing program. All Medi-Cal participating outpatient pharmacies in the State were included in the PDF survey, so no sampling methods were used.

Mercer designed the PDF survey tool following review of dispensing fee surveys conducted both at the national and individual state levels and based on the needs identified by DHCS and key stakeholders. Mercer developed the questions to assist with the proper allocation of costs by direct pharmacy costs, indirect pharmacy costs and other costs, in the determination of the dispensing fee.

Mercer customized the PDF survey to DHCS's needs by further defining LTC prescriptions as those dispensed by skilled nursing facilities or intermediate care facilities licensed by the California Department of Public Health. Mercer added questions for the dispensing of specialty drugs, at the request of specialty providers.

Development and receipt of the dispensing fee survey tools included:

- Developed survey tool and instructions for completion and submission alternatives.
- Created an online web-based survey.
- Created an Excel®-based spread sheet to accommodate retail pharmacy chains that submitted surveys for multiple locations.
- Established an email support mailbox.
- Established a toll-free number for technical assistance.

The AAC survey did not require development of a specific survey instrument; providers were simply asked to submit a copy of their June 2016 purchase invoices.

Survey Population

A list of all pharmacy providers active in the Medi-Cal program, obtained from DHCS, served as the main data source to identify the study populations.

Mercer and DHCS informed all providers of the PDF survey and asked them to participate. Participation for the PDF survey was not mandatory.

Mercer sent the AAC survey to a statistically-valid sample size of 600 pharmacies. All 61 of Medi-Cal's blood factor providers were also included in the AAC survey; Mercer evaluated their data separately. Mercer and DHCS informed all providers selected for the AAC survey that they

were required to participate by State statute (California Welfare and Institutions Code, Section 14105.45).

Pre-Survey Stakeholder Input

Mercer and DHCS held three pre-survey webinar sessions to seek and respond to provider input. Mercer hosted the webinars on June 16, 2016, June 21, 2016 and July 6, 2016. DHCS sent notices via the Medi-Cal NewsFlash notification service on June 13, 2016 and June 24, 2016 to notify providers of the webinars.

Survey Distribution and Follow-Up

On July 15, 2016, Mercer distributed PDF surveys to 5,644 provider locations:

- Mercer mailed a PDF survey letter, with secure links to the survey tool and survey instructions to 1,977 provider locations.
- Mercer sent a PDF survey electronic file to the providers representing 3,667 pharmacy site locations.

Also on the same day, Mercer distributed AAC survey letters to 600 provider locations and 61 blood factor providers:

- Mercer mailed an AAC survey letter to 206 provider locations and the blood factor providers.
- Mercer sent email notifications to the providers representing 394 pharmacy site locations.

Mercer and DHCS held a fourth webinar on August 2, 2016, to offer technical assistance to providers completing the surveys. Mercer sent reminder letters to non-responding pharmacies on August 1, 2016. Mercer communicated regularly with provider contacts via email and phone in the last weeks of the survey period, which was extended by one week to August 22, 2016.

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Professional Dispensing Fee Survey

Survey Response Rate and Non-Response Bias

Of 5,644 pharmacies in the study population, 2,783 pharmacies responded to the PDF survey, representing a total response rate of 49.3%. Of the 2,783 pharmacies that responded, 2,562 pharmacies provided usable responses to the study, representing a usable response rate of 45.4%; 221 pharmacies provided non-usable responses.

Usable responses were defined as responses that contain sufficient data to permit calculation of the following variables:

- Measurable reporting period.
- Measurable financial reporting period.
- Prescription area square footage.
- Total square footage.
- Total number of prescriptions.
- Prescription sales.
- Total sales (if not an “Other” owner type).
- Prescription department payroll.
- Total prescription department costs.
- Total sales less than total costs of dispensing (if not “Other” owner type).

Responses that were missing critical information required to calculate cost of dispensing were considered unusable and excluded from the analysis. Mercer performed outreach to pharmacies that had a single easily-correctible drop reason, such as missing financial period or missing prescription counts, in an attempt to use as much survey data as possible. However, time constraints necessitated continuing the analysis without updating or including the data if responses were not received timely. In addition, responses which reported total costs of dispensing (which do not include the cost of drug inventory) greater than total sales were deemed unusable. Table 5 reports the numbers and reasons for responses excluded from the sample.

Table 5: Accounting of Unusable Responses

Reason	Number Dropped from Sample*
Missing number of months open	8
Missing total number of prescriptions	15
Missing pharmacy department area square footage	29
Missing total square footage	26
Missing financial period beginning or end	23
Missing prescription sales (not including OTC sales)	37
Missing total sales	36
Missing prescription department payroll	34
Missing prescription department expenses	31
Missing facility costs	38
Missing overhead costs	76
Negative overhead costs	1
Costs of dispensing greater than total sales	93
Sales of specialty prescriptions greater than total sales	10
Total prescriptions more than 10% different from sum of prescriptions	29
Total area more than 10% different from sum of area	13
Open less than a year	72
Outliers (greater or less than three standard deviations from the mean)	67

* Greater than 221 because some pharmacies had multiple missing essential data elements.

The sample was examined for outliers. An initial cost of dispensing was calculated for each pharmacy. Costs of dispensing over $3,000 were flagged as outliers (five pharmacies). The sample was divided into pharmacy type. For each provider type, the mean and standard deviation of the normal log of the cost of dispensing was estimated. Responses greater or less than three standard deviations from the mean were flagged as outliers (42 additional pharmacies). This eliminated retail community pharmacies with costs of dispensing less than $2.17 or greater than $68.41, and LTC pharmacies with costs of dispensing greater than $92.38. Twenty of the outliers reported $0.00 cost to dispense. Sixty-three of the 67 outlier drops had more than this reason to drop the response.

As part of the survey process, pharmacies were asked to select a pharmacy type based on their highest percentage of sales. Those pharmacy types included:

- Retail Chain
- Independent Retail

- Clinic/Outpatient
- Compounding
- LTC
- FQHC
- Home Infusion
- Specialty

Of 2,562 pharmacies providing usable responses to the survey, 2,421 (94.5%) and 98 (3.8%) were classified as chain (four or more stores) and independent pharmacies, respectively. LTC pharmacies provided 18 (0.7%) useable responses and home infusion providers provided 11 (0.4%) useable responses.

Additionally, of the 2,562 usable responses, five (0.2%) were received from clinic/outpatient pharmacies, two (0.1%) were received from compounding pharmacies, four (0.2%) were received from FQHC/RHC pharmacies, and three (0.1%) were received from specialty pharmacies. Due to the small numbers of responses received from clinic/outpatient, compounding, FQHC/RHC, and specialty pharmacies, further analyses were not conducted on these subgroups, reducing the final study sample to 2,548 responses.

To determine whether the distributions of the responding sample by ownership type and geographic characteristics differ from those observed in the study population, Chi-square analysis was performed. Given the disproportionately high response rates of chain pharmacies relative to independent pharmacies (65.8% and 6.3%, respectively) and somewhat higher response rates of metropolitan relative to non-metropolitan pharmacies (45.2% and 43.6%, respectively), Mercer adjusted for non-response bias by applying survey weights in the calculation of the dispensing cost. This adjustment allows the survey results to be generalized to the study population. Specifically, a stratification approach was used to calculate response probability as a function of type of pharmacy (chain versus independent) and geographic characteristics (metropolitan versus non-metropolitan).

The predicted response probability was used to form adjustment cells. Within each adjustment cell, the response weight was calculated as one divided by the probability of response. Survey weights applied to observations summed to the number (5,644) of pharmacies in the study population.

This approach adjusted for the under-representation of independent pharmacies and pharmacies in the rural areas, and allows the survey results to be generalized to the population of 5,644 pharmacies. The approach yielded a higher survey weight for the responses received from independent pharmacies and pharmacies in non-metropolitan areas to create a mix in the sample that is representative of the mix of pharmacy type and geographic characteristics observed in the population. Table 6 shows the characteristics of the survey population, respondents, and respondents weighted by number of pharmacies represented and response probability by geographic and ownership type.

Table 6: Characteristics of the Pharmacy Respondents and Pharmacy Population by Geographic and Ownership Type

Geographic and Ownership Type	Population	Sample (Usable Responses)	Response Rate	Weighting	Sum of Weights of Responses
Metropolitan Chain	3,601	2,365	65.7%	1.523	3,601
Non-Metropolitan Chain	86	60	69.8%	1.433	86
Metropolitan Independent	1,894	118	6.2%	16.051	1,894
Non-Metropolitan Independent	63	5	7.9%	12.600	63

Using the responses and weights by ownership type and geographic location from Table 6 it is possible to calculate the mean weight for each pharmacy type and thereby estimate the population and response rate by pharmacy type. The results of this estimation appear in Table 7.

Table 7: Characteristics of Pharmacy Respondents and Estimated Pharmacy Population by Pharmacy Type

Pharmacy Type	Estimated Population	Sample (Usable Responses)	Estimated Response Rate	Mean Weighting	Sum of Weights of Responses
Home Infusion	104	11	10.6%	9.447	104
Independent Retail	1,559	98	6.3%	15.910	1,559
LTC	82	18	21.9%	4.559	82
Retail Chain	3,899	2,421	62.1%	1.610	3,899

Note the low response rates for all pharmacy types other than retail chain. Such low response rates mean the responding pharmacies may have significant self-selection bias. Moreover, when responses are highly weighted, as in the case of both metropolitan and non-metropolitan independent pharmacies in Table 6 and home infusion and independent retail pharmacies in Table 7, individual observations can cause unjustified aberrations in the results.

Costs and Expenses Elements

Costs included in the calculation include those defined in 42 CFR 447.502, which states "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 beneficiary. 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, overhead associated with maintaining the facility and equipment necessary to operate the pharmacy. ”

The expenses included in the cost of dispensing calculation were classified as: pharmacy or prescription department payroll expenses, pharmacy or prescription department expenses, facility expenses and other administrative expenses. The expenses related to filling a prescription must be identified and allocated to the prescription department relative to the rest of the pharmacy areas. That allocation can be made based on area ratio, sales ratio or 100%. Area ratio was calculated by dividing the prescription department square footage by total square footage. Sales ratio was calculated by dividing prescription sales (not including OTC sales) by total sales for the reporting period.

Salary expenses included in the cost of dispensing calculation are those related to prescription department payroll, including compensation, benefits and payroll taxes. These payroll expenses were allocated at 100% to the prescription department.

Prescription department expenses, allocated at 100%, included:
- Prescription containers, label and other pharmacy supplies.
- Professional liability insurance for pharmacists.
- Prescription department licenses, permits and fees.
- Dues, subscriptions and continuing education for the prescription department.
- Delivery expenses (prescription-related only).
- Computer systems (related only to the prescription department).
- Depreciation directly related to the prescription department.
- Professional education and training.
- Costs attributable to managing 340B participation as a Covered Entity.
- Other prescription department-specific costs not identified elsewhere.

Facility expenses, allocated based on area ratio, included:
- Rent.
- Utilities (gas, electric, water and sewer).
- Real estate taxes.
- Facility insurance.
- Maintenance and cleaning.
- Depreciation (not included depreciation directly related to the prescription department).
- Mortgage interest.
- Other facility-specific costs not identified elsewhere.

Other expenses, allocated based on sales ratio, included:
- Professional services (for example, accounting, legal, consulting).
- Telephone and data communication.
- Security Services.
- Transaction fees, merchant fees and credit card fees.

- Computer system and support.
- Other depreciation not captured elsewhere.
- Office supplies.
- Other insurance.
- Franchise fees.
- Other interest.
- Corporate overhead.
- Other costs not included elsewhere.

Total pharmacy operational expenses, including overhead and labor costs, were obtained by summing payroll expenses, prescription or pharmacy department expenses, facility expenses, and other store expenses allocated to the prescription department. Cost of dispensing a prescription was obtained by dividing the total pharmacy operational expenses by total number of prescriptions (both Medicaid and non-Medicaid) reported in the time period.

In the calculation of average cost of dispensing for retail community and LTC pharmacies, the following expenses were not included, although requested as part of the survey. These were bad debts for prescriptions, including bad debt (mean=$0.30 per prescription); marketing and advertising expenditures (mean=$0.54 per prescription); charitable contributions (mean = $0.02 per prescription); and taxes other than real estate, payroll or sales (mean = $0.06 per prescription). These expenses were excluded from the analysis based on the interpretations of CMS's definition of cost of dispensing, which is consistent with treatment in other states as well as provisions of the Federal Provider Reimbursement Manual CMS Pub 15-1, Section 304 (bad debt), Section 2136. 2 (advertising), and Section 2122. 2 (tax). Mercer notes that these expenses were substantially different for retail community pharmacies and home infusion pharmacies, as shown in Table 8.

Table 8: Costs Not Included Based on CMS Cost of Dispensing Guidelines

Unallowable Cost	Retail Community	Home Infusion
Bad Debts	$0.30	$16.65
Marketing and Advertising	$0.54	$8.24
Charitable Contributions	$0.02	$0.48
Unallowable Taxes	$0.16	$0.65

Of the average cost of dispensing observed for retail community pharmacies, 70.9% of costs were accounted for by prescription department payroll, 19.1% by other store costs, 5.4% by prescription department costs, and 4.6% by facility-related costs as shown in Figure 1.

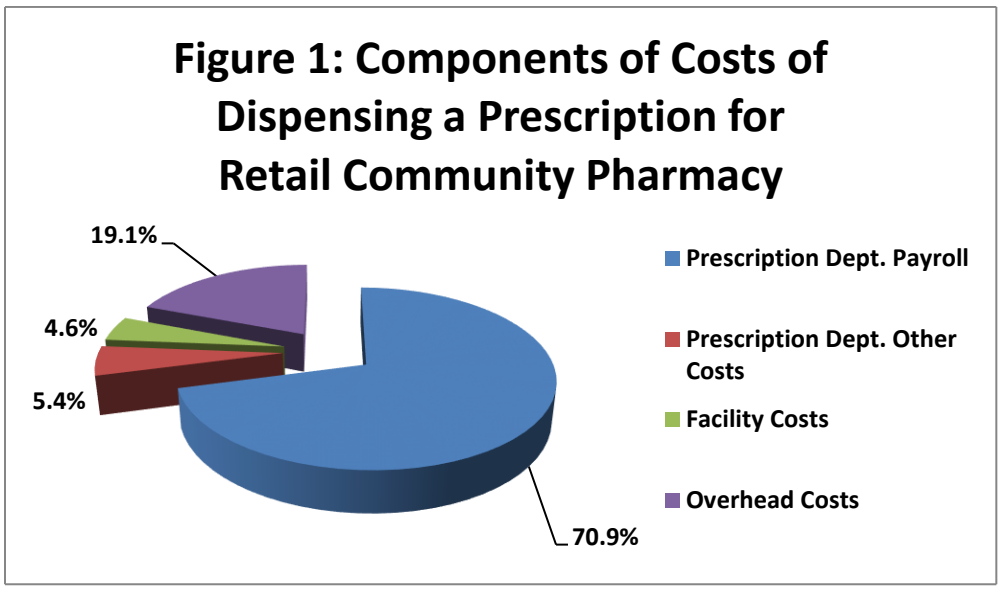
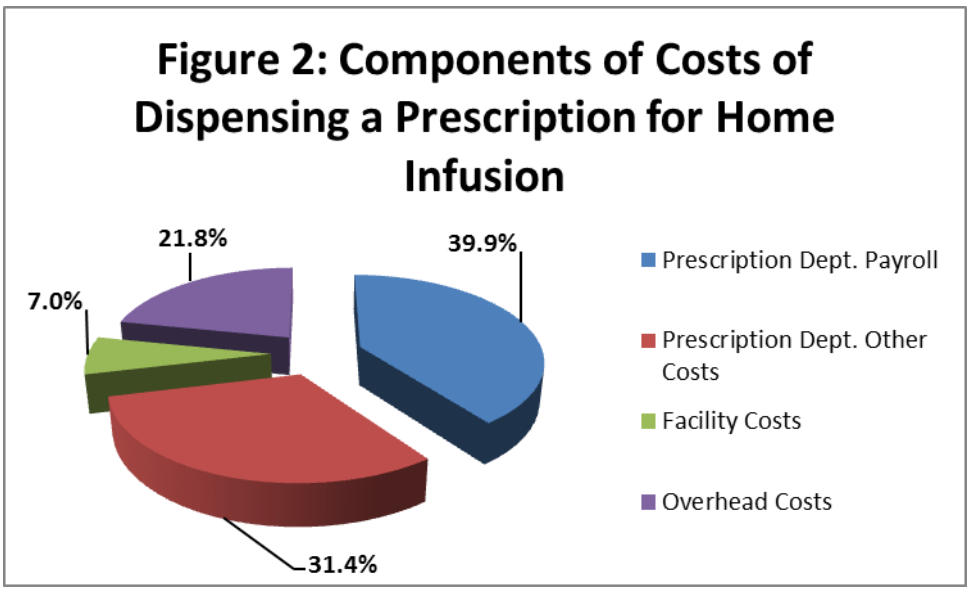


Figure 2 shows the cost components of dispensing a prescription specific to home infusion providers.



Inflation Adjustments

The Consumer Price Index (CPI) published by Bureau of Labor Statistics was used to standardize total pharmacy operational expenses, including overhead and labor costs, to the same time period ending on June 30, 2016 for all urban consumers. Fiscal period end dates reported by pharmacies ranged from December 31, 2014 to December 31, 2016. Table 9 shows

the fiscal period begin and end dates, mid-point CPI index, terminal month CPI index, inflation factor, and number of pharmacies, with the corresponding year end date included in the analysis.

Table 9: Inflation Factors Used to Standardize Costs to July 2016

Fiscal Period Begin Date	Fiscal Period End Date	Mid-point CPI	Terminal Month CPI (July 2015)	Inflation Factor	Number of Pharmacies
1 Jan 2014	31 Dec 2014	235.950	239.828	1.016	1
1 Sep 2014	31 Aug 2015	237.607	239.828	1.009	604
1 Oct 2014	30 Sep 2015	237.570	239.828	1.010	4
28 Dec 2014	26 Dec 2015	236.498	239.828	1.014	859
1 Jan 2015	31 Jul 2015	236.344	239.828	1.015	1
1 Jan 2015	31 Dec 2015	236.498	239.828	1.014	116
2 Jan 2015	31 Dec 2015	236.498	239.828	1.014	1
4 Jan 2015	31 Dec 2016	236.498	239.828	1.014	1
5 Jan 2015	31 Dec 2015	236.498	239.828	1.014	1
1 Feb 2015	31 Jan 2016	236.761	239.828	1.013	8
1 Mar 2015	27 Feb 2016	236.783	239.828	1.013	942
1 Apr 2015	31 Dec 2016	237.119	239.828	1.011	1
1 Jun 2015	31 May 2016	238.417	239.828	1.006	1
1 Jun 2015	1 Jun 2016	238.417	239.828	1.006	1
30 Jun 2015	30 Jun 2016	238.831	239.828	1.004	1
1 Jul 2015	31 May 2016	238.572	239.828	1.005	1
1 Jul 2015	30 Jun 2016	238.831	239.828	1.004	2
1 Jul 2015	31 Jul 2016	238.781	239.828	1.004	1
1 Jan 2016	31 Dec 2016	236.498	239.828	1.014	2

Regression Analysis of Pharmacy Characteristics

A multivariable linear regression model was carried out to examine the relationship between a set of pharmacy characteristics and the average cost of dispensing for each pharmacy, weighted by response probability. The regression modeling informed the cost analysis after initial results were reviewed. The regression model generated results that are representative of all 5,644 pharmacies meeting the study criteria across the State. This statistical method simultaneously considers a set of pharmacy characteristics and their relationship with the average cost of dispensing a prescription. The model performance, R-squared, measures how well the model fits the data and denotes the percentage of variation in average cost of

dispensing accounted for by a set of the pharmacy characteristics. The regression coefficient for each predictor variable represents the additional average cost of dispensing per unit change in the predictor variable, holding all other variables constant.

Based on the survey design, the following pharmacy characteristics were included in the regression model:

- Type of pharmacies.
- Years the pharmacy has been open.
- Pharmacist(s) also an owner.
- Medicaid prescription volume.
- Percent of prescriptions accounted for by Medicaid.
- Total prescription volume.
- Number of Medicaid prescriptions compounded.
- Whether enhanced services, including delivery of Medicaid prescriptions are offered.

The 340B Covered Entity characteristic was not included in the regression analysis as none of the retail community or LTC providers designated that they participated in the 340B purchasing program, and only one of the home infusion providers selected that attribute.

Table 10 shows the results of the regression analysis, examining the relationship between pharmacy characteristics and an average cost of dispensing. Each pharmacy characteristic is represented as a categorical variable, where the reference (base) case is a pharmacy with the following characteristics:

- Retail chain.
- Does not own its building.
- Open for 1–12 years
- No owner-pharmacist(s).
- 0–39,999 total prescriptions annually.
- 0–1.99% of prescriptions accounted for by Medicaid.
- 0–0.099% prescriptions compounded.
- No delivery of Medicaid prescriptions.

The intercept of the regression analysis represents the average cost per prescription for a pharmacy with these characteristics. For each characteristic, the results for the reference pharmacy are displayed as Base, since they are captured by the intercept (base case pharmacy). The result for each non-reference category represents the additional cost of dispensing compared to the base case, holding all other characteristics constant. For each characteristic that varies from the base case, the base cost is increased (decreased) by its associated coefficient.

Overall, the regression model explained 74.5% of the variance in average cost of dispensing a prescription. Based on the tests of the regression coefficients, eight comparisons to the reference case were significantly related to cost of dispensing.
The characteristics that had a significant relationship to the cost of dispensing included:

- Pharmacy type compared to Retail Chain:
  - Home Infusion.
  - Long Term Care.
- Years open:
  - 13–20 years.
  - 21+ years.
- Prescription Volume compared to 0–39,999
  - 90,000 or more.
- Percent Medicaid prescriptions compare 0–1.99%:
  - 5–14.99%.
  - 15% or more.
- Percent of prescriptions compounded compared to 0–0.099%:
  - 1% or more.

Being an independent retail pharmacy, building ownership, pharmacist as an owner, prescription volume less than 90,000, percent of Medicaid prescription of 2–4.99%, percent prescriptions compounded between 0.1–0.99%, and delivery of prescriptions were not significantly related to cost of dispensing after all other characteristics had been accounted for in the base model. The results for the intercept indicate that the average cost of dispensing was $12.05 for the base case (retail chain pharmacy with no owner-pharmacist(s); open for past 1–12 years; 0–39,999 total prescriptions; <2% of prescriptions accounted for by Medicaid; < 0.1% prescriptions compounded; and no delivery of Medicaid prescriptions). The Base case represents the most common combination of attributes described above. The 95% confidence interval of the average cost of dispensing for the base case was $9.43 and $14.68.

The results for percent of prescriptions compounded were counter-intuitive, showing higher costs for fewer prescriptions compounded. As a result, another regression model was run that included interaction terms between pharmacy type and percent prescriptions compounded. Including this relationship increased the amount of variance explained to 87.1%. Moreover, it indicated an additional cost of dispensing for a compounded prescription of $258.11 to $267.17 compared to a regular prescription for non-home infusion pharmacies. For home infusion pharmacies it increased the additional cost of dispensing to $444.71 when compared to the base case in the regression.

A number of additional variables were included in the survey to explore specialty prescription costs. Unfortunately, these appeared to introduce irreconcilable incongruities between specialty revenue and prescription sales and may be a cause of many of the 93 pharmacies that reported higher costs of dispensing than total sales. In any case, introduction of these variables into the regression did not produce intuitive results.

Table 10: Regression Analysis Examining the Relationship Between Pharmacy Characteristics and an Average Cost of Dispensing

			95% Confidence Interval		
Model Predictor	**Level**	**Base and Coefficients**	**Lower Bound**	**Upper Bound**	**P-Value**
Intercept		$12.05	$9.43	$14.68	
Type of Pharmacies	Home Infusion	$293.17	$285.57	$300.77	***
	Independent Retail	-$2.63	-$6.24	$0.98	NS
	Long Term Care	$21.53	$12.38	$30.67	***
	Retail Chain	Base			
Own the Building	No	Base			
	Yes	$2.89	-$0.42	$6.20	NS
Years Open	1–12 Years	Base			
	13–20 Years	$3.32	$1.18	$5.47	**
	21+ Years	$4.55	$2.42	$6.69	***
Pharmacist(s) also an Owner	No	Base			
	Yes	$2.54	-$1.22	$6.30	NS
Prescription Volume	0–39,999	Base			
	40,000–64,999	$0.02	-$2.46	$2.49	NS
	65,000–89,999	-$2.24	-$4.98	$0.50	NS
	90,000 or more	-$5.24	-$8.01	-$2.47	***
Percent Medicaid Prescription	0–1.99%	Base			
	2–4.99%	$3.83	$1.35	$6.31	NS
	5–14.99%	-$3.12	-$5 57	-$0.68	*
	15% or more	$0.81	-$1.77	$3.39	*
Percent Prescriptions Compounded	0–0.099%	Base			
	0.1–0.99%	-$2.68	-$7.31	$1.96	NS
	1% or more	-$27.51	-$32.66	-$22.37	***
Delivery	No	Base			
	Yes	$0.85	-$1.36	$3.05	NS

* p<0. 05, **p<0. 01, ***p<0. 001, NS = not significant

The regression analysis is designed to identify error from the base model. Therefore, during the regression analysis, data is not winsorized. The most statistically significant characteristics

were based on provider type, prescription volume for high volume providers (90,000 or more), length of time the pharmacy has been open and pharmacies with higher level of compounding.

Analysis and Findings

Mercer's initial analysis caused Mercer to focus on the differences in costs between pharmacy types. Table 11 presents means, medians, winsorized means, twenty-fifth percentile and seventy-fifth percentile for each pharmacy type, weighted by response probability. As illustrated in the table, the reported costs of dispensing for home infusion are estimated as an order of magnitude greater than those for all other pharmacy types. Also noted in the table, the number of respondents in this pharmacy type is very low. Mercer believes it likely that a large portion of these costs may not be attributable to dispensing alone and further study of these pharmacies is warranted. Therefore, Mercer has segmented home infusion providers from the other pharmacy provider types in presentation of the PDF survey findings.

Table 11: Means, Medians and Percentile Distribution of Cost of Dispensing by Pharmacy Type Weighted by Response Probability

Pharmacy Type	Number in Sample	Mean	Winsorized Mean*	Median	Twenty-Fifth Percentile	Seventy-Fifth Percentile
Home Infusion	11	$318.60	$306.27	$435.49	$137.99	$455.13
Independent Retail	98	$12.55	$11.87	$10.63	$8.01	$14.13
LTC	18	$12.22	$12.22	$11.92	$9.64	$14.99
Retail Chain	2421	$12.64	$12.46	$11.64	$10.07	$14.07

*Winsorization approach was used to minimize the impact of outliers by setting the cost of dispensing that was below the fifth percentile to fifth percentile and those that were higher than ninety-fifth percentile to ninety-fifth percentile.

Descriptive statistics and measures of central tendency, namely means and medians, are used to determine an average cost of dispensing a prescription by Medi-Cal providers. Table 12 and Table 13 present means and medians weighted by: unweighted, response probability, total number of prescriptions, and total number of Medicaid prescriptions for retail community pharmacies and home infusion providers, respectively.

Unweighted means and medians represent an average cost per prescription per pharmacy for pharmacies in the sample. Means and medians weighted by the response probability allow these measures to be generalized to the full population of pharmacies and denote an average cost per prescription per pharmacy for all pharmacies meeting the study criteria across the State. This approach gives equal weight to each individual pharmacy meeting the study criteria.

Alternatively, means and medians weighted by the total number of prescriptions or number of Medicaid prescriptions are used to determine an average cost for all prescriptions in the sample, rather than the average cost per prescription across all pharmacies. This method is equivalent to

summing all of the total pharmacy operational costs in the sample divided by the total of all prescriptions in the sample. This approach gives a higher weight to pharmacies with a high volume relative to pharmacies with a low volume.

To minimize the impact of low or high outliers in the calculation of average costs, a winsorization approach was used by setting the cost of dispensing that was below the fifth percentile to the fifth percentile, and those that were higher than the ninety-fifth percentile to the ninety-fifth percentile, prior to calculating the statewide average costs. Winsorization was performed separately for home infusion pharmacies and all other pharmacies. The unadjusted means, winsorized means, medians and twenty-fifth and seventy-fifth percentiles of the average cost per prescription estimated according to each weighting method are shown in Table 12 for retail community pharmacies including LTC pharmacies, and in Table 13 for home infusion providers.

In addition to calculating the cost of dispensing a prescription on a statewide basis, the study determined the average costs of dispensing for subgroups of pharmacies classified by various pharmacy characteristics (Appendix A).

Table 12: Means, Medians and Percentile Distribution of Cost of Dispensing, 2,537 Retail Community Pharmacies, Including LTC Pharmacies

Method	Mean	Winsorized Mean*	Median	Twenty-fifth Percentile	Seventy-fifth Percentile
Unweighted	$12.37	$12.24	$11.55	$10.04	$13.80
Weighted by response probability	$12.61	$12.29	$11 41	$9.67	$14.10
Weighted by total prescription volume	$11.34	$11.32	$10.70	$9.50	$12.55
Weighted by Medicaid prescription volume	$10.42	$10.39	$9.89	$8.96	$11.09

*Winsorization approach was used to minimize the impact of outliers by setting the cost of dispensing that was below the fifth percentile to fifth percentile and those that were higher than ninety-fifth percentile to ninety-fifth percentile.

Table 13: Means, Medians and Percentile Distribution of Cost of Dispensing, 11 Home Infusion Providers

Method	Mean	Winsorized Mean*	Median	Twenty-fifth Percentile	Seventy-fifth Percentile
Unweighted	$471.57	$395.07	$455.13	$160.75	$570.24
Weighted by response probability	$318.60	$306.27	$435.49	$137.99	$455.13
Weighted by total prescription volume	$495.15	$447.15	$460.69	$400.46	$570.24
Weighted by Medicaid prescription volume	$476.06	$441.25	$435.49	$435.49	$570.24

*Winsorization approach was used to minimize the impact of outliers by setting the cost of dispensing that was below the fifth percentile to fifth percentile and those that were higher than ninety-fifth percentile to ninety-fifth percentile.

PDF Implementation Alternatives

Mercer has concluded that there are three potentially viable PDF alternatives for DHCS consideration, which are presented immediately below. These implementation alternatives apply to retail community pharmacies, which include retail chain, independent retail and LTC pharmacies. LTC pharmacies are included in this category because the winsorized mean of their cost of dispensing based on response probability is consistent with retail chain and independent retail pharmacies (see Appendix A). After the alternatives are presented, Mercer provides some comparative analysis across the alternatives, the pros and cons for each, and a look at other states' tiered strategies to facilitate a DHCS review for a selected PDF methodology.

PDF Alternative 1: Single Professional Dispensing Fee

The first PDF alternative is the establishment of one single professional dispensing fee of $12.29 across retail community and LTC pharmacies, replacing the current $7.25 for retail community and $8.00 for LTC. Based on analysis of the PDF survey data submitted, Mercer believes that the winsorized mean (a more robust estimator that is less sensitive to outliers) weighted by response probability ($12.29) best represents the average cost of dispensing a prescription across retail community pharmacies within the State.

PDF Alternative 2: Two (2) Tier Professional Dispensing Fee

This alternative proposes two dispensing fee tiers based upon a pharmacy provider's total annual prescription volume, as presented in Table 14 below.

Table 14: Two-Tiered Rate Structure for Retail Community Pharmacies Based on Annual Total Prescription Volume

Annual Total Prescription Volume	Cost of Dispensing Rate
0–89,999	$13.20
90,000 or more	$10.05

PDF Alternative 3: Four (4) Tier Professional Dispensing Fee

This alternative proposes four dispensing fee tiers based upon a pharmacy provider's total annual prescription volume, as presented in Table 15 below.

Table 15: Four-Tiered Rate Structure for Retail Community Pharmacies Based on Annual Total Prescription Volume

Annual Total Prescription Volume	Cost of Dispensing Rate
0–39,999	$14.93
40,000–64,999	$13.21
65,000–89,999	$11.63
90,000 or more	$10.05

Given the significant effect of prescription volume on the cost of dispensing, the PDF study also examined two-tier and four-tier PDF rate structures for retail community and LTC pharmacies based on annual total prescription volume, using the winsorized mean weighted by response probability as the dispensing fee rate within each tier. Based on Mercer's analysis, we believe the best approach to reimbursement is a balance between rewarding the efficiency of high-volume pharmacies with the need for member access to low volume pharmacies, especially in rural or underserved areas. Mercer recommends using the two-tier rate structure based on the winsorized mean for total annual prescription volume.

Using a single rate of $12.29 for retail community pharmacies rewards the efficiency of high volume pharmacies. The two-tier approach provides a balanced approach by aligning with the response data based on statistical significance identified in the regression analysis and aligns reimbursement more closely to the survey data than the single rate method. The four-tier approach provides additional cost savings for Medi-Cal. However, the administrative burden is greater with this approach with its requirement to identify and classify four-tiers of retail community pharmacies. Additionally, because the regression analysis failed to identify statistical significance between lower tiers, there is no statistical proof the four-tier model more closely represents the response data than the two-tier model.

To implement either tiered dispensing fee reimbursement approach, Mercer recommends an annual provider attestation process, including certification by the pharmacy owner, CEO, CFO or a direct delegate to assign the correct dispensing fee reimbursement tier. Mercer further recommends DHCS implement policy specifying that failure to attest with a claims volume survey response would result in assignment to the lowest rate tier. The self-attestation survey process is currently used in, at a minimum, Colorado, Idaho, Oregon and Alaska FFS Medicaid programs, and is proposed in Wisconsin.

Additional policy would need to be established to assign newly enrolled Medicaid pharmacy providers to a dispensing fee tier. Mercer recommends that newly enrolled pharmacies be assigned to the lower volume tier (higher rate) for the first year to allow the new business to accumulate clientele without risk of insolvency due to start-up costs. Pharmacies that are acquired should initially receive the same dispensing fee tier assigned to that pharmacy prior to acquisition. For validation, attestations should be compared to results from the PDF survey submissions and compared year over year. Including Medi-Cal FFS prescription counts on the

attestation survey would provide an additional indicator for verification of the accuracy of the attestation. A random number of attestations and those with material variances from previous years or Medi-Cal prescription counts should be subject to additional verification or validation procedures.

Table 16: Budgetary Impact of Dispensing Fee Changes

Estimated Dispensing Fee Comparison — 12 Months' Utilization (June 2014–May 2015)						
Retail Community Pharmacies	**Prescription Count**	**Current Dispensing Fee**	**Projected Dispensing Fee Amount**	**Difference from Current Methodology**	**Projected Dispensing Fee Increase**	**Difference from PDF Alternative 1**
Single Dispensing Fee (PDF Alternative 1)	14,879,000	$108,755,000	$182,863,000	$74,108,000	68.1%	N/A
Two-Tiered Dispensing Fee (PDF Alternative 2)	14,879,000	$108,755,000	$168,493,000	$59,738,000	54.9%	($14,370,000)
Four-Tiered Dispensing Fee (PDF Alternative 3)	14,879,000	$108,755,000	$164,639,000	$55,884,000	51.4%	($18,224,000)

*Uses projected tier assignment for pharmacies that did not respond to the PDF Survey

Table 17: Pros and Cons of Dispensing Fee Options

***Reimbursement* Method**	***Pros***	***Cons***
Single rate	Minimal administrative burden — No need for attestation survey or consideration of additional verification or validation procedures. Less complex claims processing changes. Rewards efficiency.	Medi-Cal funds are distributed evenly without regard to actual cost and therefore likely overpays high volume retail pharmacies.
Two-tiered rate	Balances rewards for efficiency with improved access to rural and underserved areas. Efficiently distributes Medi-Cal funds with reimbursement levels closely reflecting costs.	Creates the need for annual attestation and consideration of additional verification or validation procedures.
Four-tiered rate	Adds an additional level of efficiency to distribute Medi-Cal funds with reimbursement levels closely reflecting costs. Increases the likelihood of access for Medi-Cal members in underserved or rural areas.	Creates the need for a more complex annual attestation process. Claims processing system capabilities would require additional dispensing fee tiers and consideration of additional verification or validation procedures. Does not reward efficiency.

Comparison to Other States

A tiered approach is becoming more common as states look to reimburse professional dispensing fees more accurately. Tiers in Alaska, Colorado, Idaho, North Carolina and Oregon are part of a growing trend.

Table 18: Medicaid Comparator Dispensing Fees for States Reimbursing AAC Based Ingredient Cost*

State	Ingredient Cost (State AAC or NADAC)	Dispensing Fee
Alabama	Ingredient cost is AAC or if not available WAC, or U/C; ASP + 6% (blood clotting factors)	$10.64

State	Ingredient Cost (State AAC or NADAC)	Dispensing Fee
Alaska	NADAC, if not available WAC + 1%	Dispensing fee is $13.36 (pharmacy located on the road system); $16.58 (mediset pharmacy); $21.28 (pharmacy not located on the road system); $10.76 (out-of-state pharmacy).
Arizona	Ingredient cost is AWP - 15%; FQHCs and FQHC Look-alikes at the lesser of billed charges or the 340B ceiling price	Dispensing fee is $2.00 (FFS only); $8.75 (FQHCs and FQHC Look-alikes)
Colorado	Ingredient cost for all drugs for retail pharmacies, 340B pharmacies, institutional pharmacies, government pharmacies and mail order pharmacies shall be based upon the lower of: • The usual and customary charge to the public minus the client's copayment. • The allowed ingredient cost: the lesser of AAC or submitted ingredient cost. If AAC is not available, then the lesser of WAC or the submitted drug ingredient cost. Submitted Ingredient Cost is a pharmacy's calculated ingredient cost. For drugs purchased through the 340B Drug Pricing Program, the submitted ingredient cost means the 340B purchase price. Ingredient cost for designated rural pharmacies: • AAC. If AAC is not available, then WAC.	Retail, 340B, institutional and mail order pharmacies are tiered based upon annual total prescription volume. Tiers; < 60,000 total per year = $13.40. 60,000–90,000 per year = $11.49. 90,000–110,000 per year = $10.25. > 110,000 per year = $9.31. Dispensing fee is $14.41 (rural pharmacies — state definition); no dispensing fee (government pharmacies) Weighted, winsorized mean for responding pharmacies in 2012: $11.67 and in 2013: $8.06.
Delaware	NADAC	$10.00
Idaho	Ingredient cost is AAC, or where there is no AAC reimbursement is WAC.	Tiered dispensing fees: • < 39,999 claims a year = $15.11. • Between 40,000–69,999 claims per year = $12.35. • 70,000 or more claims per year = $11.51.

State	Ingredient Cost (State AAC or NADAC)	Dispensing Fee
		The average (mean) cost of dispensing, weighted by total prescription volume: $12.19.
Iowa	Ingredient cost is AAC as determined from surveys or where there is no AAC reimbursement is WAC.	$11.73
Louisiana	Ingredient cost is AAC of the drug dispensed or where there is no AAC reimbursement is WAC. Reimbursement for Cost of the Influenza Vaccine at: $17.37 for intramuscular injected influenza vaccine — preservative free, $13.22 for intramuscular injected influenza vaccine, and $22.03 for intranasal influenza vaccine or billed charges, whichever is the lesser amount.	$10.51 includes State provider fee; $10.51 for drugs obtained through the 340B Drug Pricing Program which includes the State provider fee.
Nevada	Ingredient cost is NADAC	Dispensing fee is $9.47
North Carolina	Ingredient cost is NADAC. If NADAC pricing is not available, AAC will be WAC + 0%. Physician administered drugs ASP + 6% or AWP - 10%; for the contraceptive drugs (Implanon and Mirena) WAC + 6%.	Tiered professional dispensing fee: • $13.00 when 85% or more of claims per quarter are for generic or preferred brand drugs. • $7.88 when < 85% of claims per quarter is for generic or preferred brand drugs. • $3.98 for non-preferred brand drugs.
Oregon	Ingredient cost for single source and multiple source drugs is AAC.	Dispensing fee varies by claims volume: • < 30,000 claims a year is $14.01. • 30,000–49,999 claims per year are $10.14. • 50,000 or more claims per year are $9.68.
Washington	Ingredient cost is AWP - 16% (single source drugs); AWP - 16% (multi-source drugs with four or fewer manufacturers/labelers); AWP - 50% (multi-source drugs with five or more manufacturers/labelers and no MAC or FUL); ASP + 6% (physician administered drugs)	Dispensing fee is $4.24 to $5.25 (based on three-tiered pharmacy volume)

State	Ingredient Cost (State AAC or NADAC)	Dispensing Fee

[*] Centers for Medicare and Medicaid Services (CMS), Medicaid Covered Outpatient Drug Reimbursement Information by State. Quarter Ending September 2016. Viewable at the Medicaid Prescription Drug site.

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Actual Acquisition Cost Survey

Two AAC surveys were conducted for research into ingredient cost reimbursement options. The first survey targeted the general population of Medi-Cal provider pharmacies, and the second targeted Medi-Cal enrolled pharmacies dispensing blood factor products to Medi-Cal beneficiaries. The principles guiding the AAC surveys were California statute and Medi-Cal rules. The calculation of AAC rates was weighted by purchase volume, meaning that a purchase of a package of 500 units is more heavily weighted than a package of 100 units. The invoice prices used throughout the analysis were unit prices (per pill, per capsule, etc.) reported in the provider invoices.

Major goals of carrying out the AAC surveys were to compare Medi-Cal provider reported acquisition costs (Medi-Cal AAC) rates to NADAC rates, WAC, AWP, and to assess the budgetary impact of reimbursing provider pharmacies at Medi-Cal AAC rates as compared to current Medi-Cal ingredient cost reimbursement. Since the WAC and AWP rates are established per national drug code (NDC), Mercer calculated weighted averages for all NDCs that fall within a given AAC or NADAC drug grouping.

Aggregation of data for both AAC surveys was performed in SAS 9.4. Statistical analysis was performed in R version 3.2.5 and Microsoft Excel 2010.

Sample Size Calculation

General AAC Survey

A classical sample size calculation takes into account the variation of the outcome that will be measured, the margin of error that is acceptable, the confidence level desired, and the size of the population. The necessary sample size for an AAC survey must further accommodate the likelihood that pharmacies will purchase a low volume drug in a given month and the acceptable proportion of products for which a price cannot be determined.

For this survey the variation of acquisition costs in California pharmacies was not known, nor was the monthly likelihood of the purchase of a low volume drug. Therefore, instead of performing a sample size calculation based on multiple assumptions, Mercer turned to NADAC and found that they have been able to establish a NADAC rate in the great majority of cases using a sample of 500–600 pharmacy responses per month. Therefore, a sample size of 600 pharmacies was determined to be a sufficient sample size for the survey of Medi-Cal pharmacy providers.

Blood Factor Pharmacy Survey

No sample size calculation was performed for the blood factor pharmacy survey and a survey was sent to each blood factor pharmacy provided by DHCS.

Randomized Sample Generation

General AAC Survey

The sample of 600 Medi-Cal pharmacies was randomly chosen from a population list of 5,610 enrolled pharmacies supplied by Medi-Cal. This random sample was selected as described below.

Mercer assigned each of the 5,610 pharmacies to categories based on four criteria: Medi-Cal prescription volume in a 12-month period, Medi-Cal reimbursement amount in a 12-month period, chain or non-chain status, and whether their setting was rural or urban. This list included the National Provider Identification (NPI) number, pharmacy name, address, county, amount of Medi-Cal pharmaceutical reimbursement in the previous year, and number of prescriptions reimbursed by Medi-Cal in the previous year and whether the pharmacy ownership type was chain or not chain. This list was merged with the Health Resources and Services Administration Area Health Resources File (AHRF), which provides a metropolitan rating of counties on a 1–9 scale, with ratings of 1–3 being metropolitan and ratings of 4–9 being non-metropolitan.

Medi-Cal prescriptions and pharmaceutical reimbursement were each transformed into quartile strata. Due to the small numbers of Medi-Cal California pharmacies in counties with AHRF ratings of 4–9, these were transformed to a single, non-metropolitan rating. Pharmacies that lacked or did not have a valid county name were given a metropolitan code of 99. Pharmacies that lacked Medi-Cal prescription counts or pharmaceutical reimbursement amounts were given prescription and paid strata codes of 99.

Pharmacies were then randomly selected to receive an AAC survey. Two hundred five-digit randomization seeds were randomly generated in Excel. These numbers were then used in two hundred iterations seeding the random number generator in Stata, assigning random numbers to the 5,610 pharmacies, selecting the 600 with the smallest random numbers and evaluating the selected pharmacies to the entire population. The evaluation was performed by generating Fisher's exact test *p* values on each of four variables, i.e. the Medi-Cal prescription strata, Medi-Cal reimbursement strata, AHRF metropolitan rating, and chain/non-chain ownership type. The random sample of the iteration with the highest sum of Fisher's exact test *p* values was chosen as the final random sample of 600 pharmacies. All NPIs in that random sample were unique.

Survey Response Rate

General AAC Survey

Three hundred seventy-two pharmacies of the randomized sample of 600 pharmacies contributed data to the general AAC survey, for a response rate of 62.0%. An analysis was performed to assess how representative those pharmacies were of the total population of 5,610

Medi-Cal pharmacies and the random sample of 600 pharmacies that were invited to participate in the AAC survey.

Table 19 compares the randomized sample and respondents to the pharmacy population by AHRF metropolitan category. The percent of pharmacies in each AHRF category is shown for the population, randomized sample, and respondents. They are fairly consistent among categories. The response rate in each category is also relatively consistent. This was confirmed statistically by performing a Fisher's exact test; the test confirms that the respondents to the survey were representative of the State's population of pharmacies.

Table 19: Comparison of Sample and Respondents to Pharmacy Population — AHRF Metropolitan Rating

Metropolitan	Population		Randomized Sample		Respondents		Response Rate
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Percent
1	4,228	75.4%	455	75.8%	288	77.4%	63.3%
2	992	17.7%	105	17.5%	58	15.6%	55.2%
3	188	3.4%	17	2.8%	13	3.5%	76.5%
4	149	2.7%	17	2.8%	9	2.4%	52.9%
99	53	1.0%	6	1.0%	4	1.1%	66.7%
Total	**5,610***		**600**		**372**		**62.0%**
Fisher's exact *p*			0.956		0.845		

*Number does not match total count for PDF survey due to additional PDF respondents not on initial DHCS list.

Table 20 compares the randomized sample and respondents to the pharmacy population by Medi-Cal reimbursement amount quartile. The percent of pharmacies in each quartile is shown for the population, randomized sample and respondents. They are fairly consistent among quartiles. The response rate in each quartile is also relatively consistent (50–66.7%). This was confirmed statistically by performing a Fisher's exact test; again, in this case, the test confirms that the respondents to the survey were representative of the State's population of pharmacies.

Table 20: Comparison of Sample and Respondents to Pharmacy Population — Medi-Cal Paid Amount

Quartile	Population		Randomized Sample		Respondents		Response Rate
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Percent
1	1,389	24.8%	155	25.8%	100	26.9%	64.5%
2	1,388	24.8%	147	24.5%	98	26.3%	66.7%
3	1,389	24.8%	146	24.3%	85	22.8%	58.2%
4	1,388	24.8%	148	24.7%	87	23.4%	58.8%

Quartile	Population		Randomized Sample		Respondents		Response Rate
99	56	0.9%	4	0.7%	2	0.5%	50.0%
Total	5,610		600		372		62.0%
Fisher's exact *p*			0.926		0.634		

Table 21 compares the randomized sample and respondents to the pharmacy population by Medi-Cal prescription count quartile. The percent of pharmacies in each quartile is shown for the population, randomized sample, and respondents. They are fairly consistent among quartiles. The response rate in each quartile is also relatively consistent (50.0–68.0%). This was confirmed statistically by performing a Fisher's exact test; the test showed that the respondents to the survey were representative of the State's population of pharmacies for this measurement as well.

Table 21: Comparison of Sample and Respondents to Pharmacy Population — Medi-Cal Prescription Count

Quartiles	Population		Randomized Sample		Respondents		Response Rate
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Percent
1	1,390	24.8%	147	24.5%	100	26.9%	68.0%
2	1,387	24.7%	149	24.8%	96	25.8%	64.4%
3	1,389	24.8%	145	24.2%	83	22.3%	57.2%
4	1,388	24.7%	155	25.8%	91	24.5%	58.7%
99	56	1.0%	4	0.7%	2	0.5%	50.0%
Total	5,610		600		372		62.0%
Fisher's exact *p*			0.916		0.658		

Table 22 compares the randomized sample and respondents to the pharmacy population by chain/non-chain ownership type. The percent of pharmacies in each quartile is shown for the population, randomized sample, and respondents. They are fairly consistent between the population and randomized sample, but there were many fewer non-chain pharmacy respondents than there were non-chain pharmacies in the population (18.8% versus 34.2%). The response rate of chain versus non-chain pharmacies was nearly twice as high for chain pharmacies as for non-chain pharmacies (75.9% versus 34.7%). This was confirmed statistically by performing a Fisher's exact test; in this case, there is a statistically significant difference between the survey respondents and the State's population of pharmacies. Mercer believes the higher response rate of chain pharmacies results in lower generic-drug AAC rates than if non-chain pharmacies had been the primary responders. This helps explain why the State's AAC rates for generic drugs are lower than the NADAC rates in aggregate, as it is Mercer's understanding that the large chains generally do not respond to the NADAC survey.

Table 22: Comparison of Sample and Respondents to Pharmacy Population — Chain Versus Non-Chain

Chain	Population		Randomized Sample		Respondents		Response Rate
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Percent
Non-Chain	1,916	34.2%	202	33.7%	70	18.8%	34.7%
Chain	3,694	65.8%	398	66.3%	302	81.2%	75.9%
Total	5,610		600		372		62.0%
Fisher's exact *p*			0.820		< 0.001		

Blood Factor Pharmacy Survey

Twenty-seven of the 61 blood factor pharmacies responded for a response rate of 44.3%. Because this survey population was not identified using a randomized sample, no analysis was performed comparing the respondents to the population of pharmacies offering blood factor products.

Pharmacy Data Filtering

Both Surveys

A full month of pharmacy provider purchase data was requested from each Medi-Cal pharmacy in each AAC survey. The data requested included NDC, package price, order date and number of packages purchased for all purchases during June 2016. The WAC, AWP and NADAC rates were added to each purchase line based on the NDC. Whether the NDC appears on the Medi-Cal MAIC list was also appended to each purchase line. In cases where a pharmacy purchased the same product multiple times per month, the pharmacy's invoice was narrowed to the last (most-recent) purchase of each Medi-Cal covered NDC. This ensured that the analysis used the most up-to-date marketplace pricing available in the study period. NDC's were then grouped according to the methods used by the NADAC survey to establish NADAC brand and generic rates.

For the general AAC sample, 638,074 purchase lines were received from pharmacies, while 16,989 purchase lines were received from the blood factor pharmacies. After filtering for the last purchase of each Medi-Cal-covered NDC, 271,231 purchase lines remained for the general AAC sample and 6,512 for the blood factor pharmacy sample. Table 23 gives a summary of the number of purchase lines received for each survey.

Table 23: Summary of Purchase Data Received for June 2016

	General AAC Survey	Blood Factor Survey
Purchase lines received	638,074	16,989
Purchase lines after filtering	271,231 (42.5% of total)	6,512 (38.3% of total)
Mean purchase lines per pharmacy	729.1	241.2
Minimum purchase line per pharmacy	1	2

	General AAC Survey	Blood Factor Survey
Maximum purchase lines per pharmacy	1959	1802
Unique NDCs received	13,870	3,981
Unique pricing groups received	5,962	2,915

Outlier Detection

Both Surveys

Invoice purchase lines submitted lacking a unit price or package size were excluded from the analysis. Additionally, purchase lines for NDCs lacking both a WAC price and AWP price were excluded from the analysis. A number of industry-specific routines were then run to detect outliers, followed by the use of the general purpose Chauvenet's criterion. The industry-specific routines included:

- Exclude purchase lines with a price > 115% of WAC. Mercer considers price points this high to be unlikely and a result of misreporting.
- Exclude purchase lines for brand drugs with prices < 80% of WAC (general AAC sample only). Mercer believes reported purchase prices of brand drugs at this great of a discount may be 340B purchased drugs, which should not be allowed to factor into an AAC survey.
- Exclude purchase lines with a price greater than AWP. Mercer considers price points this high to be unlikely and a result of misreporting.

Chauvenet's criterion is a general purpose technique for identifying outliers in any dataset. Chauvenet's criterion assumes an observation may be rejected if the probability of obtaining the deviation from the mean for that value is less than the inverse of twice the number of observations. This method of outlier exclusion is similar to other methods, such as standard deviation exclusions. Mercer believes keeping more purchase data in the analysis is preferable, where possible.[1–3] See Equation 1.

Equation 1

$$p\left(\frac{abs(x-\bar{X})}{SD}\right) < 1/2n$$

Application of the outlier identification routines excluded a modest number of purchase lines from analysis. Table 24 presents the numbers and reasons for purchase lines that were excluded from the AAC analyses.

Table 24: Numbers of Purchase Lines Excluded due to Missing Data, Outlier Detection, or Other Exclusion

	General AAC Sample	General AAC Percent of Total	Blood Factor Sample	Blood Factor Percent of Total
Missing unit price or package size	1,891	0.3%	30	0.0%

	General AAC Sample	Percent of Total	Blood Factor Sample	Percent of Total
Missing both WAP and AWP	414	0.1%	3	0.0%
Price > 115% of WAC	1,253	0.2%	393	0.1%
Brand Price < 80% of WAC	4,204	0.7%	NA	NA
Price > AWP	693	0.1%	337	0.1%
Chauvenet's criterion	957	0.1%	23	0.0%
Supply products	2,732	0.4%	71	0.0%
All Reasons	11,538	1.8%	523	0.1%

In addition to exclusion due to missing data, industry-specific outlier reasons, and outlier detection with Chauvenet's criterion, certain supply products, i.e. syringes, were also excluded from the analysis.

Pricing Criteria

General AAC Survey

AAC prices were determined for pricing groups which had a minimum of five invoice observations similar to how NADAC rates are calculated. Mercer's pricing groups mirror NADAC's pricing groups. The NADAC groups drugs at a more-granular level than First Databank's Generic Code Number (GCN) or Generic Sequence Number (GSN). A given GCN or GSN can have more than one NADAC price depending on factors specific to the drugs in the group, such as package size.

Blood Factor Pharmacy Survey

AAC prices were determined only for pricing groups that met certain criteria. These criteria were based on the minimum number of purchases, margin of error and confidence level, which varied for each pricing group. The pricing criteria adopted were a minimum of three observations, margin of error of 10.0% of the mean, and 95.0% confidence level. The driver of these criteria was principally the desire to evaluate as many rates as possible with the limited sample of purchases available.

Determination of Statistical Significance

Both Surveys

In the comparison of AAC to NADAC, WAC, and AWP prices, the standard of statistical significance was set at $p \leq 0.05$. Since NADAC, WAC and AWP prices are not published with a measure of variance such as standard error (SE) or standard deviation (SD) and number of observations, the one sample Z-test was used to determine statistical significance of differences between AAC and these prices.

There is not a single definitive method for calculating the weighted standard error of the mean. Mercer employed the method advanced by Cochran in his 1977 book *Sampling Techniques*

seen as Equation 2 below.[4] This method was compared to two other methods in Gatz and Smith 1995 and was found to be the most accurate of three deterministic methods of calculating the weighted standard error of the mean.[5]

Equation 2

$$(SEM_w)^2 = \frac{n}{(n-1)(\sum P_i)^2}[\sum(P_iX_i - \bar{P}\bar{X}_w)^2 - 2\bar{X}_w\sum(P_i - \bar{P})(P_iX_i - \bar{P}\bar{X}_w) + \bar{X}_w^2\sum(P_i - \bar{P})^2]$$

The weighted SE was employed to determine both statistical significance and margin of error.

AAC Results

General AAC Survey Results

The analysis examined AAC calculated rates for all pharmaceutical products purchased by Medi-Cal pharmacies, and for the subgroup of those products for which MAIC rates have been established by Medi-Cal. Within each of these groups, the analysis was further divided between those products for which NADAC rates have been published and those without NADAC rates. Table 25 presents high level statistics on the survey. Of the 600 pharmacies that were randomly chosen to be part of the sample, 372 pharmacies participated. Of 10,881 pricing groups represented on Medi-Cal's covered drug list, 5,599 were present in the purchase data. The mean margin of error in these groups was 13.3%. Of the 5,599 pricing groups present, 3,721 pricing groups met the pricing criteria to establish an AAC rate. These pricing groups had a mean margin of error of 2.7%.

Table 25: High Level Statistics, General AAC Survey

General AAC Survey	Entire AAC Provider Sample	AAC Rates Determined
Number of pharmacies	372	NA
Number of pricing groups	5,599	3,721
Mean margin of error (% of mean)	13.3%	13.0%
Mean number of observations per pricing group	46.7	69.2
Median number of observations per pricing group	12	32

For those drug pricing groups with enough purchase data to set an AAC rate, Mercer assessed the AAC rates in comparison to NADAC, and the budgetary impact of an AAC reimbursement strategy. Mercer was able to calculate an AAC rate for 3,721 pricing groups out of 10,881 pricing groups covered by Medi-Cal. Of these 3,721 groups, 3,439 also have a NADAC rate.

Table 26 below shows the projected annual Medi-Cal pharmacy reimbursement amount at the AAC rates is 1.7% less than the projected reimbursement if paid at the NADAC rates. The difference is much larger for generic drugs, with a projected paid amount at AAC reimbursement 38.2% less than NADAC based reimbursement. However, generic products with both AAC rates and NADAC rates only comprise approximately 3% of the total AAC projected paid amount. Brand drug AAC rates show very little variance from NADAC rates (0.1%) and make up over 97% of the AAC projected paid amount.

Table 26: Drugs with Both AAC and NADAC — NADAC Versus AAC Reimbursement Comparison

NADAC/AAC Comparison — 12 Months' Utilization (June 2014–May 2015)					
Drug Type	**Claim Count**	**Paid at NADAC**	**Paid at AAC**	**AAC Versus NADAC**	**% Difference**
Brand	4,211,000	$2,631,820,000	$2,630,009,000	-$1,811,000	-0.1%
Generic	8,055,000	$121,139,000	$74,864,000	-$46,275,000	-38.2%
Total	12,266,000	$2,752,959,000	$2,704,873,000	-$48,086,000	-1.7%

When calculating the budgetary impact of reimbursing pharmacy providers based on Medi-Cal provider AAC rates, Mercer used current Medi-Cal reimbursement logic (Estimated Acquisition Cost, or EAC) to project the spend fiscal impact. Medi-Cal's current EAC logic is to reimburse pharmacy claims at the lesser of AWP - 17%, MAIC, or FUL.

Table 27 below shows the results of this comparison. Total projected paid amounts using Medi-Cal provider AAC rates were 6.1% less than current EAC. This table shows an even greater disparity in generic drug rates, with Medi-Cal provider AAC rates projected to be 61.1% lower than current EAC reimbursement.

Table 27: Drugs with Both AAC and NADAC — EAC Versus AAC Reimbursement Comparison

EAC/AAC Comparison — 12 Months' Utilization (June 2014–May 2015)					
Drug Type	**Claim Count**	**Paid at EAC**	**Paid at AAC**	**AAC Versus EAC**	**% Difference**
Brand	4,211,000	$2,686,732,000	$2,630,009,000	-$56,723,000	-2.1%
Generic	8,055,000	$192,660,000	$74,864,000	-$117,796,000	-61.1%
Total	12,266,000	$2,879,392,000	$2,704,873,000	-$174,519,000	-6.1%

Table 28 below shows the comparison between EAC and NADAC for this same subset of drugs. This option does potentially overpay providers for generic drugs compared to using AAC rates.

Table 28: Drugs with Both AAC and NADAC — EAC Versus NADAC Reimbursement Comparison

EAC/NADAC Comparison — 12 Months' Utilization (June 2014–May 2015)					
Drug Type	**Claim Count**	**Paid at EAC**	**Paid at NADAC**	**EAC vs. NADAC**	**% Difference**
Brand	4,211,000	$2,686,732,000	$2,631,820,000	-$54,912,000	-2.0%
Generic	8,055,000	$192,660,000	$121,139,000	-$71,521,000	-37.1%
Total	12,266,000	$2,879,392,000	$2,752,959,000	-$126,433,000	-4.4%

AAC Implementation Alternatives

AAC Alternative 1: Adopt NADAC Rates for Brand and Generic Products

The first drug pricing alternative is to adopt NADAC rates for Medi-Cal FFS pharmacy claims. Based on Mercer's analysis of one year's worth of Medi-Cal FFS claims that had both NADAC and usable AAC rates (five or more price observations), this strategy would reduce ingredient cost expenditures by approximately 4.4%, or $126 million annually, and would offer the simplicity of a single-list reference point for reimbursement of most products covered by Medi-Cal. The main challenge with this approach is the lack of NADAC rates for many specialty drugs and supplies.

Mercer's analysis of Medi-Cal's claims data indicates approximately 10% of all drug claims in the study period would not have a NADAC rate on file for reimbursement. In those cases, Medi-Cal would need to designate a secondary benchmark reimbursement rate, such as a WAC or AWP discount. Medi-Cal's current reimbursement structure of AWP - 17% is roughly equivalent to WAC+0%, resulting in approximately the same ingredient cost on this subset of drugs. Mercer is aware of other states using WAC+0% as a FFS reimbursement metric.

Table 29: NADAC Availability	**NDC Count**	**GSN Grouping Count**	**Claim Count**
Total with NADAC		4,560	N/A
Total with No NADAC	16,050	6,050	N/A
Total with Medi-Cal Utilization and NADAC	13,680	3,890	12,518,200

Table 29: NADAC Availability	NDC Count	GSN Grouping Count	Claim Count
Total with Medi-Cal Utilization and No NADAC	4,290	2,490	1,247,800
Total with Medi-Cal Utilization and No NADAC, No WAC	310	N/A	26,400
Total with Medi-Cal Utilization and No NADAC, WAC or AWP	30	N/A	800

In instances where NADAC pricing is not available, another option to consider is selecting the WAC effective rate of WAC - 2.4% for brand products and WAC - 44.3% for generic products based on the analysis of Medi-Cal provider invoice data. The NADAC equivalent WAC effective discounts calculated based on Medi-Cal drug mix and utilization are similar to the WAC effective discounts published by CMS (WAC - 3.4% for brands and WAC - 41% for generics) in April 2016 (State Reimbursement Requirements Webinar, April 28, 2016, CMS Division of Pharmacy).

Medi-Cal would be paying more than the California specific actual acquisition cost paid by Medi-Cal enrolled pharmacies if NADAC rates are utilized as the reimbursement benchmark. Although CMS has provided guidance that NADAC would meet the intent of AAC reimbursement in the final rule, the State would be paying approximately 1.7% over Medi-Cal AAC if NADAC reimbursement was to be implemented. Mercer is aware of state FFS Medicaid programs that have moved to implement NADAC ingredient cost reimbursement including Texas.

AAC Alternative 2: Adopt AAC Rates Based on Medi-Cal Provider Surveys

Another drug pricing alternative Medi-Cal can consider is to adopt Medi-Cal specific AAC rates for Medi-Cal FFS pharmacy claims. On the same subset of drugs as AAC Alternative 1 above, this strategy would reduce ingredient cost expenditures by approximately 6.1% compared to the current EAC reimbursement methodology (approximately $174 million based on June 2014 through May 2015 utilization). This option would require a vendor contracting process to establish, maintain and update AAC rates as well as provide a provider help desk to handle inquiries or rate disputes. For the NADAC, this is handled by CMS' vendor.

AAC Alternative 3: Adopt NADAC Effective Discount for Generic Products

Medi-Cal may also want to consider implementing a NADAC discount for generic products to approximate the Medi-Cal AAC rate based on this analysis. For example, the generic claim effective NADAC discount would be NADAC - 38.2% for generic products. Based on Mercer's analysis, the NADAC rates established by CMS are similar to the brand AAC rates calculated based on Medi-Cal provider invoices. Based on this analysis, Mercer would not recommend a discount be applied to NADAC for brand products.

In 2016, Texas introduced a "NADAC-minus" price point for certain aspects of their program, establishing a precedent for other states to consider in their reimbursement logic. Implementing a NADAC effective discount for all generics or MAIC products would provide approximately

$46 million in additional cost savings annually when compared to simply using NADAC for all claims, providing a total estimated cost savings to DHCS of $172 million for this alternative.

If Medi-Cal were to implement a NADAC discount to the ingredient cost reimbursement, Mercer recommends that the effective discount be reviewed annually to ensure that any variance between NADAC rates and Medi-Cal provider AAC be identified timely and adjustments made to the reimbursement process.

Blood Factor Pharmacy Survey Results

The blood factor product invoice analysis examines AAC rates for all blood factor product purchases by Medi-Cal blood factor designated pharmacies.

Of the 61 pharmacies dispensing blood factor products to Medi-Cal members, 27 pharmacies responded to the survey. Of 10,881 pricing groups represented on Medi-Cal's covered drug list, 2,823 were present in the purchase data. The drug purchases evaluated were limited to blood factor drug purchases only.

Mercer assessed the budgetary impact of an AAC reimbursement strategy for the blood factor drugs with enough purchase data to establish an AAC rate. Mercer was able to calculate an AAC rate for 19 drug price groupings related to blood factor products. The 19 drug pricing groups contain 48 unique blood factor NDCs, or about one-third of the total number of covered blood factor NDCs on the Medi-Cal covered drug list.

None of the blood factor products have a NADAC rate established, and per Medi-Cal policy these products are reimbursed differently from other outpatient drug claims. Specifically, the blood factor products are currently reimbursed at the lesser of the manufacturer's ASP, as reported by CMS quarterly, plus 20%, or the provider's U&C. Due to the lack of NADAC pricing for these drugs and the different reimbursement strategy currently utilized by Medi-Cal, Mercer performed a budgetary analysis focused only on the blood factor products, disregarding other drugs purchased by the pharmacies identified by DHCS as blood factor pharmacies.

As outlined in Table 30, Mercer's analysis of one-years' worth of Medi-Cal FFS claims data for the blood factor products shows that the actual Medi-Cal paid amount found in the claims data is very similar to projected payments at the calculated Medi-Cal AAC rate for blood factor products, and slightly above projected payments using a comparator Medicaid State Hemophilia MAC list maintained by Mercer that is intended to incentivize higher volume blood factor purchasing. Please note that Medi-Cal blood factor paid claims data includes those claims also paid at 340B prices. The projected paid amount at the Medi-Cal calculated AAC rate is lower than the projected ASP + 20% paid amount based on the July 2016 ASP rates. Mercer believes this is due to some of the blood factor providers purchasing their hemophilia products at 340B prices and reporting the 340B invoice cost on their claim as the U&C amount, which is providing the lesser of price point for reimbursement.

Table 30: Blood Factor Reimbursement Comparisons

Blood Factor Drugs with Medi-Cal Survey AAC Rates — 12 Months' Utilization (June 2014–May 2015)		
	Total	**Difference from Medi-Cal Paid Amount**
Medi-Cal paid amount*	$157,402,000.00	N/A
Estimated paid amount at July 2016 ASP + 20%	$179,444,000.00	$22,042,000.00
Estimated paid amount at July 2016 ASP + 6%	$158,509,000.00	$1,107,000.00
Estimated paid amount at Medi-Cal AAC*	$157,753,000.00	$351,000.00
Estimated paid amount at July 2016 comparator state Hemophilia SMAC list**	$152,204,000.00	($5,198,000.00)

* Includes some 340B priced claims

**Comparator state list intended to encourage volume purchasing.

Blood Factor Pricing Implementation Alternatives

The blood factor product invoice analysis examines AAC rates for all blood factor product purchases by Medi-Cal blood factor designated pharmacies. As a result of this analysis, Mercer has concluded there are two viable alternatives for the pricing of blood factors, presented below.

Blood Factor Alternative 1: Lesser of ASP + 20%, or U&C (Current Reimbursement)

The first blood factor drug pricing alternative is to maintain the current pricing logic. Mercer's analysis shows that the current paid amount based on paid claims is very similar to an implementation of a blood factor AAC rate schedule based on Medi-Cal submitted invoices. This alternative would require no system or regulatory changes, and no provider education for any billing changes. However, Mercer would recommend some type of auditing to be considered to ensure that providers are truly submitting AAC on all blood factor claims. Without an audit backend process to ensure compliance, some providers may not be passing through U&C or AAC costs (for example, 340B discounted rate) on the claims.

Blood Factor Alternative 2: Lesser of ASP + 6%, or U&C

The second blood factor pricing alternative is to adjust the current lesser of ASP + 20% or U&C logic to be the lesser of ASP + 6% or U&C. ASP + 6% is a common rate in the industry, including being very similar to the base rate that CMS uses for Part B drugs (does not include the CMS' per unit clotting factor "furnishing fee"). Mercer's analysis shows that this rate strategy projects an estimated $20 million cost savings as compared to blood factors drug claims paid at ASP + 20%. This alternative would require system updates and provider education, but would potentially protect the State against unexpected budgetary outlay if a larger number of claims were to come from providers who would get reimbursed at the ASP rate. However, Medi-Cal will need to consider total reimbursement (ingredient cost plus PDF) as alternative reimbursement options are considered.

Other options may include the establishment of (1) MAIC rates for blood factor products split for 340B versus non-340B providers (current North Carolina model) or (2) MAIC rates for blood factors, incentivizing high volume pharmacies with rates more closely aligned with significant

volume or 340B discounts or (3) an effective WAC discount equivalent to the Medi-Cal AAC for these products. This is an approach similar to some commercial PBM reimbursement and other state Medicaid FFS programs (For example, Wisconsin [WAC - 10%] or TennCare [range of AWP - 16% to AWP- 26% or Texas [WAC - 8% for all specialty including hemophilia and separate 340B hemophilia pricing].

References

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APPENDIX A

Pharmacy Characteristics

Pharmacy Characteristics and Average Cost of Dispensing a Prescription — All Usable Pharmacies

				Winsorized Means Weighted By:				Medians Weighted By:			
Pharmacy Type	n	N	% of the population	Un-weighted	Response probability	Total Rx Volume	Medicaid Rx Volume	Un-weighted	Response probability	Total Rx Volume	Medicaid Rx Volume
Home Infusion	11	104	1.8%	$395.07	$306.27	$447.15	$441.25	$455.13	$435.49	$460.69	$435.49
Independent Retail	98	1,559	27.6%	$11.85	$11.87	$10.36	$10.29	$10.58	$10.63	$9.07	$8.80
LTC	18	82	1.5%	$13.32	$12.22	$13.79	$13.74	$12.46	$11.92	$14.99	$14.99
Retail Chain	2,421	3,899	69.1%	$12.25	$12.46	$11.23	$10.29	$11.59	$11.64	$10.66	$9.90
Length of Time in Business											
1–12 Years	781	1,838	32.6%	$13.75	$19.71	$11.78	$10.75	$11.91	$12.03	$11.11	$9.99
13-20 Years	1,103	1,967	34.9%	$12.67	$15.61	$11.57	$11.07	$11.92	$11.76	$10.95	$10.01
21+ Years	653	1,808	32.0%	$12.27	$15.92	$11.00	$9.92	$10.75	$10.83	$10.15	$9.71
Pharmacist is Also Owner											
No	2,465	4,252	76.8%	$12.25	$12.41	$11.32	$10.35	$11.58	$11.54	$10.70	$9.90
Yes	83	1,288	23.2%	$11.99	$11.88	$11.46	$11. 22	$10.75	$10.65	$9.89	$9.59
Yearly Medicaid Prescription Volume											
0–999	725	1,538	27.3%	$17.72	$28.34	$14.67	$16.48	$14.12	$14.17	$13.38	$13.88
1,000–3,999	731	1,459	25.9%	$14.51	$14.34	$12.87	$13.95	$12.07	$12.07	$11.48	$11.68
4,000–11,999	576	1,349	23.9%	$11.68	$16.29	$10.64	$11.60	$10.48	$10.56	$10.18	$10.44
12,000 or more	516	1,298	23.0%	$10.12	$10.34	$10.28	$9.95	$9.75	$9.59	$9.72	$9.52
Percent Medicaid Prescription											
0–1.99%	818	1,563	27.7%	$14.48	$19.21	$13.37	$12.72	$13.43	$13.40	$12.61	$12.47
2–4.99%	634	1,239	22.0%	$15.26	$20.18	$12.26	$12.59	$11.64	$11.99	$10.95	$10.88
5–14.99%	648	1,360	24.1%	$13.50	$16.25	$11.35	$11.12	$10.67	$10.84	$10.42	$10.38
15% or more	448	1,481	26.2%	$11.45	$15.38	$10.04	$10.16	$9.91	$9.79	$9.54	$9.51
Total Yearly Prescription Volume											
0–39,999	346	1,206	21.4%	$25.95	$33.43	$20.94	$26.88	$16.68	$15.59	$16.10	$15.91
40,000–64,999	670	1,597	28.3%	$15.11	$18.22	$14.89	$13.97	$13.44	$13.41	$13.39	$13.13
65,000–89,999	650	1,246	22.1%	$11.41	$11.63	$11.36	$10.97	$11.17	$11.08	$11.13	$10.69
90,000 or more	882	1,596	28.3%	$10.07	$10.05	$10.24	$9.76	$9.75	$9.68	$9.76	$9.41
Percent Compounded Prescriptions											
0–0. 099%	2,497	5,178	91.7%	$12.57	$14.94	$11.30	$10.22	$11.53	$11.40	$10.65	$9.85
0.1–0.99%	26	225	4.0%	$12.66	$12.23	$13.02	$13.20	$11.76	$10.11	$13.78	$13.09
1% or more	25	241	4.3%	$147.69	$82.17	$28.29	$30.61	$20.98	$20.98	$16.39	$16.39
Medicaid Prescriptions Delivered											
No	2,031	3,786	67.1%	$12.16	$12.35	$11.05	$10.17	$11.33	$11.40	$10.45	$9.80
Yes	517	1,858	32 9%	$20 69	$28 61	$14 20	$13.75	$12.23	$11.67	$11.92	$11.16

n = number in sample; N = estimated number in population

Pharmacy Characteristics and Average Cost of Dispensing a Prescription — Retail Community Pharmacies Including LTC Pharmacies

				Winsorized Means Weighted By:				Medians Weighted By:			
Characteristic	n	N	%	Un-weighted	Response probability	Total Rx Volume	Medicaid Rx Volume	Un-weighted	Response probability	Total Rx Volume	Medicaid Rx Volume
Length of Time in Business											
1–12 Years	777	1,774	32.0%	$12.74	$12.83	$11.73	$10.73	$11.90	$11.84	$11.11	$9.99
13-20 Years	1,102	1,951	35.2%	$12.29	$12.16	$11.53	$10.60	$11.92	$11.72	$10.95	$10.01
21+ Years	652	1,792	32.3%	$11.59	$11.93	$10.60	$9.92	$10.74	$10.77	$10.15	$9.71
Pharmacist is Also Owner											
No	2,455	4,252	76.8%	$12.25	$12.41	$11.32	$10.35	$11.58	$11.54	$10.70	$9.90
Yes	82	1,288	23.2%	$11.99	$11.88	$11.46	$11.22	$10.75	$10.65	$9.89	$9.59
Yearly Medicaid Prescription Volume											
0–999	718	1,455	26.3%	$14.55	$14.47	$13.66	$14.21	$14.10	$13.96	$13.38	$13.87
1,000–3,999	728	1,455	26.3%	$12.50	$12.81	$11.86	$12.29	$12.06	$12.06	$11.48	$11.68
4,000–11,999	575	1,333	24.1%	$10.94	$11.24	$10.59	$10.89	$10.48	$10.53	$10.18	$10.42
12,000 or more	516	1,298	23.4%	$10.12	$10.34	$10.28	$9.95	$9.75	$9.59	$9.72	$9.52
Percent Medicaid Prescription											
0–1.99%	816	1,531	27.6%	$13.85	$13.89	$12.86	$12.65	$13.42	$13.28	$12.61	$12.47
2–4.99%	630	1,219	22.0%	$12.25	$12.65	$11.45	$11.40	$11.63	$11.88	$10.95	$10.88
5–14.99%	644	1,325	23.9%	$11.41	$11.80	$11.01	$10.90	$10.66	$10.79	$10.42	$10.38
15% or more	447	1,465	26.4%	$10.51	$10.77	$9.97	$9.92	$9.91	$9.79	$9.54	$9. 50
Total Yearly Prescription Volume											
0–39,999	337	1119	20.2%	$16.75	$14.93	$16.38	$14.47	$16.54	$15.20	$16.07	$15.52
40,000–64,999	668	1,579	28.5%	$13.64	$13.21	$13.55	$13.27	$13.44	$13.38	$13.38	$13.12
65,000–89,999	650	1,246	22.5%	$11.41	$11.63	$11.36	$10.97	$11.17	$11.08	$11.13	$10.69
90,000 or more	882	1,596	28.8%	$10.07	$10.05	$10.24	$9.76	$9.75	$9.68	$9.76	$9.41
Percent Compounded Prescriptions											
0–0.099%	2,495	5,145	92.9%	$12.21	$12.17	$11.18	$10.22	$11.53	$11.37	$10.65	$9.85
0.1–0.99%	26	225	4.1%	$12.66	$12.23	$13.02	$13.20	$11.76	$10.11	$13.78	$13.09
1% or more	16	170	3.1%	$16.38	$15.99	$15.14	$15.50	$17.35	$17.35	$16.39	$16.39
Medicaid Prescriptions Delivered											
No	2,031	3,786	68.3%	$12.16	$12.35	$11.05	$10.17	$11.33	$11. 40	$10. 45	$9. 80
Yes	506	1,754	31.7%	$12.55	$12.16	$12.27	$11.66	$12.19	$11. 46	$11. 88	$11. 13

n = number in sample; N = estimated number in population

Pharmacy Characteristics and Average Cost of Dispensing a Prescription — Home Infusion Pharmacies

				Winsorized Means Weighted By:				Medians Weighted By:			
Characteristic	n	N	%	Un-weighted	Response probability	Total Rx Volume	Medicaid Rx Volume	Un-weighted	Response probability	Total Rx Volume	Medicaid Rx Volume
Length of Time in Business											
1–12 Years	4	64	61.8%	$209.76	$209.76	$126.97	$145.32	$149.37	$149.37	$85.17	$137.99
13-20 Years	1	16	15.4%	$435.49	$435.49	$435.49	$435.49	$435.49	$435.49	$435.49	$435.49
21+ Years	1	16	15.4%	$460.69	$460.69	$460.69	$460.69	$460.69	$460.69	$460.69	$460.69
Pharmacist is Also Owner											
No	10	88	84.6%	$389.07	$279.07	$447.11	$441.21	$448.09	$160.75	$460.69	$435.49
Yes	1	16	15.4%	$455.13	$455.13	$455.13	$455.13	$455.13	$455.13	$455.13	$455.13
Yearly Medicaid Prescription Volume											
0–999	7	83	80.2%	$343.54	$270.64	$382.99	$304.48	$455.13	$160.75	$460.69	$160.75
1,000–3,999	3	5	4.4%	$501.84	$501.84	$504.55	$504.56	$570.24	$570.24	$570.24	$570.24
4,000–11,999	1	16	15.4%	$435.49	$435.49	$435.49	$435.49	$435.49	$435.49	$435.49	$435.49
Percent Medicaid Prescription											
0–1.99%	2	32	30.9%	$272.93	$272.93	$382.76	$146.06	$272.93	$272.93	$460.69	$85.17
2–4.99%	4	21	19.8%	$490.16	$465.48	$492.19	$492.12	$530.20	$455.13	$605.27	$605.27
5–14.99%	4	35	33.8%	$350.95	$184.30	$453.67	$402.00	$356.64	$160.75	$570.24	$570.24
15% or more	1	16	15.4%	$435.49	$435.49	$435.49	$435.49	$435.49	$435.49	$435.49	$435.49
Total Yearly Prescription Volume											
0–39,999	9	86	83.1%	$370.29	$273.22	$402.20	$421.56	$435.49	$160.75	$400.46	$435.49
40,000–64,999	2	18	16.9%	$506.61	$468.64	$502.44	$551.07	$532.98	$460.69	$460.69	$605.27
Percent Compounded Prescriptions											
0–0.099%	2	32	30.9%	$457.91	$457.91	$460.58	$457.60	$457.91	$457.91	$460.69	$455.13
1% or more	9	72	69.1%	$381.11	$238.48	$442.69	$441.16	$435.49	$160.75	$570.24	$435.49
340B Covered Entity											
No	10	88	84.6%	$391.03	$282.66	$447.57	$446.35	$457.91	$160.75	$460.69	$570.24
Yes	1	16	15.4%	$435.49	$435.49	$435.49	$435.49	$435.49	$435.49	$435.49	$435.49

n = number in sample; N = estimated number in population

APPENDIX B

PDF Survey Documents

State of California—Health and Human Services Agency
Department of Health Care Services

JENNIFER KENT
DIRECTOR

EDMUND G. BROWN JR.
GOVERNOR

July 15, 2016

Dear Provider:

On January 21, 2016, the Centers for Medicare and Medicaid Services (CMS) published the federal Covered Outpatient Drugs Final Rule (CMS-2345-FC) to address the rise in prescription drug costs by ensuring that Medicaid programs reform payment methodologies for prescription drugs and to ensure drug rebates accurately account for market prices.

The regulation requires state Medicaid programs to reimburse drugs at the actual acquisition cost plus a professional dispensing fee effective April 1, 2017.

The California Department of Health Care Services (DHCS) has contracted with Mercer to conduct a professional cost of dispensing survey in order to obtain information on the costs associated with dispensing covered outpatient drugs to Medi-Cal members.

The data collected will be used to determine the professional dispensing fee. Therefore, all California Medi-Cal enrolled pharmacies and providers who dispense drugs should participate in the survey process. The Professional Dispensing Fee Survey will be available beginning **July 15, 2016**, and must be submitted **by August 15, 2016.**

Please complete the survey for each of your locations in the State of California.

Providers may choose to complete the Professional Dispensing Fee Survey via Mercer's web-based tool or by using one of Mercer's Microsoft® Excel templates. For providers responding on behalf of multiple locations, we recommend using one of the Excel templates rather than the online tool. If you would prefer to use the online tool, please email RXSURVEY@mercer.com so we can provide you with a username and password.

You can download a copy of the survey in Microsoft® Excel from the Mercer survey website at http://benefitsuite.mercer.com/sites/capharmacy. You may also request a copy of the Excel template by emailing RXSurvey@mercer.com. Completed Excel surveys should be emailed back to RXSurvey@mercer.com.

The Department of Health Care Services and Mercer will be hosting a technical webinar from 11:00 a.m.-Noon PT on August 2, 2016, to assist providers with navigating the survey and to answer any questions from providers.

To participate in the technical webinar, go to https://mmc.webex.com/mmc/onstage/g.php?MTID=ed4fd30a6764cc99bba9157428305ac52. Providers who plan to attend online are encouraged to click the Register button at the bottom of the page and supply their name, email address, and the name of their company.

Providers who are unable to attend the technical call will be able to access the recorded session on the Mercer survey website.

Pharmacy Benefits
1501 Capitol Avenue, MS 4604, P.O. Box 997413, Sacramento, CA 95899-7413
Phone: (916) 552-9500 Fax: (916) 552-9563
Internet Address: www.dhcs.ca.gov

All information collected through this survey will remain confidential. Neither DHCS nor Mercer will release or otherwise make public any information that names and/or discloses the business, financial, personnel, or other information provided by providers in the course of completing this survey.

Providers with questions regarding the survey process are encouraged to contact Mercer via the pharmacy survey hotline at 1-844-679-7737 or by email at RXSurvey@mercer.com.

Refer to the Mercer survey website at http://benefitsuite.mercer.com/sites/capharmacy for more information. Providers are encouraged to check this page regularly for updated information.

Thank you for your participation.

Sincerely,

Harry Hendrix, Jr., Chief
Pharmacy Benefits Division

State of California—Health and Human Services Agency
Department of Health Care Services

JENNIFER KENT
DIRECTOR

EDMUND G. BROWN JR.
GOVERNOR

August 1, 2016

Dear Provider:

This is a follow-up reminder for the Professional Dispensing Fee survey notification sent to you on July 15, 2016. ***If you have already submitted your survey, please disregard this reminder.***

The California Department of Health Care Services (DHCS) has contracted with Mercer to conduct a professional cost of dispensing survey in order to obtain information on the costs associated with dispensing covered outpatient drugs to Medi-Cal members.

The data collected will be used to determine the professional dispensing fee. Therefore, all California Medi-Cal enrolled pharmacies and providers who dispense drugs should participate in the survey process. The Professional Dispensing Fee Survey must be submitted **by August 15, 2016.**

Providers may choose to complete the Professional Dispensing Fee Survey via Mercer's web-based tool or by using Mercer's Microsoft® Excel template found at Mercer's survey website at http://benefitsuite.mercer.com/sites/capharmacy. You may also request a copy of the Excel template by emailing RXSurvey@mercer.com. Completed Excel surveys should be emailed back to RXSurvey@mercer.com.

All information collected through this survey will remain confidential.

Providers with questions regarding the survey process are encouraged to contact Mercer via the pharmacy survey hotline at 1-844-679-7737 or by email at RXSurvey@mercer.com. Refer to the Mercer survey website at http://benefitsuite.mercer.com/sites/capharmacy for more information. Providers are encouraged to check this page regularly for updated information.

Thank you for your participation.

Sincerely,
Harry Hendrix, Jr., Chief
Pharmacy Benefits Division

Pharmacy Benefits
1501 Capitol Avenue, MS 4604, P.O. Box 997413, Sacramento, CA 95899-7413
Phone: (916) 552-9500 Fax: (916) 552-9563
Internet Address: www.dhcs.ca.gov

Providers could submit PDF responses either online or using an Excel template. The Excel Template questions are shown below.

CALIFORNIA DEPARTMENT OF HEALTH CARE SERVICES PROFESSIONAL DISPENSING FEE SURVEY

SECTION I – PHARMACY PROFILE

By Location		**Store Location Number / Identifier**							
Pharmacy Profile		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
1	National Provider Identifier (NPI) (10 digits)								
2	Provider Name								
3	Street Address								
4	Street Address (Additional)								
5	City								
6	State								
7	ZIP Code								
8	County								
9	Contact Person								
10	Contact Person Email								
11	Telephone Number								
12	Fax Number								
13	Does the provider dispense 340B Drug Pricing Program (340B) drugs?								
14	Type of Ownership								
15	Was there a change in pharmacy ownership during the reporting period?								
15a	Date of Ownership Change (MM/DD/YYYY)								
16	Was the pharmacy open the entire year?								
16a	If no, list the number of months the pharmacy was open.								
17	Select the appropriate provider type.								
18	Select the location type of the provider.								
19	How many years has this location been in business as a pharmacy?								
20	Is one or more of the pharmacists who fill prescriptions at this location also an owner of the store or chain?								
21	How many hours per week is the pharmacy department open? (Maximum of 168)								
Square Footage (Required. Survey responses for this section should use the same time period as reported in the financial information section.)									
22	What was the square footage for the following areas at the end of the reporting period?								
	a. Prescription area								
	b. Non-prescription area								
	c. Total square footage (Sum of a and b)	-	-	-	-	-	-	-	-

CALIFORNIA DEPARTMENT OF HEALTH CARE SERVICES PROFESSIONAL DISPENSING FEE SURVEY

Prescriptions (Required. Survey responses for this section should use the same time period as reported in the financial information section.)									
23	What was the total number of prescriptions filled by this pharmacy for the following categories during the reporting period?								
	a. Medicaid prescriptions								
	b. Medicare Parts B, C, and D-covered prescriptions (If available)								
	c. All other prescriptions (not Medicaid or Medicare)								
	d. Total prescriptions (Sum of a–c)	-	-	-	-	-	-	-	-
24	How many prescriptions were compounded?								
25	How many Medicaid prescriptions were compounded?								
26	How many prescriptions were delivered to the recipient?								
27	How many Medicaid prescriptions were delivered to Medi-Cal beneficiaries?								
28	How many prescriptions during the reporting period were dispensed to residents of **Skilled Nursing Facilities or Intermediate Care Facilities** licensed by the California Department of Health (does not include Assisted LIving Facilities or Group Homes) using the following package types?								
	a. Unit dose								
	b. Modified unit dose (bingo card / blister packs)								
	c. No unit dose dispensing								
	d. Traditional packaging								
	e. Other method not described above (Explain in the Comments section) (Explain: _____)								
	f. Total prescriptions dispensed for this section (Sum of a–e)	-	-	-	-	-	-	-	-

CALIFORNIA DEPARTMENT OF HEALTH CARE SERVICES PROFESSIONAL DISPENSING FEE SURVEY

SECTION II — 340B DRUG PRICING PROGRAM (340B)
PHARMACY INFORMATION

By Location		**Store Location Number / Identifier**							
Pharmacy Profile		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
29	Type of 340B Provider								
30	Covered Entity or Contract								
31	Does the provider purchase drugs through the 340B prime vendor program?								
32	Does the provider use a 340B administrator?								
33	Enter the total number of 340B prescriptions filled during the reporting period.								
34	Enter the total number of 340B prescriptions billed to Medicaid.								

CALIFORNIA DEPARTMENT OF HEALTH CARE SERVICES PROFESSIONAL DISPENSING FEE SURVEY

SECTION III — SPECIALTY DISPENSING INFORMATION

By Location		**Store Location Number / Identifier**							
Pharmacy Profile		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
	Specialty Drug Script Counts								
35	Home Infusion								
36	Blood Factor								
37	Sterile Compounding								
38	All Other Specialty								
39	Total Specialty Scripts (sum of 35 through 38)	-	-	-	-	-	-	-	-
	Specialty Revenue (sales dollars received for Specialty Drugs)								
40	Home Infusion								
41	Blood Factor								
42	Sterile Compounding								
43	All Other Specialty								
44	Total Specialty Revenue (sum of 40 through 43)	$ -	$ -	$-	$-	$ -	$-	$ -	$-

CALIFORNIA DEPARTMENT OF HEALTH CARE SERVICES PROFESSIONAL DISPENSING FEE SURVEY

SECTION IV — FINANCIAL INFORMATION — SALES AND DIRECT EXPENSES

		Store Location Number / Identifier							
By Location		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
45	a. Enter beginning date range of financial reports.								
	b. Enter ending date range of financial reports.								
Sales									
46	What were the sales for the following categories?								
	a. Prescription sales other than over-the-counter [OTC] dispensed by a pharmacist or 340B sales								
	b. OTC sales dispensed by pharmacy department								
	c. OTC sales dispensed by staff not in pharmacy department								
	d. Sales of drugs purchased through the 340B program								
	e. Portion of federal grants attributable to pharmacy, if any								
	f. Other sales such as retail sales and services								
	g. Total sales (Sum of a–g)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Costs and Expenses									
47	a. Cost of goods sold (COGS): pharmaceuticals (*Note:* This will not be included in the dispensing fee calculation.)								
	b. Non-pharmacy COGS								
	c. Total COGS (Sum of a and b)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Pharmacy Personnel and Labor Costs									
48	Pharmacist Full-Time Employees (FTEs)								
49	Other Pharmacy Department FTEs (Do not include pharmacist counted in 48.)								
	Enter Salaries, Wages, Bonuses, and guaranteed payments for Elements 50-56.								
50	Pharmacist Manager (Owner)								
51	Pharmacist Manager (Non-owner)								
52	Staff Pharmacist								
53	Technician								
54	Unlicensed Personnel Working in Pharmacy Department								
55	Pharmacy Department Payroll Taxes								

56	Pharmacy Department Benefits (Including health insurance and pension / profit sharing / retirement expenses)								
57	Pharmacy Department Payroll (Sum of 50-56)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

CALIFORNIA DEPARTMENT OF HEALTH CARE SERVICES PROFESSIONAL DISPENSING FEE SURVEY

Non-pharmacy Personnel

58	Wages, Payroll Taxes, and Benefits for Personnel Directly Attributed to Non-pharmacy Services								
59	Wages, Payroll Taxes, and Benefits for Personnel Directly Attributed to Administrative or Shared Services								
60	General Employee Expenses Attributable to All Employee Types								
61	Non-pharmacy department Payroll (Sum of 58-60)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
62	Total Payroll Expense (Sum of 57 and 61)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Pharmacy Department Expenditures

63	Prescription Containers, Label, and Other Pharmacy Supplies								
64	Professional Liability Insurance for licensed personnel								
65	Pharmacy department Licenses, Permits, and Fees								
66	Dues, Subscriptions, and Continuing Education for the pharmacy department								
67	Delivery Expenses (Prescription related)								
68	Expenses for Compounding (Including depreciation on compounding equipment)								
69	Bad Debts for Prescriptions (Including uncollected copayments)								
70	Computer Systems Costs Related Only to the pharmacy department (Not including depreciation)								
71	Depreciation — Directly Related to Pharmacy Department (Including computers, software, and equipment)								

72	Professional Education and Training								
73	Inventory Carrying Costs (Including shrinkage due to expiration, theft, or loss inventory)								
74	Costs Directly Attributable to 340B								
	a. 340B program management								
	b. Other (List other costs in Comments Section)								
75	Other pharmacy department-Specific Costs Not Identified Elsewhere								
76	Total pharmacy department Non-payroll Costs (Sum of 63-75)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

CALIFORNIA DEPARTMENT OF HEALTH CARE SERVICES PROFESSIONAL DISPENSING FEE SURVEY

SECTION V — FINANCIAL INFORMATION – OVERHEAD

		Store Location Number / Identifier							
By Location		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Facility									
77	Does the provider lease or own the building?								
	a. Building Cost Basis (Depreciable Amount)								
	b. Building Accumulated Depreciation								
Facility Expenses									
78	Rent								
79	Utilities (Gas, Electric, Water, and Sewer)								
80	Real Estate Taxes								
81	Facility Insurance								
82	Maintenance and Cleaning								

83	Depreciation Expense (e.g., Building, Leasehold Improvements, Furniture, and Fixtures)								
84	Mortgage Interest								
85	Other Facility-Specific Costs not Identified Elsewhere								
86	Total Facility Cost (Sum of 78 - 85)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Non-Facility Overhead									
87	Marketing and Advertising								
88	Professional Services (e.g., accounting, legal, consulting)								
89	Security Costs								
90	Telephone and Data Communicatio n								
91	Transaction Fees / Merchant Fees / Credit Card Fees								
92	Computer Systems and Support								
93	Depreciation (Including equipment, furniture, computers)								
94	Amortization								
95	Office Supplies								
96	Other Insurance								

97	Taxes Other Than Real Estate, Payroll, or Sales								
98	Franchise Fees (If Applicable)								
99	Other Interest								
100	Charitable Contributions								
101	Corporate Overhead								
102	Other Costs Not Included Elsewhere								
103	Total Non-Facility Overhead (Sum of 87 - 102)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
104	Total Overhead (Sum of 86 and 103)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

CALIFORNIA DEPARTMENT OF HEALTH CARE SERVICES PROFESSIONAL DISPENSING FEE SURVEY

SECTION VI — COMMENTS

The Comments section is for comments and clarifications. If reporting more than one location, be specific as to which location the comment pertains. If comments are provided in response to a question, be specific as to which question the comment pertains.

CALIFORNIA DEPARTMENT OF HEALTH CARE SERVICES PROFESSIONAL DISPENSING FEE SURVEY

SECTION VII — CERTIFICATION

I declare that I have examined this cost report including accompanying schedules and to the best of my knowledge and belief, it is true, correct, and complete.

Name and Signature

Position / Title

SECTION VIII — STATEMENT OF PREPARER (If the preparer is someone other than the provider.)

I have prepared this cost report and to the best of my knowledge and belief, it is true, correct, and complete.

Name and Signature

Position / Title

Name — Company

PDF Survey Completion Instructions

Survey Overview

Purpose of This Survey

The State of California (State) Department of Health Care Services (DHCS) has engaged Mercer Government Human Services Consulting (Mercer), part of Mercer Health & Benefits LLC, to conduct a survey of Medicaid-enrolled providers to better understand and determine the approximate cost of dispensing prescription drugs to Medi-Cal members in California.

Provider participation and timely response is crucial, as the information collected from this survey will be critical data for DHCS to better understand the current pharmacy cost of dispensing. Submit any questions about this survey via email to RXSurvey@mercer.com or call the Pharmacy Survey Hotline at 1-844-679-7737.

Who Should Participate

All California Medicaid-enrolled providers that have billed covered outpatient drugs to Medi-Cal should participate.

How to Submit Completed Surveys

Surveys may be completed online by August 15, 2016.

A username and password for the online tool will be mailed to providers with 3 or fewer locations separately. Providers may call 1-844-679-7737 for assistance with the assigned password.

For providers with multiple locations, or if the provider is unable to submit the survey information online, he or she may access, download, fill out, and email the completed Microsoft Excel version of the survey to RXSurvey@mercer.com.

The survey must be received no later than Friday, August 15, 2016.

Average Professional Dispensing Fee Calculation

The survey is created using Medicare and Medicaid cost principles as defined in 42 CFR 200.400–475, but is governed by the definition of a professional dispensing fee as defined in 42 CFR 447.502:

Professional dispensing fee means the professional fee which:

- 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
- Includes only Pharmacy costs associated with ensuring that possession of the appropriate covered outpatient drug is transferred to a Medicaid beneficiary. 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 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.
- 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.

To calculate the portion of costs allocable to a professional dispensing fee, costs are categorized as direct pharmacy expenses, direct non-pharmacy expenses, indirect costs (overhead) and unallowable costs. Indirect costs

are then allocated into direct pharmacy expenses or direct non-pharmacy expenses by either a percentage of square footage (for facility costs) or a percentage of sales (for non-facility costs). The average dispensing fee is calculated as the direct pharmacy expenses plus the allocated indirect expenses divided by the number of scripts.

Section I — Pharmacy Profile

The purpose of the Pharmacy Profile is to report provider-specific information used for identification and for statistical categorization. Providers that have multiple locations should enter the information for the location that serves as their administrative location.

1 — National Provider Identifier (NPI)
Enter the NPI of the California Medicaid provider.

2 — Provider Name
Enter the name of the California Medicaid provider.

3–7 — Address (Street, City, State, ZIP Code)
Enter the street address, suite or second address (if applicable), address suite or mail stop, city, state, and nine-digit ZIP code where the provider is located. If the four-digit extension of the ZIP code is unknown, enter 0000; do not use dashes or spaces.

8 — County
Enter the county where the provider is located.

9 — Contact Person
Enter the name of the individual to contact if there are any questions about the survey responses.

10 — Contact Person Email
Enter an email address where the contact person may be reached.

11 — Telephone Number
Enter the telephone number, including area code, where the contact person may be reached.

12 — Fax Number
Enter the fax number, including area code, for the contact person.

13 — 340B Program Participation
Indicate whether or not the provider dispenses drugs under the 340B Drug Pricing Program. Drugs dispensed under this program are reduced price outpatient drugs provided by drug manufacturers to eligible health care organizations or covered entities with disproportionately high Medicaid populations.

14 — Type of Ownership
Indicate the type of ownership (e.g., independent, franchise, chain or other).

15 — Change of Ownership
Indicate whether or not there was a change in pharmacy ownership during the reporting period.

15a — Date of Ownership Change
If there was a change in pharmacy ownership during the reporting period, enter the date of the ownership change in MM/DD/YYYY format.

16 —
Indicate whether or not the pharmacy was open the entire year.

16a —
If the pharmacy was not open the entire year, enter the number of months the pharmacy was open.

Note: For pharmacy locations that have been open less than 12 months, only complete 1–21. The remainder of the survey should not be completed.

17 — Provider Type
Select the provider type from the following list. If more than one provider type applies, select the type that represents the provider's highest percentage of sales. Hospital pharmacies that also dispense outpatient drugs should choose Outpatient/Clinic Pharmacy:

Long-Term Care (LTC) Pharmacy — A provider that dispenses medicinal preparations delivered to Medi-Cal members residing in an intermediate or skilled nursing facility, including facilities for the developmentally disabled, hospices, assisted living facilities, group homes and other forms of congregate living arrangement.

Home Infusion Pharmacy — A provider with expertise in sterile drug compounding that provides care to Medi-Cal members with acute or chronic conditions pertaining to parenteral administration of drugs, biologics and nutritional formulae administered through catheters and/or needles in home and alternate sites. (Extensive professional provider services, care coordination, infusion nursing services, supplies and equipment are provided to optimize effectiveness and compliance.)

Federally Qualified Health Center (FQHC)/Rural Health Center (RHC) — A site other than a pharmacy that dispenses medicinal preparations under the supervision of a physician to patients for self-administration. (i.e., physician offices, Emergency Room, Urgent Care Centers, Rural Health Facilities, etc.).

Compounding Pharmacy — A provider that specializes in the preparation of components into a drug preparation as the result of a practitioner's prescription drug order or initiative based on the practitioner/Medi-Cal beneficiary/pharmacist's relationship in the course of professional practice, or when a Medi-Cal beneficiary's need cannot be met by commercially available drugs. (A compounding provider utilizes specialized equipment and specially designed facilities necessary to meet the legal and quality requirements of its scope of compounding practice.)

Specialty Pharmacy — A provider who dispenses generally low-volume and high-cost medicinal preparations to Medi-Cal members who are undergoing intensive therapies for illnesses that are generally chronic, complex and potentially life threatening. (Often, these therapies require specialized delivery and administration, but are not previously described.)

Clinic/Outpatient Pharmacy — A provider in a clinic or hospital outpatient setting who dispenses medications to outpatient Medi-Cal members.

Independent Retail Pharmacy — A provider whose ownership group(s) owns three or fewer locations in which pharmacists store, prepare and dispense medicinal preparations and/or prescriptions for a local Medi-Cal beneficiary population in accordance with federal and state law; council Medi-Cal members and caregivers (sometimes independent of the dispensing process); and provide other professional services associated with

pharmaceutical care, such as health screenings, consultative services with other health care providers, collaborative practice, disease state management and education classes.

Retail Chain (default) — A provider whose ownership group(s) owns four or more locations in which pharmacists store, prepare and dispense medicinal preparations and/or prescriptions for a local Medi-Cal beneficiary population in accordance with federal and state law; council Medi-Cal members and caregivers (sometimes independent of the dispensing process); and provide other professional services associated with pharmaceutical care, such as health screenings, consultative services with other health care providers, collaborative practice, disease state management and education classes.

18 —

Select the location type of the provider from the following list:

- Designated space in a medical office building
- Free standing building
- Designated space in a shopping center
- Embedded in a grocery store/mass merchandiser
- Hospital outpatient
- Other

19 —

Indicate the number of years a pharmacy has operated at this location. This information is used in demographic analysis of the data. The response allows Mercer to understand depreciation, or lack of depreciation, for older buildings where market-based rent may need to be substituted if a building is fully depreciated.

20 —

Indicate whether or not one or more of the pharmacists who fill prescriptions has been an owner of the pharmacy at any time during the reporting period.

21 —

Enter the number of hours per week the pharmacy department is open. The maximum number of hours is 168 (24 hours x 7 days per week).

Square Footage

Required: Survey responses for this section should use the same time period as reported in the financial information section.

For the purposes of this survey, the prescription area will be defined as the medication receiving, storage, preparation, packaging, sales, and professional service areas, regardless of whether or not the pharmacist is present. Square footage is used to allocate indirect facility costs such as rent, utilities, and real estate taxes between pharmacy and non-pharmacy expenses.

22 —
Enter the pharmacy department's square footage as of the end of the reporting period:

a. Prescription area — List the actual square footage of the prescription area. Measure; do not estimate. The prescription area will be defined as the *medication receiving, storage, preparation, packaging, sales, and* professional service *areas*, regardless of whether or not the pharmacist is present.
b. Non-prescription area — List the actual square footage of the rest of the pharmacy. Measure; do not estimate.
c. Total square footage (sum of a and b).

Prescriptions

Required: Survey responses for this section should use the same time period as reported in the financial information section.

23 —
Enter the total number of prescriptions filled by this pharmacy for the following categories during the reporting period:

a. Prescriptions provided to Medicaid Medi-Cal members
b. Medicare Parts B, C and D-covered prescriptions (If available)
c. All other prescriptions (not Medicaid or Medicare)
d. Total prescriptions (sum of a–c)

24 —
Enter the number of prescriptions compounded. If none, enter 0.

25 —
Enter the number of Medicaid prescriptions compounded. If none, enter 0.

26 —
Enter the number of prescriptions delivered during the reporting period.

27 —
Enter the number of Medicaid prescriptions delivered to Medi-Cal members.

28 —
How many prescriptions during the reporting period were dispensed to residents of **Skilled Nursing Facilities or Intermediate Care Facilities** licensed by the California Department of Health (does not include Assisted Living Facilities or Group Homes) using the following package types?

a. Unit dose
b. Modified unit dose (bingo card/blister packs)
c. No unit dose dispensing
d. Traditional packaging
e. Other method not described above (explain in the Comments section)
f. Total prescriptions dispensed for this section (sum of a–e)

SECTION II — 340B DRUG PRICING PROGRAM (340B) PHARMACY INFORMATION

The purpose of the 340B Drug Pricing Program (340B) Pharmacy Information section is to better understand the provider's involvement with the 340B program. Provide the following detail regarding which drugs are prescribed under the 340B program and how those drugs are obtained.

29 — Type of 340B Provider
Enter the type of 340B provider from the following list:

- Black Lung Clinic
- Children's Hospital
- Comprehensive Hemophilia Treatment Center
- Consolidated Health Center Program
- Contract Pharmacy
- Critical Access Hospital
- Disproportionate Share Hospital
- Family Planning
- FQHC Look-Alike
- HIV/AIDS Clinic
- Rural Health Clinic
- Urban Indian Organization
- Other

30 — Covered Entity or Contract
Select whether or not this is a Covered Entity or contract.

31 —
Select whether or not the provider purchases drugs through the 340B prime vendor program.

32 —
Select whether or not the provider uses a 340B administrator.

33 —
Enter the total number of 340B prescriptions filled during the reporting period.

34 —
Enter the total number of 340B prescriptions billed to Medicaid.

SECTION III – SPECIALTY DISPENSING INFORMATION

The purpose of the Specialty Dispensing Information section is to better understand the provider's proportion of scripts and sales related to specialty drug classes. Provide the following detail regarding scripts and revenue received for the following drug classes.

Enter script counts from the reporting period for the following drug classes:
35 —
Enter the total number of scripts for Home Infusion
36 —
Enter the total number of scripts for Blood Factor
37 —
Enter the total number of scripts for Sterile Compounding
38 —
Enter the total number of scripts for Other Specialty
39 —
Enter the total number of all Specialty scripts (sum of 35–38)
.
Enter revenue from the reporting period for the following drug classes:
40 —
Enter the revenue for Home Infusion
41 —
Enter the revenue for Blood Factor
42 —
Enter the revenue for Sterile Compounding
43 —
Enter the revenue for Other Specialty
44 —
Enter the total revenue for all Specialty prescriptions (sum of 40–43)

SECTION IV — FINANCIAL INFORMATION — SALES AND DIRECT EXPENSES

Expenses such as administration, central operating or other general expenses incurred by multiple location pharmacies should be allocated to individual locations. Methods of allocation must be reasonable and conform to generally accepted accounting principles. Explain any allocation procedures used to allocate expenses in the Comments section. Enter the following financial information.

45 —
Enter the dates of the reporting period. This should be the provider's last complete fiscal year and should correspond to the report dates of your financial statements or tax returns:

a. Beginning date range of financial reports
b. Ending date range of financial reports

Sales

Sales are reported for validation and for allocating overhead costs. Percentages of sales in the categories below determine allocation rates for certain administrative costs to the pharmacy department as a cost of dispensing. Enter the following sales information rounded to the nearest dollar.

46 —
Enter the sales for this location for the following categories:

a. Prescription sales other than over-the-counter sales dispensed by a pharmacist or 340B sales
b. Over-the-counter sales dispensed by pharmacy department
c. Over-the-counter sales dispensed by staff not in pharmacy department
d. Sales of drugs purchased through the 340B program
e. Portion of federal grants attributable to pharmacy, if any
f. Other sales, such as retail sales and services (If amounts exceed 5.0% of total sales, comment on the nature of the other sales and provide more detail.)
g. Total sales (sum of a–g)

Costs and Expenses

Enter the following costs and expenses information. Cost of goods sold information is used for validation purposes only and does not affect the average dispensing fee calculation.

47 —
Cost of goods sold (COGS) is used for reference in validating the provider's responses to his or her financial statements or tax returns, as requested:

a. COGS: Pharmaceuticals (Note: This will not be included in the dispensing fee calculation.)
b. Non-pharmacy COGS
c. Total COGS (sum of a and b)

Pharmacy Personnel and Labor Costs

Note: Store costs should be categorized into three distinct areas — direct costs related to pharmacy services, direct costs related to non-pharmacy services and indirect costs related to all product lines. For 50–54, include wages only for direct costs for pharmacy services (pharmacy department).

For 50–56, round to the nearest whole dollar amount:

- For each employee group, list wages, salary, bonuses and guaranteed payments.
- List payroll taxes to reflect the employer's share of payroll tax expense.

- List pension/profit-sharing/retirement expenses to include any employer contributions to profit-sharing, pensions or retirement accounts.
- List other employee benefits, such as employer's contribution toward health insurance.

48 — Pharmacist FTEs
Enter the number of Pharmacist full-time employees (FTEs) (2,080 hours per year).

49 — Other Pharmacy Department FTEs
Enter the salaries, wages, and bonuses for employees listed in 43–47. Do not include pharmacists counted in 41c.

For 50–54, enter the sum of salaries, wages, bonuses, and guaranteed payments.

50 — Pharmacist Manager (Owner)

51 — Pharmacist Manager (Non-owner)

52 — Staff Pharmacist

53 — Technician

54 — Unlicensed Personnel Working in Pharmacy Department

55 — Pharmacy Department Payroll Taxes

56 — Pharmacy Department Benefits (Including health insurance and pension/profit sharing/retirement expenses)

57 — Pharmacy Department Payroll
Enter the total pharmacy department payroll amount (sum of 50–56).

Non-Pharmacy Personnel

Note: Store costs should be categorized into three distinct areas — direct costs related to pharmacy services, direct costs related to non-pharmacy services and indirect costs related to all product lines. For 58, include wages only for direct costs to non-pharmacy services. For example, retail marketing personnel costs would be considered a direct cost for non-pharmacy services. For 59, include indirect personnel costs such as accounting, information technology (IT), legal or human resources.

58 — Wages, Payroll Taxes and Benefits for Personnel Directly Attributed to Non-Pharmacy Services
Enter wages, payroll taxes and benefits for personnel directly attributed to non-pharmacy services. This is for personnel who do not provide any services to the pharmacy department, but are dedicated to non-pharmacy sales. Do not include wages for administrative personnel (accounting, legal, IT, human resources, corporate).

59 — Wages, Payroll Taxes, and Benefits for Personnel Directly Attributed to Administrative or Shared Services

Enter wages, payroll taxes and benefits for personnel directly attributed to administrative or shared services.

60 — General Employee Expenses Attributable to All Employee Types
Enter general employee expenses attributable to all employee types.

61 — Non-pharmacy department Payroll
Enter non-pharmacy department payroll (sum of 58–60).

62 — Total Payroll Expense
Enter the total payroll expense (sum of 57 and 61).

Pharmacy Department Expenditures

Do not include ingredient costs in any of the questions in this section.

63 — Prescription Containers, Labels and Other Pharmacy Supplies
Enter the costs of the prescription containers, labels and other pharmacy supplies in whole dollar amounts.

64 — Professional Liability Insurance for Licensed Personnel.
Enter the costs of the professional liability insurance for pharmacists and other licensed personnel in whole dollar amounts.

65 — Pharmacy Department Licenses, Permits and Fees
Enter the costs of the pharmacy department licenses, permits and fees in whole dollar amounts.

66 — Dues, Subscriptions and Continuing Education for the Pharmacy Department
Enter the costs of the dues, subscriptions and continuing education for the pharmacy department in whole dollar amounts.

67 — Delivery Expenses
Enter the costs of prescription-related delivery expenses in whole dollar amounts.

68 — Expenses Related to Compounding Drugs
Enter the costs of the expenses related to compounding drugs, including depreciation on compounding equipment or compounding supply costs, in whole dollar amounts.

69 — Bad Debts for Prescriptions
Enter the costs of any bad debts for prescriptions, including uncollected copayments, in whole dollar amounts.

70 — Computer System Costs Related Only to the Pharmacy department
Enter the costs of the computer system costs, not including depreciation, related only to the pharmacy department in whole dollar amounts.

71 — Depreciation — Directly Related to Pharmacy Department (Including computers, software and equipment)
Enter the costs of depreciation directly related to the pharmacy department, including computers, software and equipment, in whole dollar amounts.

72 — Professional Education and Training
Enter the costs of professional education and training in whole dollar amounts.

73 — Inventory Carrying Costs (Including shrinkage due to expiration, theft or loss inventory)
Enter inventory carrying costs, including shrinkage due to expiration, theft or lost inventory, in whole dollar amounts.

74 — Costs Directly Attributable to 340B
d. 340B program management
e. Other (list other costs in the Comments section)

Enter the costs directly attributable to 340B, including 340B program management or other, in whole dollar amounts. If Other, list in the Comments section of this survey.

75 — Other Pharmacy department-Specific Costs Not Identified Elsewhere
Enter other pharmacy department-specific costs not identified elsewhere in whole dollar amounts. If the amount is greater than 5.0% of total pharmacy department costs (76), attach supporting details in the Comments section.

76 — Total Pharmacy department Non-payroll Costs
Enter the total pharmacy department non-payroll costs in whole dollar amounts
(sum of 63 - 75).

SECTION V — FINANCIAL INFORMATION — OVERHEAD

Facility

Background information is needed to ensure appropriate expenses are captured and to identify potential outliers that require adjustment or exclusion.

77 —
Indicate whether or not the provider leases or owns the building. If he or she owns the building, answer questions a and b:

a. The cost basis of the building (depreciable amount)
b. The accumulated depreciation of the building

Facility Expenses

Allowable facility expenses are allocated to the pharmacy dispensing fee calculation as a percentage of square footage. Enter, in whole dollar amounts, the costs of the following:

78 — Rent
Enter the cost of rent in whole dollar amounts. If the building is owned by the provider, the rent is $0.

79 — Utilities
Enter the cost of utilities (e.g., gas, electric, water and sewer) in whole dollar amounts.

80 — Real Estate Taxes
Enter the cost of real estate taxes in whole dollar amounts.

81 — Facility Insurance
Enter the cost of property, general liability, and other facility insurance costs (but not including professional liability insurance costs or health insurance costs) in whole dollar amounts.

82 — Maintenance and Cleaning
Enter the cost of maintenance and cleaning in whole dollar amounts.

83 — Depreciation Expense
Enter the cost of depreciation expenses (e.g., building, leasehold improvements, furniture and fixtures) in whole dollar amounts.

84 — Mortgage Interest
Enter the mortgage interest in whole dollar amounts.

85 — Other Facility-Specific Costs Not Identified Elsewhere
Enter the other facility-specific costs not identified elsewhere in whole dollar amounts. If the amount is greater than 5.0% of total facility cost (79), attach supporting details in the Comments section of this survey.

86 — Total Facility Costs
Enter the total facility costs (sum of 78–85).

Non-facility overhead Expenses

Allowable other store/location expenses not directly attributed to the pharmacy department are allocated to the pharmacy dispensing fee calculation as a percentage of sales.

87 — Marketing and Advertising
Enter the marketing and advertising costs in whole dollar amounts.

88 — Professional Services
Enter the cost for professional services (e.g., accounting, legal, consulting) in whole dollar amounts.

89 — Security Costs
Enter the cost for security systems and monitoring in whole dollar amounts.

90 — Telephone and Data Communication
Enter the costs for telephone and data communication in whole dollar amounts.

91 — Transaction Fees/Merchant Fees/Credit Card Fees
Enter the costs for transaction, merchant and credit card fees in whole dollar amounts.

92 — Computer Systems and Support
Enter the costs for computer systems and support in whole dollar amounts.

93 — Depreciation
Enter the costs for depreciation for all other items, including equipment, furniture and computers, in whole dollar amounts.

94 — Amortization
Enter the costs for amortization in whole dollar amounts.

95 — Office Supplies
Enter the costs for office supplies in whole dollar amounts.

96 — Other Insurance
Enter the costs for other insurance in whole dollar amounts.

97 — Taxes Other Than Real Estate, Payroll, or Sales
Enter the costs for any taxes other than real estate, payroll or sales in whole dollar amounts.

98 — Franchise Fees (If Applicable)
Enter the costs for franchise fees, if applicable, in whole dollar amounts.

99 — Other Interest
Enter the costs for other interest in whole dollar amounts.

100 — Charitable Contributions
Enter the amount of charitable contributions for the report period in whole dollar amounts.

101 — Corporate Overhead
Enter the costs of corporate overhead in whole dollar amounts.

102 — Other Costs Not Included Elsewhere
Enter any other costs not include elsewhere in whole dollar amounts. If the amount is greater than 5.0% of total other store/location costs (103), attach supporting details in the Comments section.

103 — Total Non-Facility Overhead Costs
Enter the total other store/location costs (sum of 87–102).

104 — Total Overhead
Enter the total overhead (sum of 86 and 103).

SECTION VI — COMMENTS

The Comments section is for comments and clarifications. If reporting more than one location, be specific as to which location the comment pertains. If comments are provided in response to a question, be specific as to which question the comment pertains.

Although providers spend time providing value-added services, few providers track the time spent providing such services. Respondents are encouraged to provide information about value-added services and identify time spent on value-added services in this section.

SECTION VII — CERTIFICATION

The Certification section requires the signature of a certifier declaring that he or she has thoroughly examined the survey and cost report and believes the information is true, correct and complete. Printed name and position/title are also required of the certifier.

SECTION VIII — STATEMENT OF THE PREPARER

This section requires a statement of the preparer if the preparer of the survey and cost report is different than the provider listed on the survey. The preparer’s signature, printed name, position/title and company name is required in this section.

APPENDIX C

AAC Documents

July 2016

Subject: Participation in Survey of Purchase Prices

Dear Pharmacy Owner or Manager:

The California Department of Health Care Services (DHCS) has contracted with Mercer Government Human Services Consulting (Mercer), a part of Mercer Health & Benefits LLC, to conduct a survey of purchase prices for prescription drugs.

Your pharmacy has been randomly selected as part of a statistically-valid sample size of pharmacies to complete the survey. Your responses will be a significant component in understanding and approximating the cost to acquire prescription medications for Medi-Cal beneficiaries.

All information collected through this survey will remain confidential. Neither DHCS nor Mercer will release or otherwise make public any information that names and/or discloses the business, financial, personnel or other information provided by individual pharmacies or chains in the course of completing this survey.

The California State Legislature has made survey participation mandatory under California Welfare and Institution Code 14105.45 (b)(5)(C)(i):
“Medi-Cal pharmacy providers shall submit drug price information to the department or a vendor designated by the department for the purposes of establishing the average acquisition cost.”

and 14105.45 (b)(5)(C)(ii):
“Pharmacy providers that fail to submit drug price information to the department or the vendor as required by this subparagraph shall receive notice that if they do not provide the required information within five working days, they shall be subject to suspension under subdivisions (a) and (c) of Section 14123.”

This notification will be followed in mid-July with the survey letter. Please review the survey letter at that time; the survey collection period will run from July 15, 2016 – August 15, 2016.

DHCS greatly appreciates your time and contribution to this prescription drugs purchase price survey process. If you have any questions, please contact Mercer at RXSURVEY@mercer.com or 1-844-679-7737.

Sincerely,
Harry Hendrix, Jr., Chief
Pharmacy Benefits Division

July 2016

Dear Pharmacy Owner or Manager:

The California Department of Health Care Services (DHCS) and Mercer Government Human Services Consulting (Mercer), a part of Mercer Health & Benefits LLC, have selected your pharmacy for participation in a survey of prescription drug purchase prices.

Your responses will be a significant component in understanding and approximating the cost to acquire prescription medications for Medi-Cal beneficiaries.

The specific data fields and the layout for the invoice information are detailed below:

Please submit drug purchase price invoice data from the month of **June 2016**. **Please exclude or flag any purchases your pharmacy made under a 340B contract.**

Please provide the required information in an electronic spreadsheet file (Excel format is preferred). ***It's highly recommended that you contact your wholesaler - in most cases, your wholesaler will be able to compile your information and can provide the Excel files to you for submission to Mercer with a small amount of effort on your part.***

If you choose to compile the information yourself, rather than having your wholesaler compile, you need to download and use the Mercer spreadsheet template found on the Mercer survey web link referenced at the end of this letter. Choosing this option also requires the submission of scanned copies of the invoice for verification.

Please ensure that the pharmacy from which the information is provided is identified using the pharmacy NPI. If you are providing information for multiple pharmacy locations, please ensure each store location and associated cost data are clearly identified using a unique pharmacy NPI. An example of how wholesalers should provide the data is outlined below.

- Pharmacy NPI
- Purchase Date
- National Drug Code (NDC)
- Item Description
- Package Size of Ordered Product
- Unit of Measure
- Package Price
- Net Quantity of Packages Filled
- Extended price

	A	B	C	D	E	F	G	H	I
1	NPI (10 digits)	Purchase Date	NDC (11 digits, no dashes or spaces)	Item Description (Drug Name/Strength)	Package Size (quantity within package -- 100, 90, etc.)	Unit of Measure (ml, gm, ea)	Package Price	Net Quantity Filled (Number of Packages Delivered)	Extended Price (Package Price * Net Quantity Filled)
2									
3									

Please name your file with your pharmacy's name. If your pharmacy name is used for multiple locations, please indicate this in the file name by inserting the store number into the file name. As an example, the invoice file for ABC Pharmacy location number 201 should be named: ABC_Pharmacy_201.xlsx.

The California State Legislature has made survey participation mandatory under California Welfare and Institution Code 14105.45 (b)(5)(C)(i):
"Medi-Cal pharmacy providers shall submit drug price information to the department or a vendor designated by the department for the purposes of establishing the average acquisition cost."

and 14105.45 (b)(5)(C)(ii):
"Pharmacy providers that fail to submit drug price information to the department or the vendor as required by this subparagraph shall receive notice that if they do not provide the required information within five working days, they shall be subject to suspension under subdivisions (a) and (c) of Section 14123."

All information collected through this survey will remain confidential. Neither DHCS nor Mercer will release or otherwise make public any information that names and/or discloses the business, financial, personnel or other information provided by individual pharmacies or chains in the course of completing this survey. If you require execution of a Non-Disclosure Agreement (NDA), please complete the NDA form found at the below website and submit via email to RXSURVEY@mercer.com.

DCHS asks that information to be returned **as soon as possible to Mercer, but no later than August 15, 2016.**

Please email your data to RXSURVEY@mercer.com or submit data online at http://benefitsuite.mercer.com/sites/capharmacy. **If necessary, information can also be submitted via secure fax at 1-612-642-8686 or by mail to:**
Mercer
Attn: Pharmacy Survey
333 South 7th Street
Suite 1400
Minneapolis, MN 55402.

We greatly appreciate your time and cooperation in this effort to understand California Medi-Cal pharmacy provider purchase prices.

If you have any questions regarding this survey, please contact Mercer at RXSURVEY@mercer.com or 1-844-679-7737.

Sincerely,
Harry Hendrix, Jr., Chief
Pharmacy Benefits Division

State of California—Health and Human Services Agency
Department of Health Care Services

JENNIFER KENT
DIRECTOR

EDMUND G. BROWN JR.
GOVERNOR

August 1, 2016

Dear Pharmacy Owner or Manager:

This is a follow-up reminder for the Actual Acquisition Cost survey notification sent to you on July 15, 2016. ***If you have already submitted your purchase price information, please disregard this reminder.***

The California Department of Health Care Services (DHCS) and Mercer Government Human Services Consulting (Mercer), a part of Mercer Health & Benefits LLC, have selected your pharmacy for participation in a survey of prescription drug purchase prices. Your responses will be a significant component in understanding and approximating the cost to acquire prescription medications for Medi-Cal beneficiaries.

The California State Legislature has made **survey participation mandatory** under California Welfare and Institution Code 14105.45 (b)(5)(C)(i):

> **"Medi-Cal pharmacy providers shall submit drug price information to the department or a vendor designated by the department for the purposes of establishing the average acquisition cost."**

and has also described **consequences of non-participation** under California Welfare and Institution Code 14105.45 (b)(5)(C)(ii):

> **"Pharmacy providers that fail to submit drug price information to the department or the vendor as required by this subparagraph shall receive notice that if they do not provide the required information within five working days, they shall be subject to suspension under subdivisions (a) and (c) of Section 14123."**

For specific details, please refer to your July 15, 2016 letter and to Mercer's website at http://benefitsuite.mercer.com/sites/capharmacy.

All information collected through this survey will remain confidential. Neither DHCS nor Mercer will release or otherwise make public any information that names and/or discloses the business, financial, personnel, or other information provided by individual pharmacies or chains in the course of completing this survey.

DCHS asks that information to be returned **as soon as possible to Mercer, but no later than August 15, 2016.**

Please email your data to RXSURVEY@mercer.com or submit data online at http://benefitsuite.mercer.com/sites/capharmacy.

Pharmacy Benefits
1501 Capitol Avenue, MS 4604, P.O. Box 997413, Sacramento, CA 95899-7413
Phone: (916) 552-9500 Fax: (916) 552-9563
Internet Address: www.dhcs.ca.gov

We greatly appreciate your time and cooperation in this effort to understand California Medi-Cal outpatient pharmacy provider purchase prices.

If you have any questions regarding this survey, please contact Mercer at RXSURVEY@mercer.com or 1-844-679-7737.

Sincerely,

Harry Hendrix, Jr., Chief
Pharmacy Benefits Division

Mercer (US) Inc.

333 South 7th Street, Suite 1400

Minneapolis, MN 55402

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