Visante

How Mail-Service Pharmacies Will Save $46.6 Billion Over the Next Decade and the Cost of Proposed Restrictions

Prepared for

PCMA
PHARMACEUTICAL CARE MANAGEMENT ASSOCIATION

February 2012

Table of Contents

I. Executive Summary

On healthcare issues, poll after poll shows that cost is the greatest concern for both consumers and employers. At the same time, the growth of Amazon.com and other online retailers highlights greater consumer demand for convenience and home delivery. With prescription drugs, these trends have led to the greater use of high-tech mail-service pharmacies. While patients with short-term, acute needs continue to use drugstores, patients with chronic conditions like high blood pressure increasingly rely on mail-service pharmacies to save money and have prescriptions delivered to their homes. However, proposed state laws and regulations that restrict mail-service pharmacy options threaten to raise costs for both consumers and payers.

Major Findings on Mail-Service Pharmacy Savings

Compared to brick-and-mortar drugstores, mail-service pharmacies offer deeper discounts and reduced copays for 90-day prescriptions. This generates substantial savings:

- Mail-service pharmacies will **save $46.6 billion nationally** for employers, unions, government employee plans, consumers, and other commercial-sector payers over the next ten years.[1]
- Mail-service pharmacies **save consumers and payers an average of 15%** on 90-day prescriptions compared to 90-day prescriptions obtained at brick-and-mortar drugstores.
- Mail-service pharmacies **save consumers and payers an average of $22 per 90-day prescription** compared to the same prescription obtained at a drugstore.

Major Findings on the Cost of Restrictions on Mail-Service Pharmacies

When state or federal laws or regulations place restrictions or prohibitions on the use of mail-service pharmacies, savings are threatened:

- Laws or regulations that prohibit health plan sponsors from offering consumers lower copays on mail-service prescriptions can **decrease mail-service pharmacy use—and savings—by more than 50%** for those plan sponsors, according to government research.
- **Each 1 percentage point decrease in the use of mail-service pharmacies nationally would increase prescription costs by $2.3 billion** over ten years for consumers and commercial-sector payers.
- Across the country, all types of pharmacies—including independents—are filling an increasing number of prescriptions, indicating broad consumer access to drugstores and **no rationale for restrictions on mail-service pharmacies**.

[1] Savings estimates are for the commercial sector only. Part D savings are not included.

II. Analysis

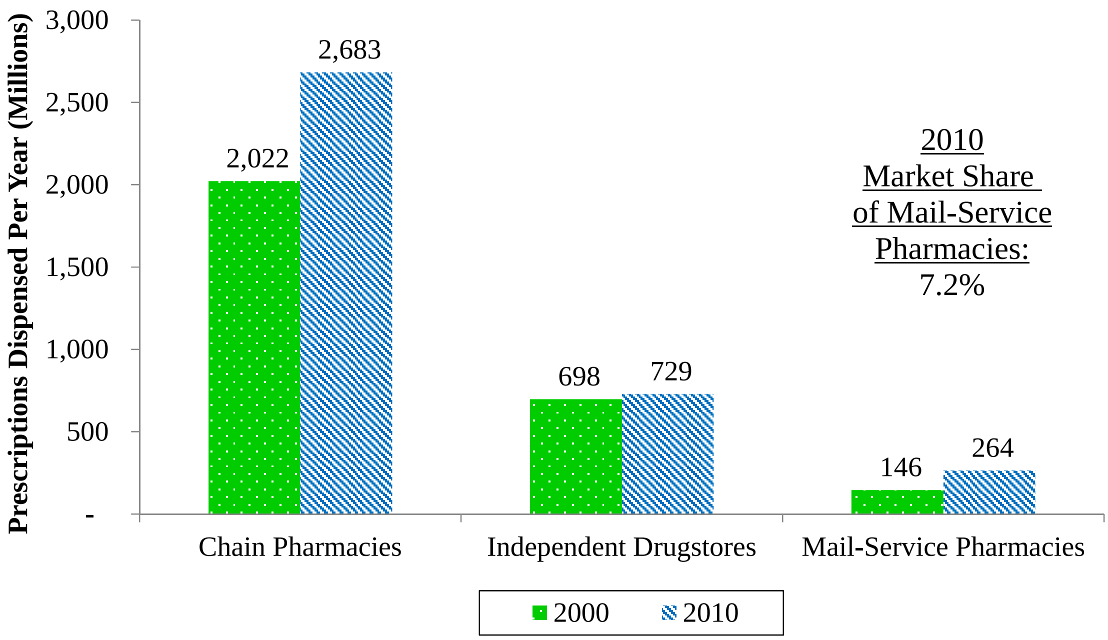
Use of Mail-Service Pharmacies for Chronic Care Prescriptions

Mail-service pharmacies typically provide 90-day prescriptions for medications consumers need on an ongoing basis, while local drugstores are used for new therapy starts and acute-care prescriptions. Consumers use mail-service pharmacies once they are stable on a medication, after having finished several 30-day prescriptions from their local drugstores.

Prescription Trends Suggest Broad Pharmacy Access and No Rationale for Restrictions

Over the past ten years, the number of prescriptions dispensed by mail-service pharmacies has increased from 146 million to 264 million, or 7.2% of all outpatient prescriptions (see Exhibit 1). At the same time, prescriptions through both chain and independent pharmacies have also increased, accounting for the majority of growth in the marketplace. The fact that the number of prescriptions flowing through each pharmacy channel is growing suggests that consumers have broad access to pharmacy options. Policies to restrict access to mail-service pharmacies are designed primarily to protect brick-and-mortar retailers, not the consumers they serve.

Exhibit 1: Prescription Volume Growing Through All Pharmacy Channels, Mail-Service Pharmacies a Modest Share of Market

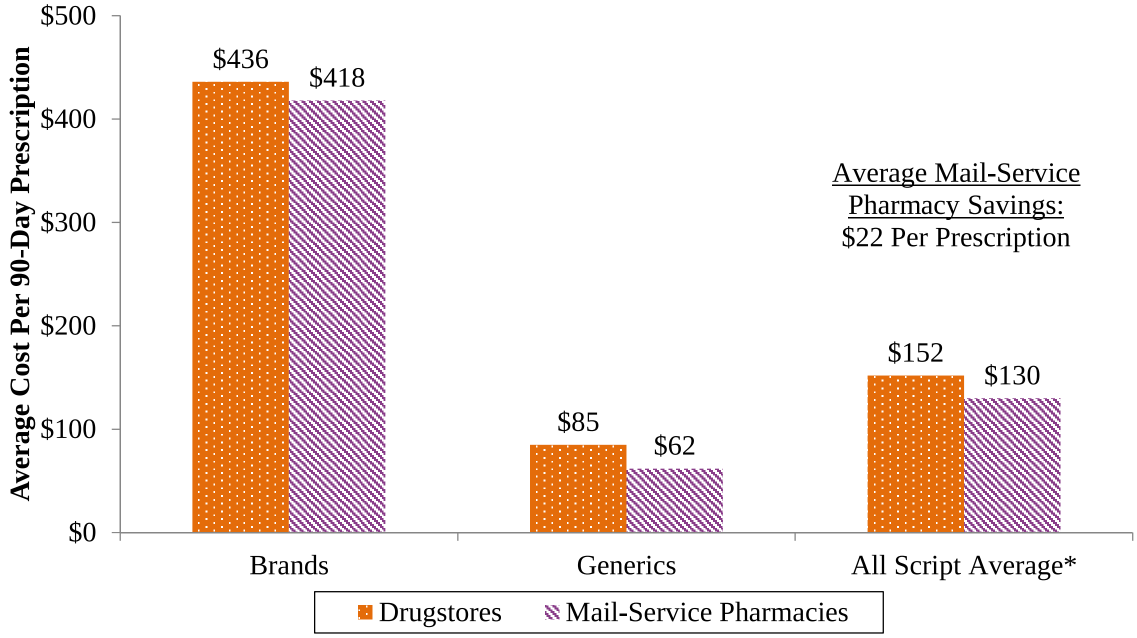


Source: IMS data as reported by the National Association of Chain Drugstores in *2011-2012 Chain Pharmacy Industry Profile*. Note: Chain pharmacies category includes chain drugstores, mass merchants, and supermarkets. Each prescription was counted once, regardless of size/days of supply.

Mail-Service Pharmacies Save 15% on the Average Cost of a Prescription

Mail-service pharmacies save consumers and payers 15% on the average cost of a 90-day prescription. At $130, an average prescription through mail-service pharmacies cost $22 less than the same-sized prescription through drugstores. Consumers and payers save an average of $23 on generic scripts and $18 on brands (see Exhibit 2).

Exhibit 2: Mail-Service Pharmacies Save Consumers and Payers $22 Per Prescription



*All script average includes brands and generics weighted by share of prescriptions.
Source: Visante analysis of data reported by the Pharmacy Benefit Management Institute (PBMI) in *2011-2012 Prescription Drug Benefit Cost and Plan Design Report*.

Payers Receive Better Discounts from Mail-Service Pharmacies

Mail-service pharmacies directly reduce prescription drug costs primarily by offering payers better discounts on the ingredient cost of prescriptions (see Exhibit 3).

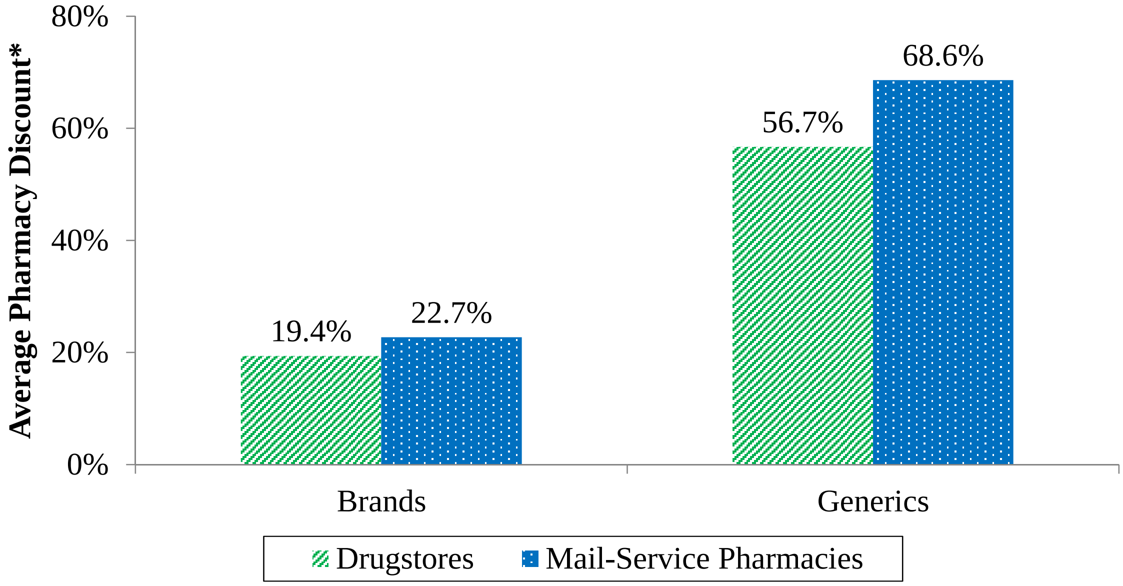
- Mail-service pharmacies offer payers an average ingredient discount of 68.6% off the average wholesale price of generic drugs, compared to a 56.7% discount at drugstores.[2]

- For brands, mail-service pharmacies offer a 22.7% discount, compared to 19.4% for drugstores.[3]

[2] Pharmacy Benefit Management Institute, 2011-2012 Prescription Drug Benefit Cost and Plan Design Report, 2011.
[3] Ibid.

Better discounts means that payers realize substantial savings on the ingredient cost of medications obtained through mail-service pharmacies.

Exhibit 3: Mail-Service Pharmacies Offer Bigger Discounts on Brands and Generics



Source: Visante analysis of data reported by the Pharmacy Benefit Management Institute (PBMI) in *2011-2012 Prescription Drug Benefit Cost and Plan Design Report*. Data for 90-day prescriptions.

Dispensing fees for 90-day scripts at both mail-service pharmacies and drugstores average less than $1 per prescription.[4] Nearly 90% of plan sponsors report that their mail-service pharmacy does not charge a dispensing fee.[5]

Mail-Service Pharmacies Encourage Generic Drug Use

Without patients waiting in line at the pharmacy counter, mail-service pharmacists have more "fill-to-receive" time that allows them to contact patients and physicians to seek approval for the substitution of generic drugs when brands have been prescribed. As a result, the generic substitution rate (GSR), which measures how often generics are substituted for brands when a generic is available, is higher for mail-service pharmacies than drugstores.[6,7] Another measure, the generic dispensing rate (GDR), measures the proportion of all dispensed prescriptions that are generic. Comparisons between mail-service pharmacy and drugstore GDRs must account for the different mix of drugs, prescription sizes, and copay incentives for each channel.[8] When these differences are taken into account, GDRs are comparable for mail-service pharmacies and drugstores.

---

[4] Pharmacy Benefit Management Institute, op. cit.
[5] Ibid.
[6] Federal Trade Commission, "Pharmacy Benefit Managers: Ownership of Mail-Service Pharmacies," August 2005.
[7] Wosinska, M., et al., "Generic Dispensing and Substitution in Mail and Retail Pharmacies," *Health Affairs*, July 2004.
[8] Federal Trade Commission, op. cit.

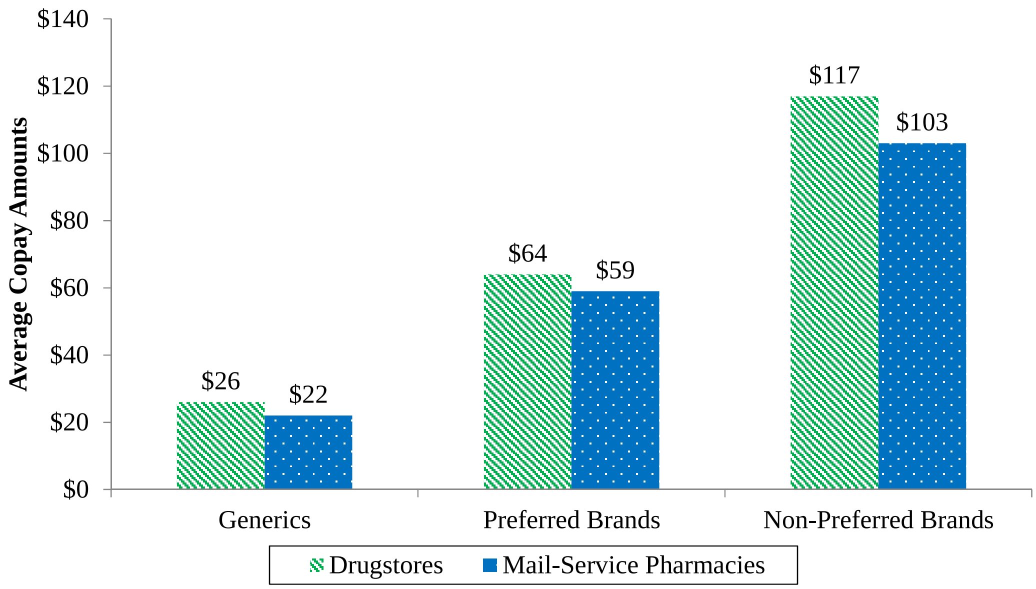
Plan Sponsors Receive Higher Manufacturer Rebates on Mail-Service Prescriptions

As with generic substitution, more "fill-to-receive" time allows mail-service pharmacies to contact patients and physicians, in this case to seek approval for the substitution of a preferred brand if a non-preferred brand has been prescribed. These activities increase compliance to the plan's formulary, lower the patient's copays, and result in higher rebates from drug manufacturers. For plan sponsors that receive a guaranteed rebate amount per prescription (the most common type of rebate arrangement), the average rebate is $34.74 through mail-service pharmacies vs. $28.62 through drugstores for a 90-day prescription.[9] These plan sponsors thus receive an additional $6.12 in savings per brand script at mail (over and above the previously discussed $18 savings per brand script from deeper ingredient cost discounts and reduced copays).[10]

Consumers Have Lower Copays for Mail-Service Prescriptions

Many plan sponsors encourage consumers to use mail-service pharmacies by lowering copays on mail-service prescriptions. For an average three-tier drug plan, consumers save up to $14 per 90-day prescription obtained through a mail-service pharmacy compared to a drugstore (see Exhibit 4). On average, consumers pay 19% of the cost of a mail-service prescription compared to 25% of a drugstore prescription.

Exhibit 4: Lower Copays for Mail-Service Prescriptions



Source: Visante analysis of data reported by the Pharmacy Benefit Management Institute (PBMI) in *2011-2012 Prescription Drug Benefit Cost and Plan Design Report*. Data for 90-day prescriptions.

[9] Pharmacy Benefit Management Institute, op. cit.
[10] Because PBMI does not report data for plan sponsors that contract for a percentage share of actual manufacturer rebates rather than a flat guaranteed rebate amount per script, Visante has not included higher average rebates in our estimates of overall mail-service savings.

Mail-Service Pharmacies Will Save $46.6 Billion During the Next Decade

Mail-service pharmacies will save $46.6 billion nationally for employers, unions, government employee plans, consumers, and other commercial-sector payers over the next ten years.[11] This represents Visante's estimate of how much mail-service pharmacies will save consumers and payers compared to a scenario where all projected mail-service prescriptions would instead be filled as 90-day prescriptions at drugstores. Our estimate represents savings to plan sponsors primarily in the form of lower ingredient costs, and savings to consumers in the form of lower copays. It does not include potential additional mail-service pharmacy savings from higher manufacturer rebates and does not consider potential savings on non-drug expenditures from improved safety and patient adherence described below. Exhibit 5 estimates potential mail-service pharmacy savings for the commercial sector on a state-by-state basis over the next 10 years, assuming an average level of mail-service pharmacy penetration and neutral laws and regulations in each state.

What Makes Mail-Service Pharmacies More Efficient

Mail-service pharmacies are able to generate savings for consumers and payers by being vastly more efficient than brick-and-mortar drugstores. Through the use of computer-controlled quality processes, robotic dispensing machinery, and advanced workflow practices, mail-service pharmacies are able to fill large quantities of prescriptions while enhancing quality and reducing costs. This technology allows pharmacists to focus on clinical and cost management functions, rather than counting out pills, printing instructions, and assembling prescriptions by hand as done in drugstores.

Superior Safety through Mail-Service Pharmacies

Technologically advanced mail-service pharmacies achieve dispensing accuracy rates up to 23 times better than drugstores. Studies have found an error rate of nearly one in every 50 prescriptions (1.72%) filled at drugstores, compared to less than one in every 1,000 prescriptions (0.075%) at mail-service pharmacies.[12] By being more accurate, mail-service pharmacies help ensure that patients get the correct drugs, dosages, and dosage forms, and thus avoid costly adverse drug events that can result in hospitalization.

Patients Have Access to 24/7 Counseling and Support

Mail-service pharmacies provide patients convenient access to 24/7 confidential counseling and answers to questions on prescription medications over the phone or Internet. Pharmacists also counsel patients on affordable medication options and identify generic and therapeutic substitution opportunities.

---

[11] Savings estimates are for the commercial sector only. Part D savings are not included.

[12] Teagarden, J.R., et al., "Dispensing Error Rate in a Highly Automated Mail-Service Pharmacy Practice," *Pharmacotherapy*, November, 2005.

Exhibit 5: Potential Ten-Year Mail-Service Pharmacy Savings State-by-State

State	Mail-Service Pharmacy Savings* (millions)
Alabama	$918.9
Alaska	$103.8
Arizona	$868.2
Arkansas	$442.0
California	$4,369.4
Colorado	$536.0
Connecticut	$802.1
Delaware	$202.4
District of Columbia	$83.1
Florida	$3,630.3
Georgia	$1,549.3
Hawaii	$203.3
Idaho	$186.3
Illinois	$1,724.1
Indiana	$1,008.9
Iowa	$501.9
Kansas	$369.5
Kentucky	$640.6
Louisiana	$730.2
Maine	$253.1
Maryland	$1,120.9
Massachusetts	$1,190.1
Michigan	$1,555.8
Minnesota	$766.9
Mississippi	$427.8
Missouri	$913.9

(Continued on next page)

* Potential mail-service pharmacy savings for the commercial sector, 2012-2021. Assumes an average level of mail-service pharmacy penetration and neutral laws and regulations in each state. Medicare Part D savings are not included.

Source: Visante analysis, 2012.

Exhibit 5: Potential Ten-Year Mail-Service Pharmacy Savings State-by-State (Continued)

State	Mail-Service Pharmacy Savings* (millions)
Montana	$107.6
Nebraska	$287.4
Nevada	$326.8
New Hampshire	$228.6
New Jersey	$1,721.2
New Mexico	$197.9
New York	$2,929.1
North Carolina	$1,588.0
North Dakota	$138.0
Ohio	$1,562.5
Oklahoma	$540.4
Oregon	$453.1
Pennsylvania	$1,986.7
Rhode Island	$245.6
South Carolina	$753.3
South Dakota	$99.3
Tennessee	$1,007.2
Texas	$3,489.8
Utah	$315.8
Vermont	$91.7
Virginia	$1,297.9
Washington	$881.8
West Virginia	$330.9
Wisconsin	$853.8
Wyoming	$82.0
US Total	**$46,614.8**

* Potential mail-service pharmacy savings for the commercial sector, 2012-2021. Assumes an average level of mail-service pharmacy penetration and neutral laws and regulations in each state. Medicare Part D savings are not included.

Source: Visante analysis, 2012.

Mail-Service Pharmacies Improve Patient Adherence

Patients receiving their prescriptions through mail-service pharmacies follow their doctors' prescribed drug regimens more often than drugstore users. This improves health outcomes and often reduces non-drug medical costs, such as hospitalizations. Part of the reason mail-service improves adherence is that patients receive their prescriptions in 90-day supplies, rather than 30-day supplies, which tends to reduce adherence problems.[13] Even after accounting for 90-day prescriptions, however, evidence suggests that mail-service pharmacy users achieve higher adherence rates than drugstore users.[14] For patients with chronic conditions, such as diabetes, high cholesterol, and high blood pressure, studies find adherence is approximately 8 percentage points higher for mail-service pharmacy users.[15,16,17] Lower copays, home delivery, and refill reminder programs all likely play roles.

Less Waste at Mail-Service Pharmacies

Prescriptions obtained through mail-service pharmacies are associated with less waste than 90-day prescriptions obtained through drugstores. Waste occurs when patients stop taking their medication before using the entire supply of a prescription. This can be due to the need to discontinue therapy, switch to a different drug, or change dosage strengths. To minimize waste, mail-service pharmacies are typically used only once a patient is stable on a medication after having finished several 30-day prescriptions from their local drugstores. A 2011 study of patients taking statin medications found that on a yearly basis, four 90-day drug prescriptions through drugstores were associated with 4.04 days of waste, while four 90-day mail-service prescriptions were associated with 3.08 days of waste.[18]

Mail-Service Pharmacies Thoroughly Regulated

Mail-service pharmacies are thoroughly regulated. They must be licensed and be in good standing with the state boards of pharmacy in their home states. This licensure includes full compliance with pharmacy and controlled substances laws for that state. Mail-service pharmacies also obtain nonresident licensure when required by the states to which they ship prescription drugs. Mail-service pharmacies adhere to the highest standards of professionalism and should not be confused with so-called "Internet pharmacies" associated with spam email offers.

---

[13] Hermes M., et al., "Adherence to Chronic Medication Therapy Associated with 90-Day Supplies Compared with 30-Day Supplies," *Journal of Managed Care Pharmacy,* 2010, 16:141-142.

[14] Duru, K., et al., "Mail-Order Pharmacy Use and Adherence to Diabetes-Related Medications," *The American Journal of Managed Care*, January, 2010.

[15] Ibid.

[16] Zhang, L., et al., "Mail-Order Pharmacy Use and Medication Adherence among Medicare Part D Beneficiaries with Diabetes," *Journal of Medical Economics,* October 2011.

[17] Devine, S., et al.,"A Comparison of Diabetes Medication Adherence and Healthcare Costs in Patients Using Mail Order Pharmacy and Retail Pharmacy," *Journal of Medical Economics*, 2010.

[18] Vuong, T., et al., "Statin Waste Associated with 90-day Supplies Compared to 30-day Supplies," Prime Therapeutics, 2011.

Do Drugstores or Mail-Service Pharmacies Have a Conflict of Interest?

Drugstores claim that encouraging the use of mail-service pharmacies poses a conflict of interest for Pharmacy Benefit Managers (PBMs). On the other hand, payers contend that seeking restrictions on the use of mail-service pharmacies poses a conflict of interest for drugstores that would benefit from the increased foot traffic and profits that would result from such restrictions. In response to this issue, the FTC conducted a comprehensive study on the effects that PBM ownership of a mail-service pharmacy can have on overall prescription drug costs.[19] The FTC determined that allegations of PBMs' conflict of interest were "without merit" and that PBM-owned mail-service pharmacies:

- Offered lower prices on prescription drugs than both retail pharmacies and non-PBM-owned mail-service pharmacies,
- Are effective at encouraging the use of and dispensing generic medications, and
- Have incentives closely aligned with their customers: third-party payers who fund prescription drug care.

Cost of Mail-Service Pharmacy Restrictions

Savings through mail-service pharmacies will only be available if the legal and regulatory environment remains neutral toward such pharmacies. When state or federal laws or regulations place restrictions or prohibitions on the use of mail-service pharmacies, savings are threatened.

Health plans, insurers, and PBMs typically use a variety of incentives, such as lower copays, in order to encourage their enrollees to use mail-service pharmacies, especially for maintenance medications. Legislation that prohibits plans from offering copay differentials between mail-service and retail pharmacies limits the ability of plans to incentivize use of the lowest-cost pharmacy channel option. Likewise, anti-mail-service-pharmacy legislation may require plans to offer retail pharmacies the "same terms and conditions" as a mail-service pharmacy. The FTC cautions that such legislation limits competition because "there is no incentive for a mail-order pharmacy to bid aggressively for a share of a health plan's business if the pharmacy has no reason to expect that a lower bid will result in a higher share." FTC concludes that "by reducing competition between pharmacies, this legislation likely will raise prices for, and reduce access to, prescription drugs."

A study by the Maryland Health Care and Insurance Commissions found prohibitions on differential copays led to dramatically lower mail-service pharmacy use. For the fully-insured, in-state insurance plans subject to the differential copay prohibition, mail-service pharmacies accounted for just 7% of prescription drug payments. This compares with mail-service accounting for 22% of

[19] Federal Trade Commission, Pharmacy Benefit Managers: Ownership of Mail-Order Pharmacies, August 2005.

payments when the plan sponsor was a self-insured employer exempt from the Maryland law.[20] In short, anti-mail-service legislation cut the use of mail-service pharmacies by more than 50%, which means that any resulting savings was also cut by more than 50%.

Based on this experience, state or federal laws or regulations that place restrictions or prohibitions on the use of mail-service pharmacies could substantially increase prescription drug costs:

- Laws or regulations that prohibit health plan sponsors from offering consumers lower copays on mail-service prescriptions can **decrease mail-service pharmacy use—and savings—by more than 50%** for subject plan sponsors.

- **Each 1 percentage point decrease in the use of mail-service pharmacies nationally would increase prescription costs by $2.3 billion** over ten years for consumers and commercial-sector payers.

[20] Note that the Maryland study's finding that mail-service pharmacies accounted for 22% of prescription drug payments is consistent with the national mail-service penetration rate of approximately 7% of prescriptions, since mail-service prescriptions are typically three times larger than retail prescriptions (90-day vs. 30-day supply). In addition, the chronic care medications dispensed by mail-service pharmacies are not available generically as often as acute care medications dispensed by drugstores. This also makes mail-service pharmacies' share of payments marginally greater than their share of prescriptions.

III. Methodology

Visante's model for projected mail-service pharmacy savings draws on commercial third-party prescription data, employer surveys, and national health expenditure (NHE) data compiled by Centers for Medicare and Medicaid Services (CMS). We first estimate average costs to consumers and plan sponsors on brand and generic prescriptions through the mail-service and retail pharmacy channels to derive savings per prescription. We then combine this with projections for the number of prescriptions, mix of prescriptions, drug price inflation, channel penetration, and other factors in order to estimate total dollar savings.

Discounts Provided by Mail-Service Pharmacies

According to data reported by health plan sponsors, mail-service pharmacies offer significant discounts over retail pharmacies on the ingredient cost of medications. A pharmacy benefits survey of 274 employers finds mail-service pharmacies provide ingredient-cost discounts of 22.7% off Average Wholesale Price (AWP) for 90-day brand prescriptions (3 percentage points better than retail) and 68.6% for 90-day generic scripts (12 points better than retail).[21] A survey of managed care organizations covering 32 million individuals with commercial health insurance has similar results, with mail-service ingredient cost discounts 6 points better than retail networks.[22]

Dispensing fees for 90-day scripts at both mail-service pharmacies and drugstores average less than $1 per prescription.[23] Nearly 90% of plan sponsors report that their mail-service pharmacy does not charge a dispensing fee.[24]

Based on these data, combined with data on average ingredient costs for generic and brand prescriptions in a managed care environment (i.e., $23.75 average generic ingredient cost for a 31-day supply and $167.47 average brand ingredient cost for a 33-day supply),[25] Visante then estimated pharmacy reimbursement for 90-day prescriptions at mail-service pharmacies and drugstores.

Projecting Mail-Service Savings by Type of Prescription

The weighted average (including both brands and generics) cost for a 90-day prescription filled at a mail-service pharmacy is approximately $130, which is 14.5% less than the $152 cost of a 90-day prescription at drugstores. This savings is based only on what consumers and plan sponsors pay pharmacies per prescription. Evidence suggests that additional savings flow to plan sponsors as a result of manufacturer rebates; however, these savings are not included in Visante's model. Likewise, mail-service pharmacies may generate even more savings through greater formulary

[21] Pharmacy Benefit Management Institute, Prescription Drug Benefit Cost and Plan Design Report, 2011-2012.
[22] Novartis, "Pharmacy Benefit Report: 2010/2011 Facts, Figures, & Forecasts," 2011.
[23] Pharmacy Benefit Management Institute, op. cit.
[24] Ibid.
[25] Novartis, op. cit.

compliance, dispensing accuracy, and patient adherence programs; however, these factors are not included in our model.

Mail-Service Pharmacy Utilization

In addition to price discounts, mail-service utilization is also a crucial variable in predicting how much money mail-service pharmacies save the health system. Data from IMS Health suggest that about 7.2% of prescriptions are currently filled through mail-service pharmacies.[26] This amounts to roughly 20% of prescriptions on a size-normalized basis (one 90-day prescription counted as three 30-day prescriptions). This assumes that approximately 10% of drugstore prescriptions are for a 90-day supply, as are nearly all mail-service prescriptions. Specialty pharmacy prescriptions were excluded from the analysis.

Deriving Ten-Year Pharmacy Expenditure Trends

To derive baseline drug expenditures flowing through retail and mail-service pharmacies, Visante used CMS National Health Expenditure (NHE) projections for outpatient prescription drug expenditures from 2011 to 2020. NHE projections reflect assumptions concerning the impact of health reform, manufacturer price inflation, patent expirations, new drug introductions, follow-on biologics, and other factors. By using CMS data, our model incorporates these assumptions. CMS does not publish the detailed factors underlying its model, so we estimated the factor inputs necessary to model mail-service pharmacy savings and then applied these to baseline expenditures derived from CMS's data.

To model savings over a ten-year period, it was necessary to use data from IMS Health[27] to separate drug trends into key subcomponents such as the number of prescriptions, the generic dispensing rate (GDR), the mail-service pharmacy penetration rate, and other measures. We also estimated trends in these components based on data published in PBM drug trend reports[28] and other sources. We assume that during the 10-year projection period (2012-2021): total prescription utilization will grow by 2% to 3% annually; the generic dispensing rate (GDR) will continue to grow and will exceed 80% by 2015; and brand prices will increase 5% to 10% per year, while generic prices will remain relatively flat. We assume that these trends are similarly captured in the CMS projections.

Projecting Mail-Service Pharmacy Savings to the Health System

In order to estimate savings associated with mail-service pharmacies over the next ten years, we compared the projected prescription expenditures for the commercial sector if mail-service pharmacy utilization continues at current levels vs. projected expenditures if all mail-service prescriptions were instead filled as 90-day prescriptions at drugstores.

---

[26] IMS Health, Channel Distribution by Prescriptions, April 2011.
[27] IMS Health, The Use of Medicines in the United States: Review of 2010, April 2011; IMS Health, Channel Distribution by Prescriptions, April 2011.
[28] CVS Caremark, Insights 2011, 2011; Express Scripts, Annual Drug Trend Report, 2011; Medco, Drug Trend Report, 2011.

Based on this methodology, we find that mail-service pharmacies will save $46.6 billion nationally for employers, unions, government employee plans, consumers, and other commercial-sector payers over the next ten years.

Projecting Potential Mail-Service Pharmacy Savings on a State-by-State Basis

To derive potential mail-service pharmacy savings on a state-by-state basis, Visante used CMS NHE projections of outpatient prescription drug expenditures at the state level to allocate our national estimate of mail-service savings. This assumes that the state-by-state allocation of mail-service pharmacy expenditures mirror the allocation of overall outpatient prescription drug expenditures by state. As with our national estimate, only the commercial sector is included. This excludes Medicare Part D and state Medicaid fee-for-service programs. Because we are estimating *potential* mail-service pharmacy savings, we have not adjusted for any existing laws or regulations in individual states that may serve to discourage the use of mail-service pharmacies.

Projecting the Cost of Anti-Mail-Service Legislation

Total mail-service savings were calculated assuming 20% of medication volume flows through mail-service pharmacies nationwide.[29] If mail-service pharmacy penetration changed by 1 percentage point, the savings would change by one-twentieth of the total. In other words, a 1 percentage point reduction in mail-service penetration would reduce ten-year savings by one-twentieth of $46.6 billion, or $2.3 billion.

[29] The national mail-service penetration rate is approximately 7% of prescriptions, but since mail-service prescriptions are typically (but not always) three times larger than retail prescriptions (90-day vs. 30-day supply), mail-service pharmacies account for approximately 20% of medication volume.