



*The* LEWIN GROUP

# **Mail-Service Pharmacy Savings: A Ten-Year Outlook for Public and Private Purchasers**

*Prepared for:*

**Pharmaceutical Care Management Association**

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## **Current Trends in Mail-Service**

During the past ten years, mail-service pharmacies have been the fastest growing distribution channel for outpatient prescription drugs. This rapid growth has occurred as employers, unions, and other plan sponsors have encouraged consumers to use mail-service in order to cut prescription drug costs.

While it has grown rapidly, mail-service still accounts for just 17.3 percent of expenditures on outpatient prescriptions, according to IMS Health. **Assuming current trends continue, we estimate that mail-service will account for 18.5 percent of outpatient drug spending in 2006, or about \$46.1 billion.**<sup>1</sup>

## **Savings Provided by Mail-Service**

This analysis focuses on savings resulting from mail service pharmacies being used to their full potential. Given the typical design of prescription drug coverage in the marketplace, a portion of these savings is derived from the smaller number of prescriptions typically required under mail compared to retail for the same number of pills, because mail usually fills a 90-day supply while retail typically fills a 30-day supply. At the same time, there is strong evidence that the greater efficiencies of automation and workflow inherent in the structure of mail-service pharmacies enable them to produce cost savings well beyond those associated with the larger days supply:

- A recent analysis by an investment firm estimated that, compared with retail, mail-service is five to ten percent less expensive for payers, even after taking into considering that payers typically require lower copayments from consumers for mail prescriptions.<sup>2</sup>
- Published data also indicate that mail-service likely has significantly lower overhead and fulfillment costs than retail pharmacies. Analysts report that it costs major retail pharmacies between \$4.95 and \$5.89 to fill a prescription, whereas a mail-service pharmacy can fill and mail a prescription for as little as \$2.50.<sup>3</sup>

Because mail-service pharmacies buy medicines in bulk, they may also enjoy advantages on drug ingredient costs. Other potential sources of savings include mail-service's greater ability to reduce costs through therapeutic interchange, step therapy, and formulary compliance. This analysis makes no attempt to quantify the proportion of savings due to these individual factors.

According to a 2003 study by the U.S. Government Accountability Office (GAO) examining pharmacy benefits within the federal employee health benefits program (FEHBP), a sample of commonly-prescribed brand-name drugs had an average price of \$72.85 through retail pharmacies, but just \$64.44 through mail-service—a difference of 11.5 percent. For generic drugs, the average price was \$7.86 at retail and \$7.08 at mail—a difference of 9.9 percent.

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<sup>1</sup> We estimate that *all* prescriptions filled through mail service will account for \$46.1 billion in 2006. The vast majority of this – \$44.7 billion – will be prescriptions filled for the two populations that are the focus of this report: the Medicare population and the non-Medicare commercial population.

<sup>2</sup> Gallucci, T., "Mail Trends Bode Well for PBMs," Merrill Lynch, September 7, 2004.

<sup>3</sup> Boyle, M., "Walgreen's Drug Wars," *Fortune*, June 1, 2005.

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According to a survey of more than 400 employers—The Takeda Prescription Drug Benefit Cost and Plan Design Survey Report—mail-service offers significant cost savings over retail in terms of the ingredient cost of the drug, prescription dispensing fee, and administrative fees for processing each prescription claim (*Exhibit E-2*).<sup>4</sup>

**Exhibit E-2: Pharmacy Costs and Fees, 2003**

|   | <b>Mail</b> | <b>Retail</b> |
|---|-------------|---------------|
| <b>Drug ingredient cost discount percentage</b> | 20.4%       | 14.5%         |
| <b>Prescription dispensing fee</b>              | \$0.52      | \$2.05        |
| <b>Administrative fees per prescription</b>     | \$0.15      | \$0.24        |

Source: 2004 Prescription Drug Benefit Cost and Plan Design Survey Report, Takeda, 2005.

**Based on existing published empirical evidence, we estimate that mail-service pharmacies provide savings of ten percent compared to retail pharmacies within the same health plan**

***Potential Scope of Mail-Service***

While patients with short-term, acute needs typically receive their prescriptions in the retail setting, those patients with chronic conditions such as high-blood pressure and high cholesterol can be served by mail-service pharmacies. Typically, the first fill of a prescription is for a 30-day supply and is most often obtained through a retail pharmacy.

To estimate the potential size of the mail service market – that is, the level of expenditures for prescription drugs that could reasonably be expected to be filled by mail service pharmacies – we analyzed data from the Medical Expenditure Panel Survey (MEPS). The MEPS, a widely used annual government survey, is uniquely suited to this analysis because it combines rich survey information about insurance coverage with actual pharmacy claims data for a statistically representative sample of the entire U.S. population.<sup>5</sup> These data allowed us to identify prescriptions filled at retail pharmacies three or more times during the year, a strong indicator of maintenance medications used for chronic conditions. **Based on this analysis, we estimate that mail-service pharmacies could expand to encompass approximately 50 percent of expenditures on outpatient prescription drugs.**<sup>6</sup>

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<sup>4</sup> Pharmacy Benefit Management Institute, *Prescription Drug Benefit Cost and Plan Design Survey Report*, sponsored by Takeda, October 2004.

<sup>5</sup> U.S. Agency for Healthcare Research and Quality, 2002 Medical Expenditure Panel Survey.

<sup>6</sup> Prescription drug estimates in this report are outpatient only, thereby excluding expenditures in institutional settings such as hospitals and nursing facilities.

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## Potential Savings in the Commercial Sector and the Medicare Sector

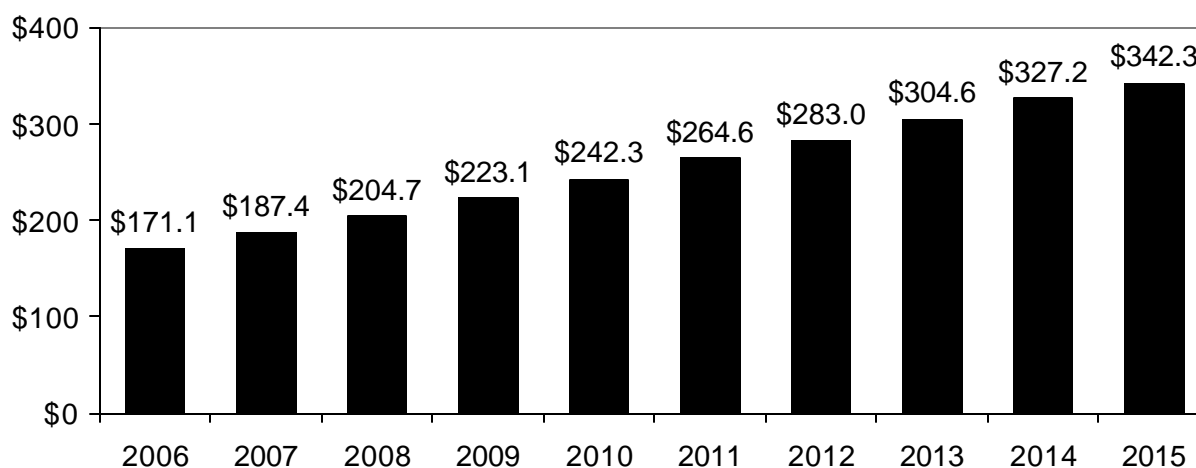
The Centers for Medicare and Medicaid Services (CMS) projects that prescription drug spending will be \$249.3 billion in 2006. We estimate that Medicare beneficiaries will account for about \$106 billion in outpatient drug spending in 2006, and non-Medicare commercially covered populations will account for nearly \$110 billion.

- At current levels, mail-service prescriptions will save our healthcare system \$5 billion in 2006. Of this total, \$2.8 billion is attributable to prescriptions filled by Medicare beneficiaries and \$2.2 billion to prescriptions filled by the non-Medicare commercial population.
- If all prescriptions that can potentially be filled through mail-service pharmacies are, an additional \$6.2 billion in savings would result, with \$2.7 billion of that savings for Medicare and \$3.6 billion for the non-Medicare commercial population.
- If current trends in mail-service market share continue, total savings will be approximately \$78.9 billion from 2006-2015.

## Impact of Mail-Service Pharmacy Growth on Retail Pharmacies

Although CMS projects that prescription drug expenditure growth will continue to slow through the next decade, due in part to the continued expansion of pharmacy benefit management tools, drug expenditures will nonetheless constitute a rapidly growing segment of healthcare expenditures.<sup>7</sup> Due to this overall growth, we estimate that retail pharmacies will continue to experience increasing expenditures (**Exhibit E-3**) if mail-service pharmacies continue expanding at their current pace—slightly less than one percentage point of the outpatient market per year.<sup>8</sup>

**Exhibit E-3: Drug Expenditures through Retail Pharmacies Assuming Current Growth Trends in Mail-Service Pharmacies Continue**



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<sup>7</sup> Heffler, S., et al., U.S. Centers for Medicare and Medicaid Services, "U.S. Health Spending Projections for 2004-2014, Health Affairs, February 2, 2005.

<sup>8</sup> IMS data show mail-service expenditures expanding by slightly less than 1 percentage point of the outpatient prescription drug market per year from 2001-2004.

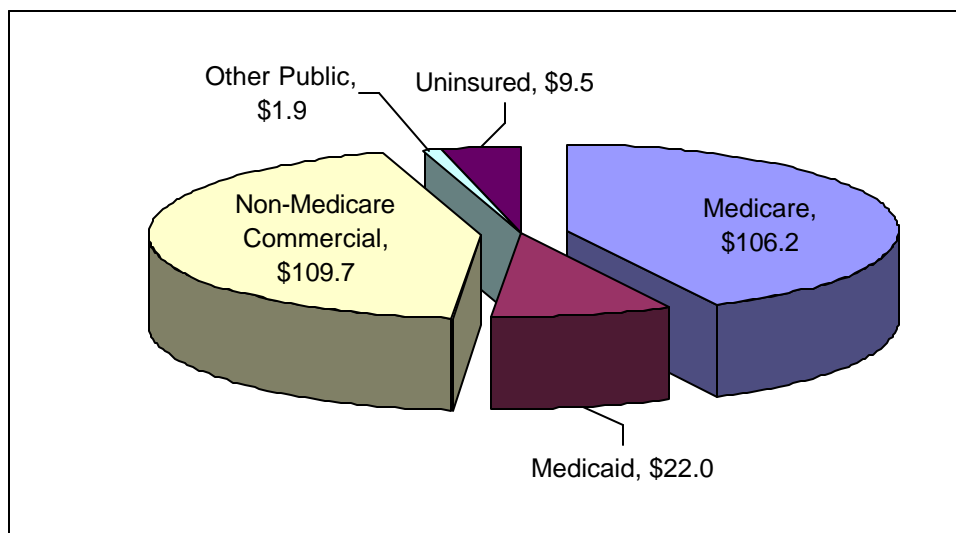
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## I. FINDINGS

### ***Potential Scope of Mail Service***

Our analysis of the 2002 MEPS data, trended forward to 2006, indicates that Medicare beneficiaries will account for about \$106 billion in outpatient drug spending in 2006, while non-Medicare commercial populations will account for nearly \$110 billion (**Exhibit 1**). The remainder of this report focuses specifically on these two groups because they represent populations with the largest potential for growth in prescriptions filled through mail service pharmacies.<sup>9</sup> While mail-service is expected to represent 18.5 percent of the outpatient prescription drug market as a whole in 2006, we estimate a higher penetration rate among Medicare beneficiaries (23.6 percent), and a slightly lower penetration rate in the non-Medicare commercial group (17.9 percent).

**Exhibit 1: Aggregate Outpatient Prescription Drug Spending (Billions) by Covered Population**



Further analysis of MEPS data indicates that mail service pharmacies could expand to encompass approximately 50 percent of prescription drug expenditures for these two groups combined.

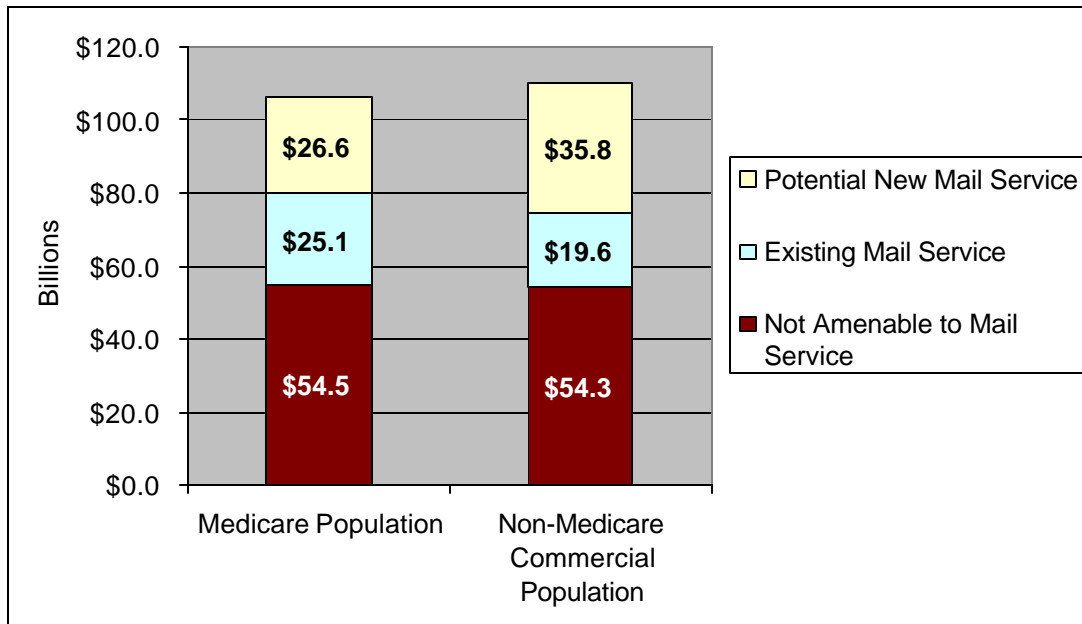
Interestingly, the data show the non-Medicare commercial group with a slightly greater *total potential* for mail-service spending than the Medicare group. Almost 51 percent of drug spending in the non-Medicare commercial group, compared to 47 percent of drug spending for Medicare beneficiaries, will be for prescriptions that could appropriately be filled through mail

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<sup>9</sup> Excluded from the analysis are individuals with Medicaid coverage (unless also covered by Medicare) and non-Medicare beneficiaries without coverage for prescription drugs.

service (**Exhibit 2**). It is important to note, however, that these estimates are based on data from 2002 (trended-forward broadly using per capita spending trends), when hormone replacement therapy represented a relatively large share of the maintenance medications, particularly for women under age 65. The subsequent change in clinical guidelines for HRT and the associated drop in utilization may reduce the size of the potential mail-service market for the non-Medicare commercial population.

**Exhibit 2: Existing and Potential Mail Service Drug Spending in Medicare and Commercial Populations, 2006**



**Potential Savings in the Commercial Sector and in the Medicare Sector**

At expected mail service penetration levels, mail-service prescriptions will save our healthcare system \$5 billion in 2006. Of this amount, \$2.8 billion will be attributable to prescriptions filled by Medicare beneficiaries and \$2.2 billion will be attributable to prescriptions filled by the non-Medicare commercial population.

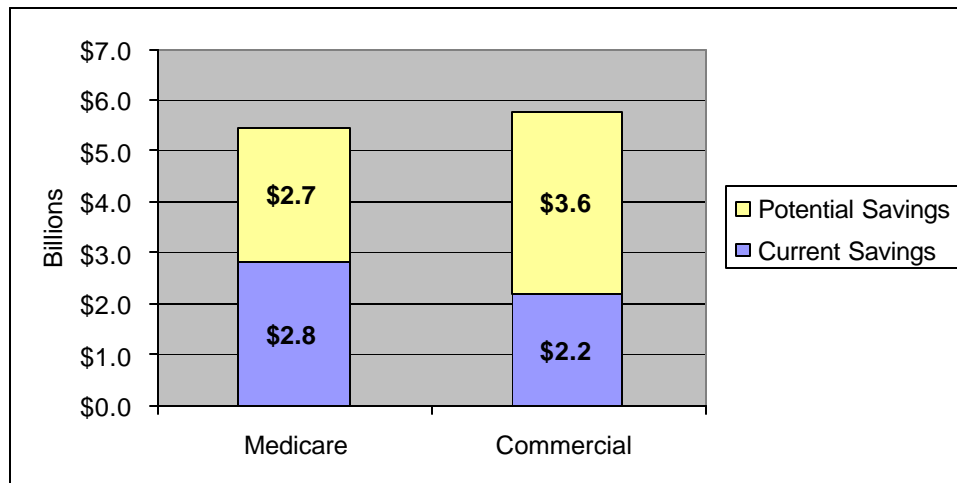
Retail prescriptions that could be filled through mail service will account for approximately \$62 billion in drug spending in 2006. If these prescriptions were filled through mail-service, it would yield an additional \$6.2 billion in savings, with \$2.7 billion of savings for the Medicare coverage group and \$3.6 billion for the non-Medicare commercial coverage group (**Exhibit 3**).<sup>10</sup> Thus, if all prescriptions that could be filled through mail-service were filled through mail-service in 2006, drug savings would reach \$11.2 billion.

Viewed another way, in the non-Medicare commercial market, we estimate that every one percentage point increase in mail-service market share generates savings of \$675 million over

<sup>10</sup> See Methods section for a description of how savings estimates were derived.

five years (2006-2010). Similarly, in the Medicare Beneficiary market, every one percentage point increase in mail-service market share can generate savings of \$646 million over five years (2006-2010). Note that it may be challenging to realize the full potential mail-service penetration for Medicare beneficiaries, given the requirement in the regulation that Medicare Part D plans offer a 90-day supply at retail.

**Exhibit 3: Potential Additional Savings from Mail Service in Medicare and Commercial Populations, 2006**



If the current mail-service market share of 18.5% is maintained from 2006 to 2015, mail-service pharmacies will save the healthcare system \$78.9 billion dollars in those 10 years **Exhibit 4**). However, if the trend continues and mail-service market share continues to increase at the rate observed since 2001, savings over that same ten-year period would rise by \$19.0 billion to a total of \$97.8 billion. Of the \$97.8 billion in savings, \$54.9 billion would be savings attributable to the Medicare population and \$43.0 billion would be attributable to prescriptions filled by the non-Medicare commercial population.

**Exhibit 4: Estimated Annual Savings from Mail-Service under Alternative Mail-Service Market Share Assumptions (billions)**

|                             | <u>Total</u>   |   |  | <u>Medicare Population</u>                           |   |  | <u>Non-Medicare Commercial Population</u>            |   |  |
|-----------------------------|--|---|--|--|---|--|--|---|--|
|                             | Mail Service Market Share Remains Constant 2006-2015 | Mail Service Market Share Continues to Increase at Current Rate | Maximum Mail Service Market Share Achieved in 2006 | Mail Service Market Share Remains Constant 2006-2015 | Mail Service Market Share Continues to Increase at Current Rate | Maximum Mail Service Market Share Achieved in 2006 | Mail Service Market Share Remains Constant 2006-2015 | Mail Service Market Share Continues to Increase at Current Rate | Maximum Mail Service Market Share Achieved in 2006 |
| 2006                        | \$5.0  | \$5.0   | \$11.2   | \$2.8  | \$2.8   | \$5.4  | \$2.2  | \$2.2   | \$5.8  |
| 2007                        | \$5.5  | \$5.8   | \$12.4   | \$3.1  | \$3.2   | \$6.0  | \$2.4  | \$2.5   | \$6.4  |
| 2008                        | \$6.1  | \$6.7   | \$13.7   | \$3.4  | \$3.7   | \$6.7  | \$2.7  | \$2.9   | \$7.1  |
| 2009                        | \$6.7  | \$7.6   | \$15.1   | \$3.8  | \$4.3   | \$7.4  | \$2.9  | \$3.4   | \$7.8  |
| 2010                        | \$7.4  | \$8.7   | \$16.6   | \$4.1  | \$4.9   | \$8.1  | \$3.2  | \$3.8   | \$8.6  |
| 2011                        | \$8.2  | \$10.0  | \$18.4   | \$4.6  | \$5.6   | \$8.9  | \$3.6  | \$4.4   | \$9.5  |
| 2012                        | \$8.8  | \$11.3  | \$19.9   | \$5.0  | \$6.3   | \$9.7  | \$3.9  | \$5.0   | \$10.2   |
| 2013                        | \$9.6  | \$12.7  | \$21.7   | \$5.4  | \$7.1   | \$10.6   | \$4.2  | \$5.6   | \$11.2   |
| 2014                        | \$10.5   | \$14.3  | \$23.6   | \$5.9  | \$8.0   | \$11.5   | \$4.6  | \$6.3   | \$12.1   |
| 2015                        | \$11.1   | \$15.7  | \$25.0   | \$6.2  | \$8.8   | \$12.2   | \$4.9  | \$6.9   | \$12.9   |
| <i>Cumulative 2006-2015</i> | <i>\$78.9</i>  | <i>\$97.8</i>   | <i>\$177.9</i>                                     | <i>\$44.3</i>  | <i>\$54.9</i>   | <i>\$86.5</i>                                      | <i>\$34.6</i>  | <i>\$43.0</i>   | <i>\$91.4</i>                                      |

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### ***Impact of Mail-Service Pharmacy Growth on Retail Pharmacies***

Although CMS projects that prescription drug expenditure growth will continue to slow through the next decade, due in part to the continued expansion of pharmacy benefit management tools, drug expenditures will nonetheless constitute a rapidly growing segment of healthcare expenditures.<sup>11</sup> Due to this overall growth, we estimate that retail pharmacies will continue to experience increasing expenditures (**Exhibit 5**) if mail-service pharmacies continue expanding at their current pace —slightly less than one percentage point of the outpatient market per year.<sup>12</sup>

**Exhibit 5: Drug Expenditures through Retail Pharmacies Assuming Current Growth Trends in Mail-Service Pharmacies Continue (billions)**

|                             | Total            | Medicare<br>Population | Non-Medicare<br>Commercial<br>Population |
|-----------------------------|------------------|------------------------|--|
| 2006                        | \$171.1          | \$81.1                 | \$90.0                                   |
| 2007                        | \$187.4          | \$88.8                 | \$98.6                                   |
| 2008                        | \$204.7          | \$97.0                 | \$107.7                                  |
| 2009                        | \$223.1          | \$105.7                | \$117.4                                  |
| 2010                        | \$242.3          | \$114.8                | \$127.5                                  |
| 2011                        | \$264.6          | \$125.4                | \$139.2                                  |
| 2012                        | \$283.0          | \$134.1                | \$148.9                                  |
| 2013                        | \$304.6          | \$144.3                | \$160.3                                  |
| 2014                        | \$327.2          | \$155.0                | \$172.1                                  |
| 2015                        | \$342.3          | \$162.2                | \$180.1                                  |
| <i>Cumulative 2006-2015</i> | <i>\$2,550.4</i> | <i>\$1,208.5</i>       | <i>\$1,341.8</i>                         |

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<sup>11</sup> Heffler, S., et. al., U.S. Centers for Medicare and Medicaid Services, "U.S. Health Spending Projections for 2004-2014, Health Affairs, February 2, 2005.

<sup>12</sup> IMS data show mail-service expenditures expanding by slightly less than 1 percentage point of the outpatient prescription drug market per year from 2001-2004.

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## II. METHODS

The purpose of this study is to estimate the savings achievable if more people filled their prescriptions through mail-service pharmacies rather than at retail pharmacies. The savings estimates presented in this report capture the reduction in spending specifically associated with the provision of prescription medications through the mail-service channel compared to retail. Whether the savings accrue to the payer (e.g., the employer) or to the consumer is a function of the market and is outside of the scope of this analysis.

The study provides separate estimates for the Medicare population and the non-Medicare commercially insured population. Together, these two groups account for about 87 percent of total U.S. spending for outpatient prescribed medications. Estimates for the Medicare population are provided for 2006, the year the new Medicare Part D drug benefit goes into effect, because mail-service is likely to be an important source of savings for Medicare beneficiaries who currently lack drug coverage but who will gain coverage in 2006. Estimates for the non-Medicare commercial population are also provided for 2006 for consistency and to avoid confusion.

The analysis consisted of four steps:

1. identifying expected mail-service spending in the Medicare and non-Medicare commercial populations in 2006;
2. estimating the portion of retail spending that could theoretically be moved to mail;
3. establishing a percentage cost difference between retail and mail;
4. calculating potential savings from realizing the potential shift from retail to mail.

Three data sources were used for steps (1) and (2): the 2002 Medical Expenditure Panel Survey (MEPS); publicly available data from IMS Health; and CMS' National Health Accounts projections of prescription drug spending. Evidence for cost savings from mail-service was derived from the January 2003 GAO report on Pharmacy Benefit Managers<sup>13</sup> and more recent information from the Takeda-sponsored survey of drug benefits released annually by the Pharmacy Benefit Management Institute.<sup>14</sup>

The following sections describe these steps in more detail.

### **1. Identifying Mail-Service Spending in 2006**

IMS data are used widely as a source for information about the relative size of the mail-service market relative to other channels. Publicly-available top-line industry data from IMS indicate that mail-service accounted for 14.4 percent of prescription drug spending, and 17.3 percent of

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<sup>13</sup> Government Accountability Office, *Federal Employees' Health Benefits: Effects of Using Pharmacy Benefit Managers on Health Plans, Enrollees, and Pharmacies*, January 2003 (GAO-03-196).

<sup>14</sup> Pharmacy Benefit Management Institute, *Prescription Drug Benefit Cost and Plan Design Survey Report*, sponsored by Takeda, October 2004.

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outpatient prescription drug spending, in 2004.<sup>15</sup> Assuming the trend toward mail evident from 2001 to 2004 in the IMS data continues, mail will account for 18.5 percent of outpatient drug spending in 2006. Benchmarking this to CMS's projection for total U.S. prescription drug spending of \$249.3 billion in 2006, mail would account for \$46.1 billion in 2006.<sup>16</sup>

While these sources provide important benchmarks of total mail-service spending, they do not provide information about the *potential* size of the mail-service market. That is, how much is currently spent at retail pharmacies on prescriptions that could reasonably be expected to be filled through mail-service pharmacies? For this question, we used data from the pharmacy follow-back component of the 2002 Medical Expenditure Panel Survey (MEPS), a widely-used data source compiled by the U.S. Agency for Healthcare Research and Quality (AHRQ).

The MEPS data provides drug coverage information and event-level drug utilization and spending data for a nationally representative sample of individuals. MEPS allowed us to identify the two populations of interest for this analysis—Medicare beneficiaries, and non-Medicare beneficiaries with commercial insurance. The commercial population excludes those with Medicaid coverage, while the Medicare population includes those dually eligible for Medicare and Medicaid.

The MEPS identifies channels of prescription drug spending and health insurance coverage. MEPS categorizes retail pharmacies into five possible outlets: mail-service, another store, HMO/clinic/hospital, drug store, and online. Assuming that the vast majority of online pharmacy purchases were for refills from mail-service prescriptions, for the purpose of this report, both mail-service and online uses were considered mail-service.

MEPS identifies whether consumers used any mail-service pharmacy during the year, but does not identify whether a *specific prescription* was filled via a retail pharmacy or a mail-service pharmacy. If consumers identified themselves as only using mail-service pharmacies (i.e., no retail pharmacy usage), all prescription drug spending was considered mail service. In other cases where consumers indicated they had used both mail-service and retail pharmacy, only prescriptions were filled for the exact same drug two or more times during the year were considered mail service.<sup>17</sup> Additionally, if consumers reported any use of mail service, we assumed that they used mail-service for all maintenance prescriptions.

We assume that these drugs are maintenance medications and assume 90-day supplies, typical of mail-service prescriptions. Although this analysis includes some prescriptions filled initially at retail, it also likely excludes some initial fills of maintenance prescriptions, mitigating the potential bias. Because mail pharmacy services are typically only marketed to health plans, employers, and large buyers rather than to uninsured individuals, this study assumes that the uninsured have no mail service spending

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<sup>15</sup> U.S. Purchase Activity by Channel, 2004, retrieved on May 25, 2005 from:

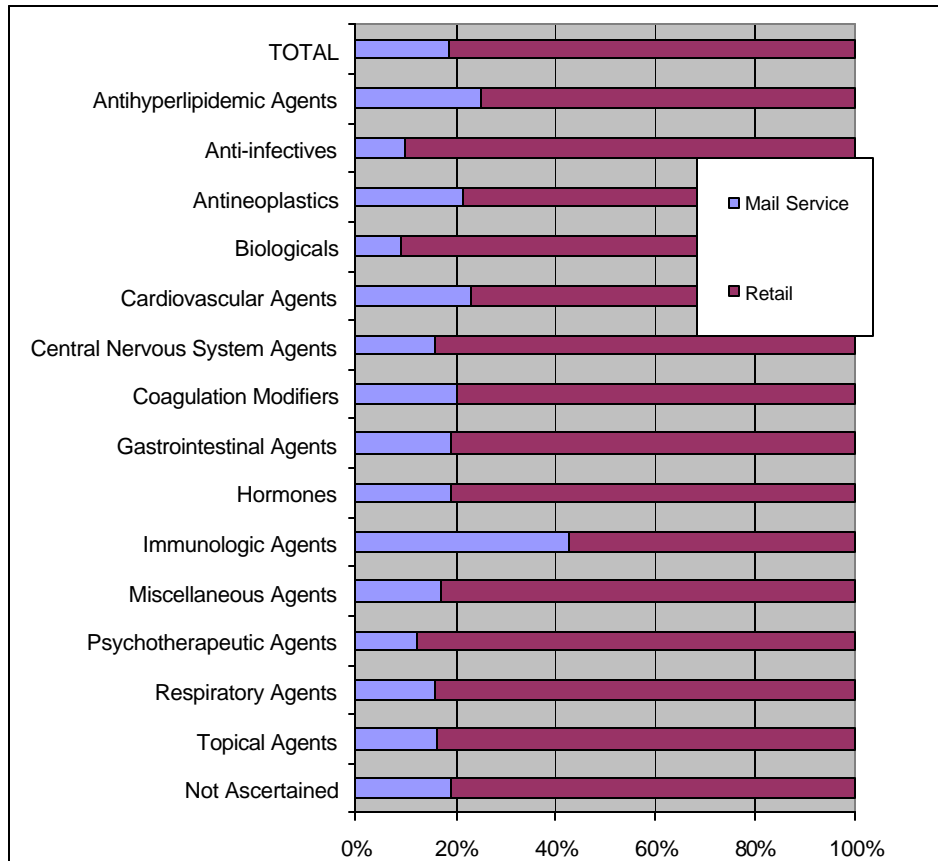
[http://www.imshealth.com/ims/portal/front/articleC/0,2777,6599\\_49695983\\_69891354,00.html](http://www.imshealth.com/ims/portal/front/articleC/0,2777,6599_49695983_69891354,00.html)

<sup>16</sup> Centers for Medicare and Medicaid Services, National Health Expenditure Projections 2004-2014, published February 2005. Retrieved May 25, 2005 from <http://www.cms.hhs.gov/statistics/nhe/default.asp>.

<sup>17</sup> Though clearly not all prescriptions filled twice are maintenance medications, because we are looking here only at individuals known to use some mail service, it is more likely than average that prescriptions filled more than once were filled by mail.

We then re-weighted the MEPS data to match total projected spending of \$249.3 billion in 2006 from National Health Accounts, and to reflect the expected proportion of mail-service spending of 18.5 percent in 2006 discussed earlier. **Exhibit 6** shows the resulting proportion of spending accounted for by mail service by therapeutic class.

**Exhibit 6**  
**Percent Mail-service Spending by Therapeutic Class from the MEPS, Adjusted <sup>a</sup>**



<sup>a</sup> Overall mail-service spending percentage in 2002 MEPS, adjusted to be consistent with mail-service percentage from 2004 IMS top-line sales data, and trended forward to 2006.

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## **2. Estimating Spending for Retail Prescriptions Amenable to Mail-Service**

The adjusted and benchmarked prescriptions from MEPS that were not identified as mail-service were broken out into two categories: those that are amenable to being filled through mail-service (“potential new mail”) and those that are not likely to be easily filled through mail-service. *Potential new mail* includes prescriptions for the exact same drug (including form and strength) filled three or more times during the year. Because these individuals reported no mail-service use during the year, we assume these prescriptions are all for 30-day supplies, and therefore apply the stricter standard of three identical prescriptions, rather than the two prescription standard used to identify mail-service prescriptions among known mail-service users. In addition, to ensure a conservative savings estimate, we did not count the first of the three or more maintenance medication prescriptions as *potential new mail*. (The initial 30-day prescription for a maintenance medication is most often filled at a retail pharmacy.) We also did not count as *potential new mail* prescriptions those that were for non-maintenance type medications, or those for individuals that are uninsured or covered by Medicaid.

## **3. Establishing the Cost Difference between Retail and Mail-Service**

This analysis focuses on savings from mail-service over retail related to increased efficiencies in filling prescriptions. Given the typical design of prescription drug coverage in the marketplace, a portion of these savings is derived from the smaller number of prescriptions typically required under mail, compared to retail for the same number of pills, because mail typically fills a 90-day supply while retail typically fills a 30-day supply. A recent analysis by an investment firm estimated that mail-service is five percent to ten percent less expensive for payers compared with retail, even after taking into consideration that payers typically require lower copayments from consumers for mail prescriptions.<sup>18</sup>

Published data also indicate that mail-service likely has significantly lower overhead and fulfillment costs than retail pharmacies. For example, some analysts report that it costs major retail pharmacies between \$4.95 and \$5.89 to fill a prescription, whereas a mail-service pharmacy can fill and mail a prescription for as little as \$2.50.<sup>19</sup> These cost differences reflect the greater efficiencies of automation and workflow of mail-service pharmacies. Because mail-service pharmacies buy medicines in bulk, they may also enjoy advantages on drug ingredient costs. Other potential sources of savings include mail-service’s greater ability to reduce costs through therapeutic interchange, step therapy, formulary compliance, and reduced dispensing errors. This analysis makes no attempt to quantify the proportion of savings from these latter factors.

The two sources mentioned earlier – the January 2003 GAO report and the Takeda/Pharmacy Benefit Management Institute (PBMI) survey report – provide the most direct measures of the likely size of the savings attributable to mail service. Based primarily on these sources,

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<sup>18</sup> Gallucci, T., “Mail Trends Bode Well for PBMs,” Merrill Lynch, September 7, 2004.

<sup>19</sup> Boyle, M., “Walgreen’s Drug Wars,” *Fortune*, June 1, 2005.

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PricewaterhouseCoopers estimated that mail-service discounts are about 11 percentage points higher than discounts on retail drugs.<sup>20</sup>

The GAO report directly compares average retail prices negotiated by PBMs with the average mail-service price negotiated by the PBMs. The report assumes a savings of 11.5 percent for branded drugs and 9.9 percent for generics. The GAO analysis has several strengths. It appropriately excludes savings related to the involvement of PBMs in general and not specifically to mail-service. It also uses the same basket of drugs to compare retail versus mail-service, which eliminates bias related to differences in drugs used by retail and mail-service users. In fact, this study may understate mail-service savings, to the extent that mail-service pharmacies may be better able than retail pharmacies to encourage patients to use less expensive brand name drugs. A potential weakness of this study is its relatively small and specific sample. It includes only one month of data, focuses specifically on the Federal Employee Health Benefits Plan market, and contains only 50 percent of the claims. Nevertheless, it is the most direct source of evidence available of the size of the savings attributable to mail-service pharmacy.

The Takeda/PBMI report uses an “average reimbursement rate” that reflects average discounts from AWP as well as average dispensing fee standardized to average ingredient cost. It implies a mail-service cost savings of 9.1 percent for branded drugs. (It does not look at generics.) Unlike the GAO report, the Takeda report does not appear to control for the difference in mix of drugs prescribed in retail versus mail-service. Branded mail-service prescriptions are more heavily-weighted toward more expensive single-source brands.<sup>21</sup> Thus, to the extent that mail-service attracts patients who are more likely to use drugs that get deeper discounts, the report may overstate the savings from retail to mail-service. Again, however, the Takeda/PBMI report may significantly understate mail savings related to therapeutic interchange.

Given the narrow range of estimates from these studies – 9.1 to 11.5 percent savings for branded drugs and 9.9 percent savings for generics – and the likelihood that there are additional savings from therapeutic interchange that are not captured in these studies, we think it is conservative to use a savings estimate of ten percent from mail-service over retail.

#### **4. Calculating Savings from Realizing the Potential Shift from Retail to Mail**

We calculated the aggregate potential savings as ten percent of the spending for those prescriptions considered amenable to mail. In addition, we analyzed potential projected savings over ten years under three alternative scenarios: 1) assuming mail-service market share increases at its current rate; 2) assuming mail-service market share remains constant over time at the projected 2006 rate; and 3) assuming mail-service market share remains at the constant maximum level possible in 2006 (i.e. that all potential mail-service in 2006 shifts to mail-service).

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<sup>20</sup> PricewaterhouseCoopers, “The Value of Pharmacy Benefit Management and the National Cost Impact of Proposed PBM Legislation,” prepared for the Pharmaceutical Care Management Association, July, 2004.

<sup>21</sup> Wosinska, M. and Huckman, R., “Generic Dispensing and Substitution in Mail and Retail Pharmacies,” *Health Affairs*, Web Exclusive, July 28, 2004, W4-409-416.

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We estimated these potential savings separately for the Medicare population and for the non-Medicare commercial population for the years 2006 through 2015.

For the first scenario, we used IMS data to trend-forward the percentage of prescription drug spending associated with mail-service. Then, assuming that the National Health Accounts drug spending projections already reflect the savings associated with a continued increase in the mail-service market share in the prescription drug projections, we applied the trended IMS percent to the NHA projections in each year to get the projected mail-service spending and the savings associated with that spending.<sup>22</sup>

The second scenario estimates the savings that would result if there is no change in mail-service market share from the 18.5% expected in 2006. We adjusted the NHA projections by adding the savings associated with an increase in mail-service market share from scenario 1 that would not be savings at the lower constant market share in scenario 2. We then calculated savings in the same way as in the first scenario, using the adjusted NHA projections as the starting point.

The third scenario estimates the savings that would result if the maximum mail-service market share were achieved in 2006 and then remained constant through 2015. We adjusted the NHA projections by subtracting the savings associated with the maximum mail-service market share that would not be savings at the increased mail-service market share in scenario 1. We then calculated savings in the same way as in the first scenario, using the adjusted NHA projections as the starting point.

### **III. CONCLUSION**

This study illustrates that prescriptions filled through mail service pharmacies result in significant savings to the healthcare system, both for typical commercially covered populations and for Medicare beneficiaries. The analysis further demonstrates that there is potential for substantially greater savings if more retail prescriptions amenable to mail service (i.e., non-initial prescriptions for maintenance medications) were instead filled through mail service pharmacies.

The potential for such large additional savings suggests that it would be worthwhile to understand the existing and potential barriers to mail service pharmacy usage among covered populations. This may be particularly true for the many Medicare beneficiaries who will be newly acquiring outpatient drug coverage under Medicare Part D in 2006. In addition, such barriers will likely become more important as mail service pharmacy market penetration continues to increase, resulting in a shrinking retail-only population that may be more difficult to reach.

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<sup>22</sup> That is, assuming a 10% savings associated with mail service, the spending was divided by 0.9 to get the cost associated with the prescriptions if they had been filled at a retail pharmacy (“at retail cost”). Savings were calculated by subtracting mail service cost from the “at retail cost.”