Trend Drops to the Lowest Level in 4 Years

3.2% Year-over-Year Trend
Prescription drug prices drew attention from many sides in 2016. Consumers facing triple-digit price increases for some products — such as EpiPen, a treatment for potentially life-threatening allergic reactions — set off social media campaigns that turned into headline stories on local and national outlets. It also drew the attention of lawmakers, who summoned pharmaceutical CEOs to Capitol Hill. Presidential candidates pledged action. By year’s end and into the new year, there were significant shifts, including commitments by some manufacturers to limit price increases.

Amid the market turmoil, as drug prices continued their upward trajectory, trend, the rate of drug spending growth, declined from 5.0 percent in 2015 to 3.2 percent in 2016, for CVS Health commercial pharmacy benefit management (PBM) clients. Per-member-per-month (PMPM) out-of-pocket costs also dropped 3 percent, from $12.98 to $12.59.

Thirty-eight percent of our commercial clients had negative trend — below zero percent — meaning they actually spent less on their prescription benefit in 2016 than in 2015.

Despite the Headlines, Prescription Spending Growth Slowed for Our Clients

Prescription drug trend is the measure of growth in prescription spending per member per month. Trend calculations take into account the effects of drug price, drug utilization and the mix of branded versus generic drugs, as well as the positive effect of negotiated rebates on overall trend. The 2016 trend cohort represents CVS Health commercial PBM clients—employers and health plans.
Trend Drivers: Increases in Brand Inflation, Utilization

Manufacturer-driven brand inflation continued to be the primary contributor to trend (8.6 percentage points), although the mix has shifted. The contribution of non-specialty brands in proportion to overall branded inflation continued to decline, while the contribution of specialty brands increased.

Generic inflation contributed only 0.4 percentage points to trend in 2016. At the same time, the generic dispensing rate (GDR) increased 1.4 percentage points to 85 percent, thereby contributing significantly to trend reduction and more than offsetting the modest contribution of generic inflation.

Utilization growth, largely due to aging population, contributed 2 percentage points to trend.

PBM management solutions, including PBM-negotiated discounts and rebates, the promotion of utilization of generics especially through managed formularies, and targeted solutions on spend drivers such as compounds and hyperinflating drugs, helped reduce trend by 7.8 percentage points.
Brand inflation had the greatest impact on trend, contributing an 8.6 percentage point increase. Although in 2016, average wholesale price (AWP) inflation on branded drugs remained in the double-digits — non-specialty at 12.3 percent and specialty at 11.8 percent — overall, the rate of inflation slowed. Inflation has been declining as a contributor to trend — from a combined non-specialty and specialty contribution of 10.7 percentage points in 2014 to 8.6 percentage points in 2016.

As a percentage of spend and a trend driver, specialty has been growing consistently. Specialty utilization is also growing much faster than non-specialty utilization. Specialty utilization increased 7 percent compared to 2 percent overall. Our analysis indicates that specialty growth will continue to outpace that of traditional pharmaceuticals for the next several years as new products come to market and the population ages.

### Top Contributors to Brand Inflation

<table>
<thead>
<tr>
<th>Therapeutic Class</th>
<th>Specialty</th>
<th>Contribution to Inflation</th>
<th>AWP Inflation</th>
<th>Gross Trend*</th>
<th>Inflation Drivers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-inflammatory Agents</td>
<td>Yes</td>
<td>1.2%</td>
<td>21.6%</td>
<td>30%</td>
<td>Drugs to treat rheumatoid arthritis, such as Humira, Enbrel</td>
</tr>
<tr>
<td>Antidiabetics</td>
<td>No</td>
<td>1.0%</td>
<td>11.1%</td>
<td>18.7%</td>
<td>Continued price increases for insulin</td>
</tr>
<tr>
<td>Psychotherapeutic &amp; Neurological Agents</td>
<td>Yes</td>
<td>0.4%</td>
<td>11.1%</td>
<td>8.8%</td>
<td>Spend for multiple sclerosis, including expensive orals</td>
</tr>
<tr>
<td>Ulcer Drugs</td>
<td>No</td>
<td>0.4%</td>
<td>7.6%</td>
<td>-6.3%</td>
<td>High-cost omeprazole formulations</td>
</tr>
<tr>
<td>Dermatologicals</td>
<td>No</td>
<td>0.3%</td>
<td>6.7%</td>
<td>0.2%</td>
<td>High-cost brands to treat eczema and acne</td>
</tr>
</tbody>
</table>

* Pre-rebate
Brand Inflation in 2016

Over the last several years many brand manufacturers have been taking multiple price increases per year. Some have bought the rights to existing drugs and sharply increased the price in a matter of days.

Most recently, a company with only two products — both life-saving injectables for use in emergencies — raised their prices from below $700 to $4,500. With higher deductibles and copays, consumers now have greater visibility into these price increases, and are impacted more directly by them. Their negative reaction spread through social media platforms, and their frustration drew governmental scrutiny.

CVS Health data shows that AWP inflation has slowed somewhat. Several pharmaceutical manufacturers have made public pledges to reduce annual price increases to 10 percent or less. In fact, in January 2017, pharmaceutical manufacturers raised prices on fewer drugs and imposed fewer increases of 10 percent or greater than they had the previous year. We will continue to monitor drug price inflation throughout 2017 and will evaluate how these commitments to moderate price increases are maintained. It should be noted that even a price increase of 10 percent a year is a higher rate of inflation than for nearly any other consumer commodity.
How PBMs Help Keep Drug Costs Under Control

We negotiate with pharmaceutical manufacturers to lower costs. Rebates and price protection reduced the 2016 trend by 1.6 percentage points.

At the basis of our cost management approach is intelligent purchasing, along with a strategic assessment of the marketplace, including pricing, the pharmaceutical pipeline, and clinical evidence. This assessment enables us to negotiate aggressive rebates and offer competitive pricing to our clients. More than 90 percent of our brand manufacturer contracts include price protection, a critical element in protecting clients in a market characterized by high drug price increases. Price protection helps control costs for clients through improved rebates and discounts when manufacturers increase prices over a certain baseline. Market analysis also helps inform our formulary strategies, including the removal of select products when more cost-effective, clinically appropriate alternatives are available.

- Clients choosing our generic-focused Value Formulary had the highest GDR and lowest baseline cost — $81.86 PMPM. For these clients, the cost of treating common chronic conditions was proportionately lower compared to those using other formularies, making the specialty portion of their spend higher. This resulted in a slightly higher trend in 2016 for this cohort compared to clients adopting our standard managed formulary.
- Clients who chose our standard managed formulary with specific drug removals achieved a post-rebate gross cost PMPM of $89.23 and had a trend of 2.2 percent.
- In contrast, those who used a custom formulary and opted out of drug removals spent $113.62 PMPM and had a trend more than 2 percentage points higher — 4.5 percent.

Managed Formularies Help Control PMPM Costs and Trend*

<table>
<thead>
<tr>
<th>Value Formulary</th>
<th>PMPM cost</th>
<th>2016 Trend</th>
<th>2016 GDR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opt-In to Drug Removals</td>
<td>$79.46</td>
<td>3.0%</td>
<td>88.2%</td>
</tr>
<tr>
<td>Opt-Out of Drug Removals</td>
<td>$81.86</td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Standard Managed Formulary</th>
<th>PMPM cost</th>
<th>2016 Trend</th>
<th>2016 GDR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opt-In to Drug Removals</td>
<td>$87.29</td>
<td>2.2%</td>
<td>85.0%</td>
</tr>
<tr>
<td>Opt-Out of Drug Removals</td>
<td>$89.23</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Custom Formulary</th>
<th>PMPM cost</th>
<th>2016 Trend</th>
<th>2016 GDR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opt-In to Drug Removals</td>
<td>$108.75</td>
<td>4.5%</td>
<td>83.2%</td>
</tr>
<tr>
<td>Opt-Out of Drug Removals</td>
<td>$113.62</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Age-adjusted trend
Generics Remain the Most Important Trend Reducer

Generic drugs had the largest deflationary impact on prescription drug trend, due to increasing generic dispensing rates combined with relatively low overall inflation and falling prices for the vast majority of generic drugs. Most payors recognize the value of generics, and many have taken a more aggressive approach in promoting their use. At 0.4 percentage points, generic inflation, a major concern in the industry a couple of years ago, was only a modest contributor to 2016 trend.

Compared to previous years, there were fewer new generics launched in 2016. The most significant one was rosvastatin, equivalent for the reference brand cholesterol drug Crestor. Despite the dearth of new launches, GDR rose by 1.4 percentage points to 85 percent across our book of business. Clients using our generics-focused Value Formulary achieved an 88.2 percent GDR.

How PBMs Help Keep Drug Costs Under Control

We maximize the value of generics

In 2016 GDR rose by 1.4 percentage points reducing cost an estimated 3.5%

Generics: Driving Value for Sponsors and Members

Payor Cost per 30-Day Rx, Cholesterol Agent Example

<table>
<thead>
<tr>
<th></th>
<th>Brand</th>
<th>Generic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payor Cost</td>
<td>$214.38</td>
<td>$16.16</td>
</tr>
</tbody>
</table>

Member Cost per 30-Day Rx, Cholesterol Agent Example

<table>
<thead>
<tr>
<th></th>
<th>Brand</th>
<th>Generic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member Cost</td>
<td>$30.15</td>
<td>$4.42</td>
</tr>
</tbody>
</table>
Generics help keep costs low for members as well as payors. Generics now provide effective therapy for the most common chronic conditions — hypertension, diabetes, high cholesterol, depression and asthma. They are the backbone of treatment for millions of Americans. According to the Association for Accessible Medicines generics saved Americans $227 billion in 2015.

As we discussed, formulary solutions can help drive generic utilization. As brand prices rise, many clients are more open to selective formulary solutions, opting in to our standard managed formularies with drug removals. We recognize that formulary changes can be disruptive for at least some members. By working with clients, CVS Health has been able to ease transitions for millions of members using a thoughtful and research-based approach that leverages the assets of our integrated model. Helping members navigate change can improve results as well as satisfaction. When members understand the change, why it is happening, and what they need to do to make the transition, they are more likely to make the best use of the benefit with minimal interruption of any ongoing therapy.

### Annual Out-of-Pocket Member Costs

<table>
<thead>
<tr>
<th></th>
<th>Non-Specialty Brands</th>
<th>Generics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$477.47</td>
<td>$68.27</td>
</tr>
</tbody>
</table>

How PBMs Help Keep Drug Costs Under Control

We help keep prescriptions affordable for members

Member PMPM out-of-pocket costs dropped by 3%
Meeting the Challenges of Specialty Management

For 2016, specialty pharmaceuticals accounted for just under 36 percent of spend. As noted earlier, AWP inflation and utilization trends are higher for specialty drugs.

Three of the top five categories contributing to gross trend were predominantly specialty, including:

- Anti-inflammatory agents used predominantly for rheumatoid arthritis and psoriasis
- Antineoplastics and adjunctive therapies used to treat cancer
- Psychotherapeutic and neurological agents, a category dominated by spend for multiple sclerosis therapies

Global top-seller Humira, an anti-inflammatory antibody, alone contributed 1.4 percentage points to gross trend. Humira’s market exclusivity expired in 2016. A biosimilar for Humira was approved in 2016, and more biosimilars are in the pipeline. However, Humira has multiple patents and it’s expected that patent litigation will delay the launch of any competitive products in 2017.

Characteristics of the Specialty Market Compared to Traditional Prescriptions

- Smaller populations of users
- Fewer categories with multiple competing products
- Robust pipeline, innovative products
- Multiple indications for many drugs
- Current limited availability of generics/biosimilars
- Divided spend under medical and pharmacy benefit
- Less willingness to move patients with complex conditions among prescribers and payors

Market competition has been key to effective spend and trend management for non-specialty drugs. The availability of therapeutic alternatives, including generics, influences our negotiations with manufacturers, directs our formulary strategies, and provides low-cost alternatives to members. The specialty market differs in some important ways, necessitating a differentiated approach to management.
CVS Health has a unique integrated specialty management approach that allows us to manage spend at the therapeutic class level regardless of benefit. Evaluating a prescription in the context of a patient’s complete disease state — instead of as an individual event or individual drug — creates more opportunities to manage trend and improve outcomes. We continue to evolve our specialty cost management approach.

Our most recent innovations include:

- Market-leading inclusion of biosimilars on the 2017 formulary, which includes the biosimilar Zarxio, replacing Neupogen
- Rebates on medical specialty drug spend, enabled by our proprietary technology
- Indication-based formulary for specific categories, which ties drug cost to the value it delivers for a patient’s specific diagnosis
- Enhanced Specialty Guideline Management to help reduce specialty spend and promote utilization of clinically appropriate, cost-effective agents
- Quarterly review to identify and evaluate hyperinflating drugs — those with significant price increases that may exceed 100 percent — for potential removal from the formulary if they have readily-available, clinically appropriate and more cost-effective alternatives
- Copay card plan design that allows payors to capture the value of copay cards, delivering savings without sacrificing access to the drugs needed by members

Watch future issues of Insights for more on innovative specialty management strategies.

How PBM Help Keep Drug Costs Under Control

We innovate to meet the challenges of an evolving market

11% potential savings on specialty drug spend* from integrated specialty management
2017 and Beyond

Health care stakeholders — payors, plans, patients, providers, even pharmaceutical manufacturers — face much uncertainty as the new administration in Washington considers how to proceed with “repealing and replacing” or simply changing the Affordable Care Act. Health care costs and affordability are top concerns for consumers with prescription drug costs a priority for many. Every segment of the market is expected to see some change, although as we near the end of the first quarter, very little is known about what kind of changes will occur and how soon.

In this environment, the best course of action is modeled by low-trend clients. They partnered with us to focus on rigorous management of costs, quality of care, and working with members to support them in making the best decisions for their care. Helping to make prescriptions affordable, for clients and their members aligns with our corporate purpose of helping people on their path to better health.

Methodology

This report provides an overview of performance for CVS Health commercial clients — employers and health plans. Trend was calculated on a cohort of more than 1,100 clients, covering more than 23.5 million lives. The cohort is built based only on clients eligible throughout all of 2015 and 2016. Clients with abnormally high membership shifts (up or down) are removed. Clients with abnormally low or high trends are also removed through a standard statistical methodology.

* Actual client results from a subset of specialty management solutions. Individual results will vary.

All of the savings and/or trend changes discussed in this Executive Briefing will vary based on a variety of factors, including demographics, plan design and programs adopted by the client. Client-specific modeling available upon request.

This document contains references to brand-name prescription drugs that are trademarks of pharmaceutical manufacturers not affiliated with CVS Health.
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