



# Forecast

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*Express Scripts 2006 Drug Trend Report*

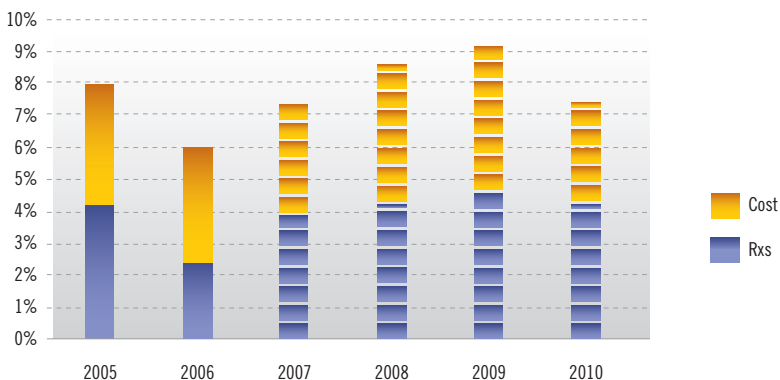
## Forecast

### Nonspecialty Drugs

Our projections for changes in overall nonspecialty prescription-drug trends are shown in Exhibit 14.

#### Exhibit 14

#### *Changes in PMPY Nonspecialty Ingredient Cost for Express Scripts Commercial Business 2005 and 2006 (Actual) and 2007 to 2010 (Projected)*



In 2007, look for slightly higher growth in the number of prescriptions for acute conditions. The cyclical nature of growth in acute-care drug classes likely will offset slowing of the double-digit growth of hypnotics as the market for sleep aids reaches saturation and utilization-management programs become more prevalent.

We anticipate that use of cardiovascular drugs — primarily antihypertensives, beta blockers and calcium blockers — will grow slightly faster in 2007 than in 2006. The expected release of several new brand-name antihypertensives will be a main factor in the increase. In a departure from previous forecasts, we no longer expect the use of prescription nonsedating antihistamines to drop off precipitously in 2008 following additional movement of products to over-the-counter status. Most plan sponsors are not likely to deny coverage of a class with an established generic such as fexofenadine, even as a powerful cost-saving measure. From 2008 through the end of the decade, look for overall utilization growth to hover in the 4% to 5% range.

By the end of 2007, the full effect of new generics introduced in 2006 and early 2007 will be felt as the first generic manufacturers lose exclusivity, additional manufacturers enter the market and competition drives down prices. These declines will be balanced by increases in cost due to two major factors: the loss of generics for OxyContin® and Plavix®, and the market removal of generic albuterol inhalers that contain chlorofluorocarbons (CFCs). As CFC inhalers are phased out, look for albuterol inhalers to be in short supply and their costs to rise. Cost trend in hypnotics and stimulants, two classes with high 2006 cost trend, should moderate because generics are expected for market-leading products in each class.

In 2008 and 2009, look for overall costs to rise because few significant new generics are expected. Then, after reaching about 5% in 2009, cost increases should slow again in 2010 as another wave of new generics hits the market.

## Exhibit 15

## 2007 to 2010 Forecast for Selected Nonspecialty Therapy Classes

2006 Rank	Therapy Class	Trend				COMMENTS
		2007	2008	2009	2010	
1.	Antihyperlipidemics	-5.5%	10.2%	12.3%	0.7%	A significant price drop is expected in 2007 after a full year of generics to Pravachol® and Zocor®. In 2010, generic Lipitor® will be available, further reducing costs.
2.	Gastrointestinals	7.1%	9.2%	10.2%	-1.2%	Expect a drop in utilization as clients adopt new 3-tier PPI structures. Cost/Rx will increase through 2009 in anticipation of generics to Prevacid®; the price will drop in 2010, due to Prevacid generics in late 2009.
3.	Antidepressants	3.9%	9.2%	10.2%	8.1%	The decline prompted by suicidality warnings has subsided, and historical utilization growth should return. Low-cost prescriptions will be seen in 2007 due to a full year of multiple manufacturers for generic Zoloft® and the full rollout of generic Wellbutrin XL®. The impact of Effexor XR's® generic in 2010 will be tempered by the introduction of Pristiq™ in 2007.
4.	Antidiabetics	18.8%	21.0%	23.2%	23.2%	Introduction of new add-on products (Januvia™, Galvus®) with unique mechanisms of action and favorable side-effect profiles will drive up both utilization and cost through 2008. The potential impact of inhaled insulin is unknown.
5.	Antiasthmatics	15.4%	11.2%	9.2%	7.1%	HFA inhalers will replace CFC-containing products and drive up cost dramatically in 2007 and 2008. Symbicort®, expected to be more expensive than existing antiasthmatics, will drive up cost due to mix in 2007. Advair Diskus® generics in 2010 may not reduce costs as much as other generics due to difficulty in making generic inhalers.

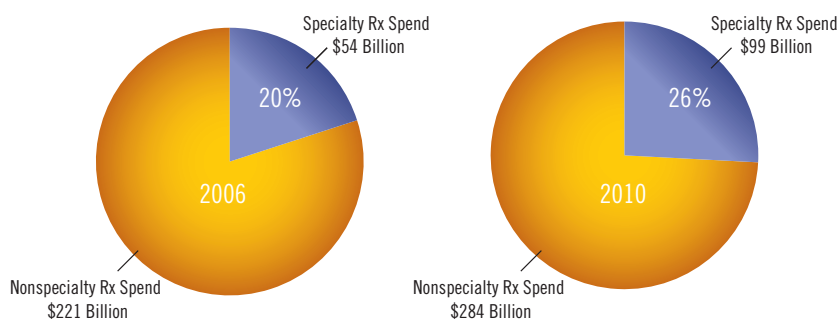
2006 Rank	Therapy Class	Trend				COMMENTS
		2007	2008	2009	2010	
6.	Antihypertensives	7.1%	6.1%	6.1%	6.1%	Tekturna® may have an impact on brand/generic mix in 2007. Due in 2007, generics for Lotrel® and Univasc® will lower cost in 2008. Generic Altace® will drive down cost in 2009. Cozaar® goes generic in 2010.
7.	Anticonvulsants	15.6%	13.4%	8.1%	10.2%	Utilization remains stable through the end of the decade. In 2007 and 2008, cost/Rx should be driven by increased use of more expensive brands. In 2009, generics to Lamictal® and Topamax® will lower cost.
8.	Narcotic Analgesics	20.8%	11.3%	12.4%	13.4%	In 2007, removal of generics to OxyContin® will have a large impact on cost, but not much impact on utilization. Inflation will continue unchecked through 2012.
10.	Antivirals	12.3%	12.3%	12.3%	1.9%	A mild 2006 flu season resulted in higher utilization and cost trends for 2007. Look for trends to be consistent but cyclical between utilization and cost through 2009. Valtrex® generics (in 2009) will decrease 2010 costs dramatically.
11.	Stimulants/ Anti-Obesity	17.6%	11.3%	5.0%	9.2%	Health concerns about ADHD drugs are lower. Utilization increases are expected to stay flat. Generics for Concerta® — expected in late 2007 — will affect 2008 costs. Adderall XR® generics are due in 2009.
14.	Antihistamines	5.0%	-14.5%	-7.3%	-7.3%	Zyrtec's® going OTC will reduce overall class utilization by about 10% annually beginning in 2008. Cost/Rx will also decline as prescriptions move to generic Allegra®.
19.	Hypnotics	9.8%	13.3%	0.4%	13.4%	Utilization growth rates are expected to decline slightly through 2012. Cost/Rx will drop in early 2007 due to Ambien® generics and again in 2009 when generics are approved for Ambien CR™ and Sonata®.
	Other	7.1%	7.1%	8.2%	8.2%	
	<b>Total</b>	<b>7.6%</b>	<b>8.6%</b>	<b>9.2%</b>	<b>7.5%</b>	

## SPECIALTY DRUGS

The data sample in the *2006 Drug Trend Report* includes only specialty drugs that were adjudicated through the pharmacy benefit. By this measure, specialty drugs account for only 9.2% of the total pharmacy-benefit ingredient cost. Since a large portion of specialty-drug spend is paid through the medical benefit, national figures adapted from IMS Health data put specialty spend at closer to 20% of total drug costs (Exhibit 16). Furthermore, our analysis of 2006 U.S. prescription drug sales as reported by IMS Health estimates that total specialty trend was only 16.6% in 2006, compared with the 20.9% trend shown in this report. This disparity may be explained, in part, by the much lower growth rate (4% to 6%) in hospital-drug expenditures<sup>4</sup> because many specialty medications are administered in the hospital and are billed under the medical benefit.

### Exhibit 16

#### 2006 and Projected 2010 Spend for Specialty Medications



Source: Express Scripts analysis of IMS Health data.

In this section of the *Drug Trend Report*, we have not simply extrapolated the overall specialty trend between 2005 and 2006 over the next few years. Instead, we have attempted to forecast growth in the top six specialty categories based on expected utilization and cost dynamics of the drugs in each class. Then, class-specific estimates were combined with trend estimates for the remaining specialty drugs. This final specialty forecast supplements our nonspecialty forecast to produce an overall view of expected changes in the pharmacy benefit for the next four years.

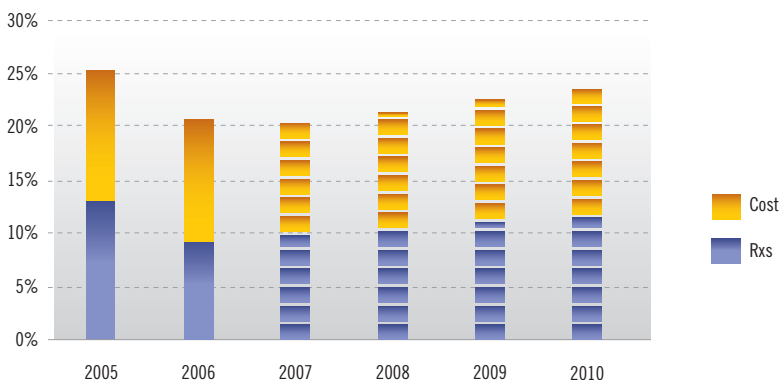
<sup>4</sup> Hoffman JM, Shah ND, Vermeulen LC, et al. Projecting future drug expenditures--2007. *Am J Health Syst Pharm.* 2007;64(3):298-314.

Specialty drug utilization is expected to slow in the next couple of years due to lower than historical growth in a few categories. In the inflammatory conditions class, market expansion beyond the treatment of rheumatoid arthritis (RA) has leveled off — leading to a slowdown in the explosive growth seen since 1998. That deceleration is expected to continue even as new products, such as Cimzia™, are released and new indications, such as the Crohn's disease indication for Humira®, are approved. Slower growth is also expected in the blood cell deficiencies category because several recent studies have reported safety issues with the use of erythropoietin (EPO).<sup>5,6</sup> Toward the end of the decade, utilization growth will be fueled by new products that are expected in 2008 and 2009 for multiple sclerosis (MS) and hepatitis C, as well as by combination cancer therapies.

Cost-per-prescription growth will be dampened slightly by less expensive growth hormone products expected in 2007 and by true generic anticoagulants that should enter the market within the next few years. Additional downward pressure may be exerted by new oral medications for conditions such as MS, currently treated only by injectables. Movement toward new, more expensive products will be the primary driver of cost-per-prescription growth in most therapy categories.

### Exhibit 17

#### Changes in PMPY Specialty Ingredient Cost for Express Scripts Commercial Business 2005 to 2006 (Actual) and 2007 to 2010 (Projected)



<sup>5</sup> Singh AK, Szczech L, Tang KL, Barnhart H, Sapp S, Wolfson M, Reddan D; CHOIR Investigators. Correction of anemia with epoetin alfa in chronic kidney disease. *N Engl J Med*. 2006;355(20):2085-2098.

<sup>6</sup> Wright JR, Ung YC, Julian JA, et al. Randomized, double-blind, placebo-controlled trial of erythropoietin in non-small-cell lung cancer with disease-related anemia. *J Clin Oncol*. Published ahead of print. February 20, 2007.

## Exhibit 18

## 2007 to 2010 Forecast for Selected Specialty Therapy Classes

2006 Rank	Therapy Class	Trend				COMMENTS
		2007	2008	2009	2010	
1.	Inflammatory Conditions	21.9%	21.9%	21.9%	21.9%	New products such as Cimzia™ and new indications for existing drugs will continue to drive increases in utilization. Inflation will drive cost due to no new follow-on generics and little competition among brands.
2.	Multiple Sclerosis	16.2%	16.3%	16.4%	15.4%	New oral brands, which are expected in 2008 and 2009, may increase utilization but decrease cost/Rx. Drugs currently used to treat cancer may be approved for MS — potentially reducing the use of existing MS drugs.
3.	Cancer	43.8%	38.0%	38.0%	38.0%	New drugs and combination therapy will drive up utilization.
4.	Blood Cell Deficiency	5.0%	6.1%	7.1%	7.1%	Less growth is expected in utilization, primarily driven by recently publicized safety concerns associated with the use of EPO products for anemia.
5.	Growth Deficiency	5.0%	10.2%	9.2%	9.2%	Omnitrope™, a less expensive follow-on protein launched in January 2007, will reduce this year's cost/Rx. After 2007, expect slightly slower growth in utilization and a return to consistent inflationary cost/Rx increases.
6.	Hepatitis C	-0.3%	-0.3%	12.4%	14.5%	Current medications are not effective for all patients, and no new therapies have been introduced. New products expected in 2009 and beyond are likely to increase utilization. The introduction of generic ribavirin continues to impact cost/Rx.
	Other	24.2%	25.4%	26.5%	26.5%	Other specialty categories are expected to experience slightly higher than historical growth as new products are introduced for previously untreated or undertreated conditions. Biogenerics in some categories should help to slow overall growth in cost.
	<b>Total</b>	<b>21.2%</b>	<b>22.0%</b>	<b>23.5%</b>	<b>24.0%</b>	