



Introduction

DRUG TREND
2002 Report

Introduction

Background

The year 2002 was a year characterized by national concern over homeland security, the war on terrorism, potential war with Iraq, a sluggish economy, and federal and state surpluses that turned into substantial deficits. In the public sector, the addition of a Medicare prescription drug benefit died over philosophical and partisan differences. Proposals for a Medicare prescription drug benefit have reappeared, but they are embroiled in debates over comprehensive Medicare reform. In addition, they must somehow be financed as budget deficits continue to grow. Unlike the federal government, states are required to have balanced budgets. In 2002, most states experienced severe budget problems that continue into 2003 and likely into 2004. As a consequence, many states have been forced to reduce spending for Medicaid, the federal/state program that provides medical care for the poor. Budget problems were not limited to the public sector, however. The economic downturn hit the private sector hard, resulting in large layoffs and subsequent rises in unemployment rates, as well as in a growing inability of employers to pay for the rapid growth in healthcare premiums.

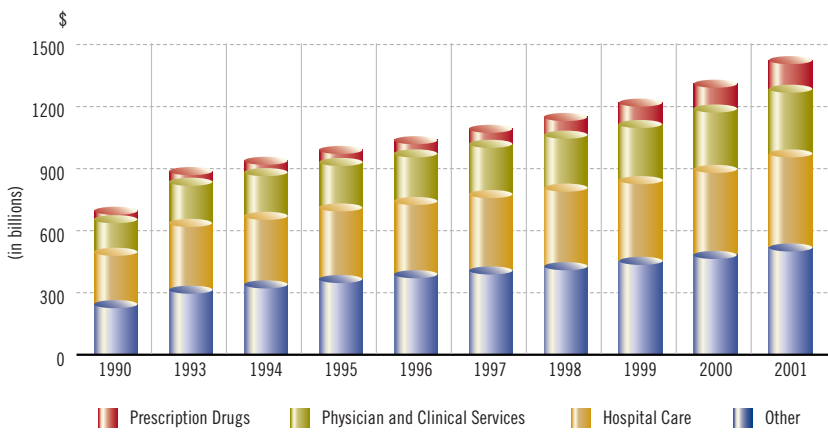
As economic problems hurt the public and private sectors, healthcare costs increased substantially. After stabilizing at between 5 percent and 6 percent between 1994 and 1998, the annual growth rate in total national health expenditures has inched up, reaching \$1.4 trillion, or \$5,035 per capita, in 2001 — 8.7 percent above 2000 levels¹ (see Figure 1). National health expenditures for prescription drugs grew at an even more sizeable annual rate, peaking at 19.7 percent in 1999 before ebbing to still significant annual growth rates of 16.4 percent and 15.7 percent in 2000 and 2001, respectively. These rates of increase were higher than any of the other major components of national health expenditures.

In contrast, the annual growth rate in national expenditures for hospital care and physician and clinical services rose over the last several years — particularly in 2001 — after declining in the early and mid-1990s. The annual growth of expenditures for hospital care actually declined from 10.1 percent in 1990 to 2.9 percent in 1998, before creeping back up to 8.3 percent in 2001. Annual growth rates in national spending for physician and clinical services declined from 11.2 percent in 1990 to 4 percent in 1996 before rising by 5 percent, 6.6 percent, 5.2 percent, 6.9 percent and 8.6 percent in the five succeeding years. As a proportion of overall national healthcare costs, prescription drugs rose from 5.8 percent in 1990 to 9.9 percent in 2001. Conversely, the percentage attributed to hospital care slowly declined from 36.5 percent in 1990 to 31.7 percent in 2001, while the proportion of total spending attributable to physician and clinical services remained stable at about 22 percent.

1 Adapted from: Centers for Medicare & Medicaid Services, Office of the Actuary: National Health Statistics Group; U.S. Department of Commerce, Bureau of Economic Analysis; and U.S. Bureau of the Census. Table 1: National Health Expenditures Aggregate and Per Capita Amounts, Percent Distribution, and Average Annual Percent Growth, by Source of Funds: Selected Calendar Years 1980-2001 and Table 2: National Health Expenditures Aggregate Amounts and Average Annual Percent Change, by Types of Expenditure: Selected Calendar Years 1980-2001. Available at: <http://www.cms.hhs.gov/statistics/nhe/historical/tables.pdf>. Accessed January 30, 2003.

Figure 1

National Health Expenditures for Selected Healthcare Accounts 1990 and 1993-2001



Source: Centers for Medicare & Medicaid Services, Office of the Actuary. National Health Statistics Group. Table 2: National Health Expenditures Aggregate Amounts and Average Annual Percent Change, by Types of Expenditure: Selected Calendar Years 1980-2001. Available at: <http://www.cms.hhs.gov/statistics/nhe/historical/tables.pdf>. Accessed January 30, 2003.

Although spending for prescription drugs has grown at a dramatic rate, the absolute dollar amount expended on prescription medicines is substantially below what is spent on hospital care and physician and clinical services. By 2001, per capita prescription expenditures totaled \$497. By comparison, per capita spending for prescription drugs was less than one-third of what was expended for hospital care (\$1,594) and less than one-half of the expenditure for physician and clinical services (\$1,108).² Consequently, even though the percentage growth in per capita spending for prescription drugs between 2000 and 2001 was far higher than for hospital care and physician and clinical care, the absolute annual dollar increases for hospital care (\$106) and physician and clinical care (\$77) were larger than for prescription drugs (\$63).³

The Office of the Actuary for the Centers for Medicare and Medicaid Services (CMS) projects that national health expenditures will grow by 8.6 percent in 2002, then gradually decline to an annual 6.9 percent growth rate in 2009 and remain at about that level through 2012. Expenditures for prescription drugs are predicted to grow by 14.3 percent in 2002, with the annual rate of growth declining to 9.5 percent from 2009 through 2012. As a result, the proportion of total national health expenditures accounted for by prescription drugs is projected to grow from 9.9 percent in 2001 to 14.5 percent in 2012.⁴

2 Levit K, Smith C, Cowan C, Lazenby H, Sensenig A, Catlin A. Trends in U.S. health care spending, 2001. *Health Affairs*. 2003;22(1):154-164.

3 *ibid*.

4 Centers for Medicare and Medicaid Services, Office of the Actuary; and the U.S. Department of Commerce, Bureau of Economic Analysis and Bureau of the Census, as cited in: Heffler S, Smith S, Keehan S, Clemens MK, Won G, Zezza M. Health care spending projections for 2002-2012. *Health Affairs-Web Exclusive*. No Date Given. Available at: <http://www.healthaffairs.org/WebExclusives/2202Heffler.pdf>. Accessed January 2003.

The impact of rising health costs has been felt by state Medicaid agencies, as well as by private employers. In terms of the former, total Medicaid costs grew by 13.4 percent in 2002, on top of the 11 percent growth experienced in 2001. They are expected to grow by about another 9 percent in 2003.⁵ Prescription drug costs have been a major driver of these increases. Indeed, between 1998 and 2000, annual Medicaid prescription drug costs grew by around 20 percent and increased by over 28 percent in 2001.⁶ While the increasing number of Medicaid recipients has contributed to this growth, the ascension of drug costs is explained only partially by this phenomenon. (See Appendix B for a more detailed explanation of Medicaid prescription cost trends.) In terms of the latter, private health benefit premiums have risen substantially over the last several years, and that increase is projected to continue into 2003. A Buck Consultants survey of health insurers found that health premiums grew between 13 percent and 14.9 percent in 2002. Depending on the product, the rate of growth was projected to continue at about those same levels in 2003. The trend for prescription drug card programs was 18.4 percent in 2002, and it is projected to be 16.9 percent in the first half of 2003.⁷ The 2003 Segal Company Cost Trend Survey reported that 2003 medical plan costs, including prescription drugs, will rise between 14.4 percent and 16.2 percent, depending on plan type. Prescription drug carve-out plans are anticipated to grow by 19.5 percent in 2003 for those under 65 years old and by 19 percent for those 65 and older.⁸ A poll conducted by Mercer Human Resource Consulting found that healthcare premiums will increase by 14 percent in 2003 after growing by 14.7 percent in 2002. Together, these growth rates represented the largest two-year increase since 1990.⁹ Finally, Hewitt Associates reported that companies are anticipating a 15 percent rise in health premiums in 2003¹⁰ while Towers Perrin reports expected increases of 16 percent.¹¹

The figures cited above clearly demonstrate the magnitude of the financial burden that plan sponsors must bear for health benefit costs. Stories abound in the media regarding the negative effects that rising health premiums have on companies and on employees and their families. According to Hewitt, “The majority (94 percent) of participating companies also report that their CEO, CFO and CHRO are significantly or critically concerned about the rising costs of health benefits and the impact on corporate costs, while exactly 90 percent are significantly or critically concerned about their impact on employees.”¹² Larger employers reduced the number of HMO plans they

5 Smith V, Ellis E, Gifford K, Ramesh R, Wachino V. Medicaid spending growth: a 50-state update for fiscal year 2003. Kaiser Commission on Medicaid and the Uninsured. January 2003. Available at: <http://www.kff.org/content/2003/20030113/4082.pdf>. Accessed January 14, 2003.

6 Adapted from: Medicaid Statistical Information System (MSIS) and HCFA-2082 State tables. Available at: <http://cms.hhs.gov/medicaid/msis/mstats.asp>. Accessed September 24 and 27, 2002, and October 2 and 16, 2002.

7 Health care costs continue to rise, according to survey by Buck Consultants [press release]. New York: Buck Consultants; August 8, 2002. Available at: <http://www.buckconsultants.com/content/pr293.html>. Accessed March 25, 2003.

8 2003 Segal Health Plan Cost Trend Survey [abstract]. November 2002. Available at: <http://www.segalco.com/corporate/pub-corporate.cfm?ID=415>. Accessed February 2, 2003.

9 Rate hikes pushed employers to drop health plans, cut benefits in 2002-but average cost still rose 14.7% [press release]. New York: Mercer Human Resource Consulting; December 9, 2002.

10 Employers concerned about the impact of rising health care costs and are evaluating alternatives [press release]. Lincolnshire, Illinois: Hewitt News and Information; January 14, 2003.

11 Enochs, L. Employment: rising health care costs impact hiring rates. *The Seattle Times*. February 13, 2003. Available at: <http://archives.seattletimes.nwsource.com/cgi-bin/texis.cgi/web/vortex/display?slug=bizhealthcosts13&date=20030213&query=health+care+Enochs>. Accessed February 14, 2003.

12 Employers concerned about the impact of rising health care costs and are evaluating alternatives [press release]. Lincolnshire, Illinois: Hewitt News and Information; January 14, 2003.

offered and used this added leverage, in conjunction with plan design changes, to curb HMO growth to 8.1 percent. In contrast, smaller employers, with no buying leverage, saw HMO premiums jump by 25.9 percent in 2002. Faced with such substantial increases in healthcare costs, the percentage of smaller employers — those with between 10 and 50 employees — that offered a health plan dropped from 66 percent to 62 percent.¹³ Some companies that have declared bankruptcy have eliminated health benefits for retirees.¹⁴ Most plan sponsors have and/or will raise members' financial responsibility for healthcare costs through higher member copayments/deductibles or premium contributions. Some momentum is also building toward more consumer-driven approaches, such as tiered copayments for networks, drugs and consumer-directed health plans.^{15,16} In a sign that employees are becoming increasingly concerned about their health benefits, General Electric Company's union workers threatened to strike over rises in healthcare copayments.¹⁷

While the overall picture of rising health and pharmacy costs appears bleak, the prescription drug side of the equation includes a couple of positive dynamics that may moderate the magnitude of future cost increases. First, several heavily used brand products — Prozac[®], Glucophage[®], Zestril[®]/Prinivil[®], Zestoretic[®]/Prinzide[®] and Prilosec[®] — have lost patent protection, allowing generic versions to enter the market in the past 18 months. Prozac[®], an antidepressant, went generic in August 2001 and within 12 weeks, about three-fourths of Prozac[®] prescriptions for Express Scripts members were converted to the generic (fluoxetine). The generic conversion rate (the proportion of multi-source brand prescriptions that have been filled by generics) for Prozac[®] has stabilized at about 94 percent. In 2002 the combined market share for Prozac[®] and fluoxetine actually declined from 14.8 percent in January to 13 percent in December. When the oral antidiabetic agent Glucophage[®] went generic in late January 2002, it experienced a rapid conversion from the brand to the generic product (metformin). Within 2 months, over 80 percent of branded Glucophage[®] was converted to metformin and over 90 percent within 6 months. The combined market share of Glucophage[®] and metformin declined slightly (1.4 percentage points) during 2002 (see Figure 2). The conversion of brand Zestril[®]/Prinivil[®] and Zestoretic[®]/Prinzide[®] to their respective generic equivalents was even faster, reaching 85 percent in 2 months and 90 percent in 4 months. Despite the relative therapeutic equivalency of other brand products in this therapeutic class, the combined market share of Zestril[®]/Prinivil[®] and Zestoretic[®]/Prinzide[®] and their respective generic equivalents remained flat at about 29 percent (see Figure 3).

13 Rate hikes pushed employers to drop health plans, cut benefits in 2002-but average cost still rose 14.7% [press release]. New York: Mercer Human Resource Consulting; December 9, 2002.
 14 Caruso D. Sour economy, corporate scandals put retirees' health benefits in peril. *St. Louis Post Dispatch*. February 15, 2003.
 15 Kaiser Family Foundation. National survey of small businesses. April 2002. Available at: <http://www.kff.org/content/2002/20020402a/>. Accessed January 2003.
 16 Rate hikes pushed employers to drop health plans, cut benefits in 2002-but average cost still rose 14.7% [press release]. New York: Mercer Human Resource Consulting; December 9, 2002.
 17 G.E. workers set to strike over insurance. *Bloomberg News*. December 31, 2002. Available at: <http://coveringtheuninsured.org/news/index.php?NewsID=145>. Accessed January 2003.

Figure 2

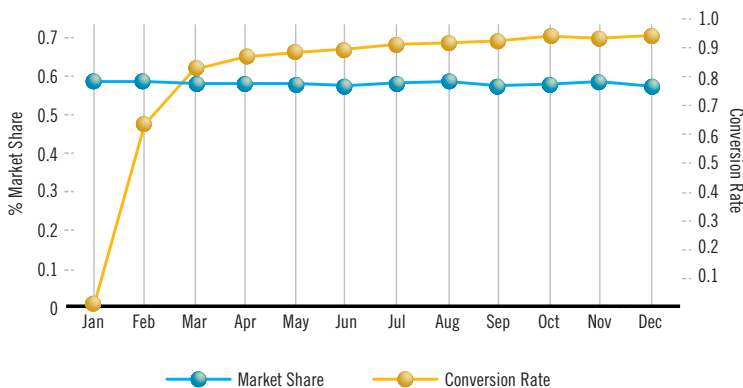
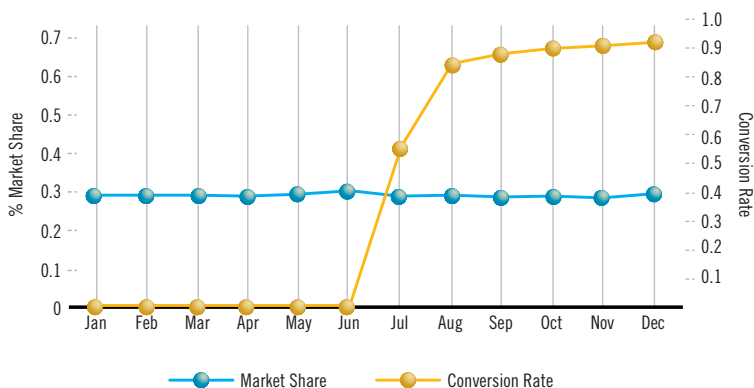
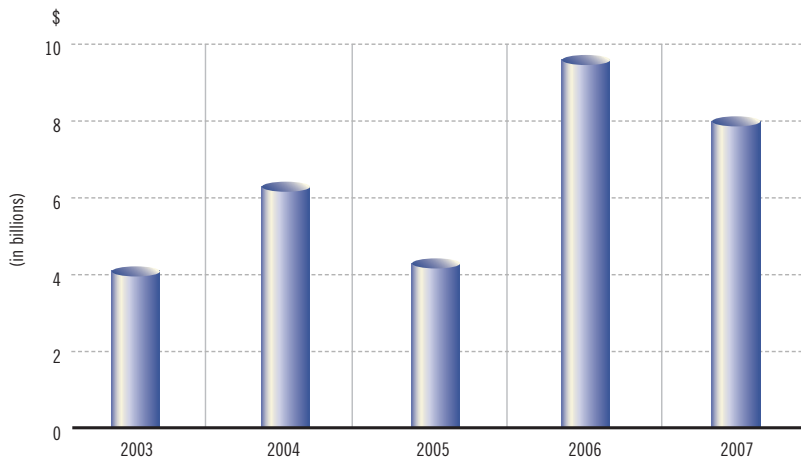
2002 Generic Conversion Rates for Glucophage® to Metformin and Market Share for Glucophage® and Metformin

Figure 3

2002 Generic Conversion Rates for Zestril®/Prinivil® to Lisinopril and Prinzide®/Zestoretic® to Lisinopril/HCTZ and Market Share for Zestril®/Prinivil®, Prinzide®/Zestoretic®, Lisinopril and Lisinopril/HCTZ

A significant number of additional brands will lose their respective patents in the next several years. Indeed, as is shown in Figure 4, \$32.3 billion worth of brand patents will expire over the next 5 years. These products represent 16.8 percent of U.S. prescription drug sales in 2002.¹⁸ The impact on prescription drug costs, and consequently on trend, will be considerable. In 2002, the use of generic products instead of their branded counterparts reduced trend by 2.1 percent, or \$12.70 Per Member Per Year (PMPY). The generic fill rate, which grew from 41.5 percent in the fourth quarter of 2001 to 45.9 percent in the fourth quarter of 2002, is projected to increase to 53.1 percent by the fourth quarter of 2007¹⁹ (see Figure 5). Those percentages could increase even more, as would the reduction in trend, if the use of generic products went beyond mere substitution for their brand product counterparts and extended to utilization, when appropriate for a given patient, instead of other therapeutically equivalent brand products.

Figure 4

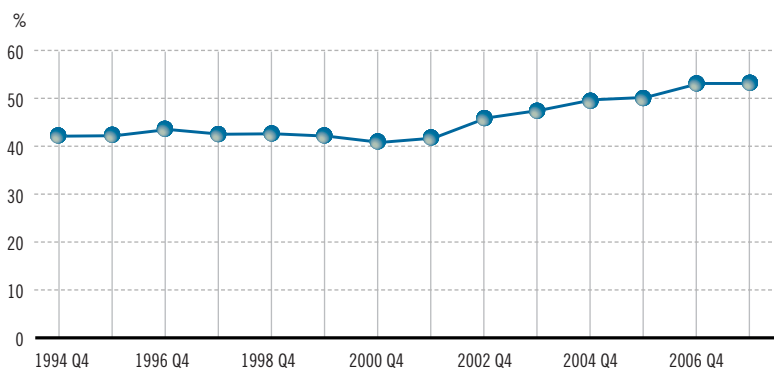
U.S. Sales for Brand Products with Patent Expirations Between 2003 and 2007

Adapted from: JP Morgan Securities, Inc. Industry update. *Prescription Pad*. February 14, 2003, and Marketos M. Top 200 brand and generic drugs by retail sales. *Drug Topics*. 2002;4:31 Available at: http://dt.pdr.net/be_core/content/journals/d/data/2002/0218/d0top200rxs02b.html. Accessed February 18, 2003.

18 Adapted from: IMS reports 11.8 percent dollar growth in 2002 U.S. prescription sales. [press release]. Plymouth Meeting, Pennsylvania: IMS Health; February 21, 2003. Available at: <http://www.imshealth.com>. Accessed February 21, 2003.

19 Express Scripts data and projections.

Figure 5

Generic Fill Rate Fourth Quarter 1994 to Fourth Quarter 2007 (Estimated)

Source: Express Scripts data and projections.

A second noteworthy event in 2002 was the introduction of prescription strength Claritin® (loratadine) to the over-the-counter (OTC) market. In the past, most OTC products were lower in strength than the prescription version of those products. In the case of Claritin®, however, the prescription strengths went OTC and the prescription versions were removed from the market. This action is consistent with current FDA regulations, which state that a drug product cannot exist as both a prescription and an OTC product in the same strength and for the same uses. Moreover, OTC Claritin was not brought to market until December 2002. Most plan sponsors had little or no time to determine whether to cover only OTC Claritin® (and now other OTC versions of loratadine) in 2003, and/or to cover some or all of the prescription non- and low-sedating brand antihistamine products and, if so, at what copayment levels. Nonetheless, the OTC availability of non-sedating antihistamine products represents a previously unavailable avenue for plan sponsors to use in reducing prescription drug costs by changing drug coverage rules and/or attaching high copayments to the prescription products.

Prilosec® potentially represents a hybrid opportunity for capitalizing on generic and OTC products to reduce costs — but with important caveats. First, as a result of a court decision, generic Prilosec® (omeprazole) in both the 10mg and 20mg strengths can be manufactured by only one company, and that exclusive right could last for months, if not years. This situation is unusual because the first generic manufacturer generally is granted exclusive marketing rights for only the first 6 months of generic availability. Therefore, the price of a newly-introduced generic product is typically higher than its price after the first 6 months when competitive pressures from multiple manufacturers drive down the price. Because of the extended exclusivity attached to omeprazole, its initial relatively high price could extend for up to 5 years until additional manufacturers can also bring omeprazole to market. Thus, when brand rebates are taken into account, the price difference between generic omeprazole and branded proton pump inhibitor (PPI) products is much less than usual. Moreover, even in the short run, the use of omeprazole has been curtailed by an insufficient supply of the product.

A second reason that the Prilosec®/omeprazole situation is unique relates to its OTC status. When labeling issues are finalized, the Food and Drug Administration (FDA) will grant the 20mg strength of Prilosec® OTC status; but only with a recommendation that its use be limited to 14 days, based on clinical reasons. Prescription Prilosec® has several long-term indications. The short-term use guidance for the OTC version puts plan sponsors in a difficult position when deciding whether to cover OTC Prilosec®, but not similar prescription proton pump inhibitors; to cover only the OTC product; to cover the OTC product at a relatively low copayment while covering prescription products at a substantial copayment; or to cover prescription PPIs only and forego the OTC opportunity.

Against this backdrop, prescription drug costs continue to increase substantially, and they are projected to grow at double digit rates for the foreseeable future. However, there are opportunities to reduce the rate of such increases, primarily through promoting the use of generic and lower cost brand products. The magnitude of trend increases in the future will reflect the degree to which plan sponsors are willing to adopt plan design strategies that encourage the use of these lower cost products.

Summary Of Findings

In 1997, Express Scripts published the first edition of the *Drug Trend Report* covering the 1993-1996 time period. The intent of the *Drug Trend Report* series is to provide our clients with a better understanding of the dynamics underlying both current drug cost increases and future drug cost trends. This seventh edition of Express Scripts' *Drug Trend Report* discusses the magnitude of and the reasons for prescription drug cost increases between 2001 and 2002. Among the key findings of this study are:

Between 2001 and 2002

- PMPY ingredient costs grew by \$91.40, or 18.5 percent in 2002.
- The rise in per prescription costs accounted for 60.5 percent of this overall increase; 34.2 percent is attributable to increased utilization and 5.3 percent to the introduction of new drugs.
- The inflation rate for common drugs (drugs available in 2001 and 2002) grew by 7.5 percent — the fifth consecutive year that inflation topped 5 percent and the highest rate seen since the *Drug Trend Report* was initiated. Inflation accounted for 43.4 percent of the overall 2001-2002 drug expenditure increase.
- The use of generics instead of their respective brand counterparts reduced the PMPY ingredient cost increase by 2.1 percent.
- Slightly more of the utilization increase was due to more members using prescription drugs than to more prescriptions per utilizer.
- Ten drug classes accounted for 53.9 percent of the total 2002 PMPY ingredient cost.

- Higher costs of gastrointestinal, antihyperlipidemic, antidepressant and antihypertensive medicines accounted for \$33.30, or 36.4 percent, of the total \$91.40 PMPY ingredient cost increase in 2002.
- Five percent of members accounted for 50.7 percent of total 2002 PMPY ingredient cost and 10 percent of members for 69.7 percent of ingredient cost.

2003 Through 2007 Projections

PMPY ingredient costs are projected to increase by:

- 15.5 percent in 2003
- 16.0 percent in 2004
- 16.0 percent in 2005
- 15.6 percent in 2006
- 15.2 percent in 2007

These trend figures reflect past experience with and future expectations about the magnitude of drug cost increases on an ingredient cost basis. When considered from a net cost perspective — costs after member financial contribution and manufacturer rebates — plan sponsors can significantly curb costs. Plan sponsors that took aggressive steps saw their drug cost trend actually decrease by as much as 20 percent, with the average PMPY net claim cost increase being between 6 percent and 11 percent.

The key cost drivers that underlie the 2001-2002 drug cost growth are discussed in the first section of this Report. Express Scripts' forecast of PMPY ingredient costs for the period from 2003-2007 is then presented, along with a discussion of the new drug pipeline anticipated during this period. Also included in the forecast section is an analysis of the key products that are scheduled to lose patent protection between 2003 and 2007. A new chapter this year focuses on specialty injectable pharmacy products and the growing role these drugs have in the overall drug treatment arsenal. The concluding portion of this Report discusses the types of actions that plan sponsors can take to offset growing prescription costs. Appendix A includes an analysis of drug cost changes within the most costly therapy classes between 1998 and 2002. Also highlighted are some of the key changes in utilization of specific drugs and drug classes, as well as factors that are likely to impact future product mix in these classes. Appendix B is a new addition to the *Drug Trend Report*. This appendix provides an overview of the Medicaid program and an analysis of the prescription drug trend for Medicaid recipients from 1996 through 2001, the latest year for which data were available at the time this Report was written.

Methods

The analyses contained in the 2002 *Drug Trend Report* are based on prescription medications for a sample of Express Scripts commercial clients that maintain individual member eligibility data and use Express Scripts for both retail and mail pharmacy services. Medicaid recipients and Medicare beneficiaries receiving drug coverage through Medicare Plus Choice plans are excluded from this study because of their unique demographics and drug coverage policies. About two-thirds of the resulting 2002 sample consists of non-managed care commercial members, and about one-third is managed care commercial members.

Cost data included in past Reports were expressed on an Average Wholesale Price (AWP) ingredient cost (retail “list” price of the medication) basis. Thus, retail network discounts, mail discounts, dispensing fees, rebates and member financial contributions were not reflected in these data. This approach was adopted to ensure comparability across time periods and across client groups; however, it does not take into account that retail and mail discounts on generic products are on average about three times greater than on single-source branded products. This differential did not have a material impact on the trend percentage in past Reports because the generic fill rate was relatively stable during that period. Beginning in 2001 and extending over the next several years, however, the number of single-source brand medicines losing patent protection is growing substantially. Correspondingly, generic fill rates are increasing, reaching 45.9 percent in the fourth quarter of 2002. To take this phenomenon into account, ingredient costs were computed using a standard discount of 12 percent for brand products and 36 percent for generic products off of the AWP cost per unit, rather than computing ingredient costs on an AWP basis. Ingredient costs going back to 1998 were also re-stated using the same discount percentages to maintain comparability in the trend figures over time. When comparing these two ingredient cost calculation methodologies, the annual percentage trend figures do not vary more than 0.2 percent between 1998 and 2001. However, the brand/generic and therapeutic mix components are somewhat different because of this change in methodology. The 12 percent and 36 percent discount figures used are not meant to represent actual client discounts. Rather, they were selected primarily to reflect the roughly three to one ratio between the magnitude of brand and generic discounts that apply to the Express Scripts’ book of business. Also, it should be noted that generic discount rates can vary significantly across specific products.

As was the case in previous Reports, prescriptions counts have been converted to equivalent numbers that would have been dispensed through retail pharmacies to adjust for differential mail usage rates and varying benefit structures across Express Scripts clients. Drugs sold over-the-counter and prescriptions dispensed in inpatient settings are not included in this analysis. Finally, overall figures may not represent actual client experience due to differences in plan design.

The 2002 sample consists of 3 million unique members. To prevent significant distortion in the sample, membership from any given client was limited to no more than 5 percent of the overall sample. The average age of the 2002 sample was 35, compared to the average age of 34.3 for the 2001 sample.