AdvancePCS

health improvement REPORT

An Analysis of Prescription Drug Trends and Evaluation of Methods to Reduce Drug Expenditures

Overview

We're Bending the Trend

For the first time in several years, AdvancePCS analysis shows the ongoing growth in drug expenditures beginning to slow – especially in certain market segments that utilize more aggressive and integrated cost management strategies. Our study of drug cost and usage trends – using claims data from 2001 – reveals that a sizable number of AdvancePCS clients are outperforming the current national trend, with some plan sponsors even experiencing negative growth rates. We have quantified how plan design and collaborative health improvement approaches can contribute to lowering health care costs while improving patient outcomes. Programs that encourage the prescribing, dispensing and utilization of lower-cost, therapeutically appropriate drugs are lowering the drug spend of health plan sponsors.

AdvancePCS is seeing impressive results from plan sponsors that employ a mix of integrated health improvement strategies. In one study, AdvancePCS looked at 246 clients that utilized pharmacy benefit management tools that encourage formulary utilization and compliance. The analysis showed the dramatic effect of benefit plan designs that integrate AdvancePCS' Performance Drug List with three-tier copays, mail service, generic incentive programs, managed drug limitations, prior authorization, drug utilization review and physician education. During 2001, these plans realized total savings of $1.62 billion, with per-member-per-month costs increasing only 4.5 percent – significantly lower than the 17 percent national average reported recently by the National Institute for Health Care Management.

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Plan sponsors employing integrated health improvement strategies are seeing impressive cost-saving results.

In addition, these plans achieved major cost reductions in the leading therapeutic classes. Members under plans with a three-tier copay structure incurred annual prescription costs that were, on average, 16 percent less in the cardiovascular class and 10 percent less in the psychotherapeutic class than seen in the population at large. The research proves that, when incentivized, members choose lower-cost, preferred drugs – reducing their own out-of-pocket costs as well as payer expenses.

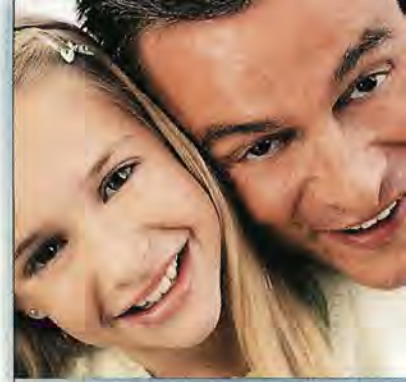
What's Inside?

This reports details notable drug trend findings for 2001. We discuss growth rates and drivers, the role of plan management in controlling drug spend, trends in generics, as well as the impact of new drugs. In the final portion of this report, AdvancePCS shares an overview of health improvement and cost-saving strategies that are delivering lower drug plan costs to our clients while ensuring clinically appropriate patient care.

The data used for this drug trend analysis come from a random sample of a large, statistically significant, eligibility-controlled subset of members from the AdvancePCS book of business. The sampling included insurance plans, self-insured employer groups, and managed care organizations, all of which employed a variety of plan design features and varying degrees of formulary management. For the analysis, self-insureds included third-party administrators and Taft Hartley Trusts. Managed care organizations included Blue Cross and Blue Shield plans.

Key Findings

- Growth rates in drug spend, although varied among plan sponsors, have slowed. The level of cost management incorporated into plan design plays a significant role in the resulting drug spend rate, indicating that cost-management strategies are working.
- The average member copayment amount increased, although member share as a percentage of the overall cost remained stable. The degree of member cost-sharing varied between plan type in 2001, a result of differing plan designs and strategies.
- Generic drug use is increasing, and the costs of generic drugs are rising. However, these drugs still represent an excellent value. Prescriptions filled with generic drugs cost, on average, one-fourth the price of prescriptions filled with brand drugs.
- Fewer new drugs were introduced in 2001, but they were more expensive than in the previous year, a trend that is expected to continue. New prescription drugs remain a major driver of drug spend growth.



Growth Rates and Trends

Growth Rates of Drug Expenditures Decline

AdvancePCS clients have experienced a decrease in the overall rate of growth for prescription drug expenses compared to earlier years. There are several reasons for this slowing of drug expenditure growth from 2000 to 2001. Patents for several key branded products expired, causing them to lose market share to their generic counterparts. The U.S. Food and Drug Administration also approved fewer New Molecular Entities considered to be breakthrough therapies. Most notably, many plan sponsors employed increasingly aggressive plan designs in order to control utilization and slow drug spending.

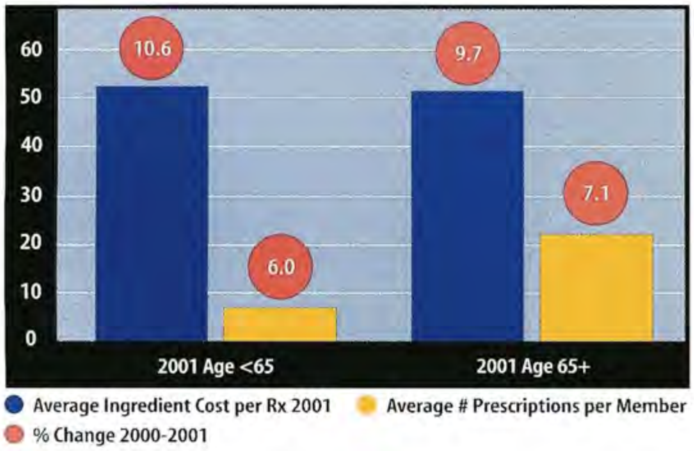
The AdvancePCS study looked at drug spend by plan sponsor type and found that growth rates varied significantly by client, based on plan design and level of cost management. For some clients, particularly insurers and managed care organizations, the lower rate of drug spend growth was especially dramatic. One-third of AdvancePCS client groups had growth rates of less than 15 percent overall, about 15 percent had growth rates of less than 10 percent, and some plan sponsors even experienced negative growth rates. In summary, a significant portion of our clients' drug spend increased less than the national average of 17 percent.

One-third of AdvancePCS client groups had drug cost trends less than 15%. Some plan sponsors even experienced negative growth rates.

Prescription Costs Outpace Utilization Growth

Between 2000 and 2001, the increase in cost per prescription accounted for a larger proportion of overall expenditure growth than utilization, especially for younger enrollees.[1] The increase in cost per prescription has two components: changing drug "mix" and drug cost inflation. The cost of a prescription increased approximately 10 percent for each age group, while the number of prescriptions per enrollee increased between 6 and 7 percent. This finding is in contrast to previous growth trends, when the price per day of therapy and utilization growth were equally responsible for the growth in prescription drug expenditures. The growth in prescription cost may now be outpacing the growth in prescriptions per enrollee as a factor in the overall spending increase.

Growth in Number of Prescriptions vs. Ingredient Cost



[1] Pure inflation (the increase in price of the same prescription from one year to the next) was 4.8 percent between 2000 and 2001 for all ages. The remaining percentage points in cost per day are attributed to the drug mix changing to more expensive drugs.

Plans with integrated health improvement strategies spent 16% less in the cardiovascular class and 10% less in the psycho-therapeutic class than spent by all plans overall.

Cardiovascular Class Leads Rise in Prescription Cost Growth

The fastest growing therapeutic classes were similar to those in previous years. The cardiovascular therapeutic drug class was the single largest contributor to the growth in spending from 2000 to 2001. In all, eight drug classes accounted for nearly 60 percent of total expenditures in 2001 and two-thirds of total expenditure growth between 2000 and 2001.

In some large therapeutic categories, such as antihistamines, the drug spend growth primarily was due to an increasing number of prescriptions filled. Expenditure growth for hypoglycemic agents was due to more costly prescriptions. In the antiarthritics category, plans felt the influence of the blockbuster COX-2 medications (e.g.,Vioxx®, Celebrex®). There was an increase in overall cost per day of therapy for the therapeutic class, but combined COX-2 and non-COX-2 drugs impacted overall cost growth less than it did in 1999-2000.

Several of the smaller drug classes that contribute a smaller amount to total expenditures are growing significantly and should be monitored for potential cost management. Classes to be watched include: antiasthmatic drugs (drug spend increased 40 percent per enrollee between 2000-2001 and represents 6 percent of total expenditure growth), analgesics, immunosuppressants, blood products (e.g., Procrit®), and central nervous system drugs (e.g., Alzheimer's agents, such as Exelon®).

Major Therapeutic Classes Contributing to Greatest Cost Growth

Therapeutic class	Contribution to overall 2000-2001 expenditure growth	Average 2001 expenditures per enrollee per year for drugs in class	Growth drivers	
			Increase in cost per day	Increase in days per enrollee
Cardiovascular	14.9%	$74.06	3.6%	10.8%
Psychotherapeutics	9.9%	$51.55	7.0%	6.4%
Hypoglycemics	8.4%	$25.46	15.9%	9.2%
Antihistamines	7.1%	$25.42	5.9%	15.0%
Gastrointestinal	6.9%	$46.16	2.8%	7.5%
Antiasthmatics	5.9%	$13.33	20.6%	15.6%
Analgesics	5.1%	$19.02	6.9%	12.6%
Antiarthritics	4.7%	$25.15	9.5%	3.7%

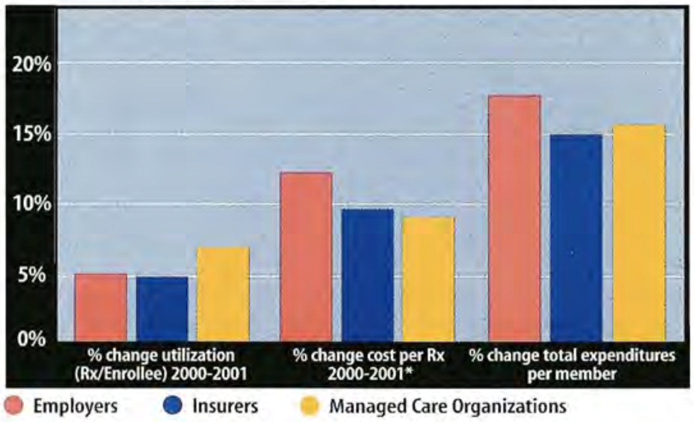
The Role of Plan Management in Controlling Drug Spend

Drug Cost Growth Differs by Type of Plan Sponsor

AdvancePCS manages prescription drug benefits for several types of plan sponsors, including self-insured employers, health insurance carriers, and managed care organizations. Each of these client groups experienced different drug spend growth rates, due primarily to the level of cost control and plan features used.

Our study showed that self-insured employers experienced the highest prescription drug cost per insured person and the greatest growth in expenditures per person between 2000 and 2001. The difference in drug spend between employer groups and the other two categories is due to plan design differences, which include multi-year coverage contracts (e.g., union contracts) and lower cost sharing. Employers generally cover an older population with a higher utilization pattern and a potentially increased use of medication for chronic conditions. AdvancePCS believes that employers may see a decline in their spending growth rate in the next few years if their flexibility to make plan changes increases, and if they adopt more cost-sharing and utilization management techniques.

Average Prescription Expenditures by Type of AdvancePCS Client



The growth rates of utilization and prescription costs for managed care organizations demonstrates the powerful impact aggressive plan designs can make. Utilization increased nearly 7 percent for this group – higher than that of employers and insurers. Drug expenditures per member were not as high as the other two groups in cost per prescription, however, which slowed the overall rate of spend.

* Cost per prescription represents the sum of ingredient cost paid for all claims in the study.

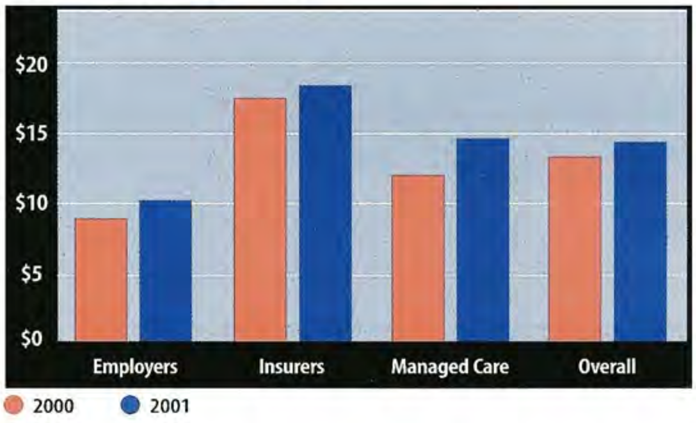
Plan sponsors experiencing lower rates of drug spend are those adopting cost sharing and utilization management techniques.

Tiered copays are an effective method of cost sharing.

Members Pay More Dollars, But Cost Share Remains Stable

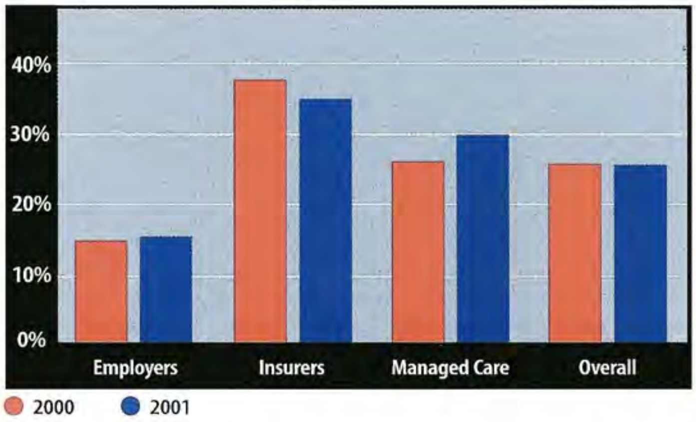
AdvancePCS analysis shows that the average copay for members in all three payer categories was higher in 2001 than in 2000. Increasing member copays is a new trend from past years, when employers and insurers absorbed the hike in health care costs. The average copay per prescription increased by $1.28, or approximately 10 percent, in 2001.

Member Copayment Amounts



Due to increasing drug costs, however, members' share as a percentage of the overall cost remained stable at an average of 27 percent in 2000 and 2001. The proportion of total expenditures borne by members differed considerably across client types and increased at different rates. While employer groups increased member share from 15.3 to 16.3 percent of total costs, managed care groups increased member share more substantially from 27.2 to 30 percent. This copay increase may be the result of a general move to multi-tier benefit designs.

Member Cost Share Percentage



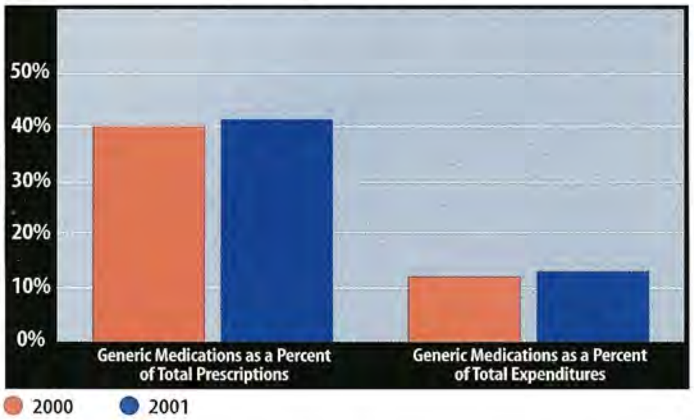
Across the AdvancePCS population, the proportion of plan sponsors with three-tier plans grew from 12 percent in 1999 to 27 percent by the end of 2001. Because many of these groups made this move during 2001, the full effect of this effort has not yet been reflected in the data.

Trends in Generics

Generics' Share of Prescriptions Steadily Gains Ground

From 2000 to 2001, generics increased their share as a proportion of all prescriptions dispensed, despite the introduction of numerous brand drugs. The generic dispensing rate increased slightly, and expenditures rose due to a higher cost per generic prescription dispensed. This reflects a change from recent years, when brand drugs increased as a proportion of all prescriptions dispensed.

Increase in Generic Dispensing Rate and Cost



In addition, several major prescription drugs went off patent during 2001, paving the way for generics to enter the market. For example, within six weeks of introducing fluoxetine (the generic form of Prozac) to the market, two-thirds of dispensed prescriptions were for fluoxetine. The impact of this market shift likely will be more apparent in next year's data.

AdvancePCS expects a continued increase in the generic dispensing rate over the next year as several significant brand drugs lose patent protection, fewer blockbuster drugs are introduced, and clients increasingly adopt strategies to promote the utilization of generics.

Generic and Brand Prices Continue to Rise

The average price of both generic and brand prescription drugs continued to increase during 2000 and 2001. The cost of generic prescriptions[2] dispensed to AdvancePCS members rose more rapidly than brand prescriptions, growing more than 21 percent in 2001 while brands increased 10 percent.

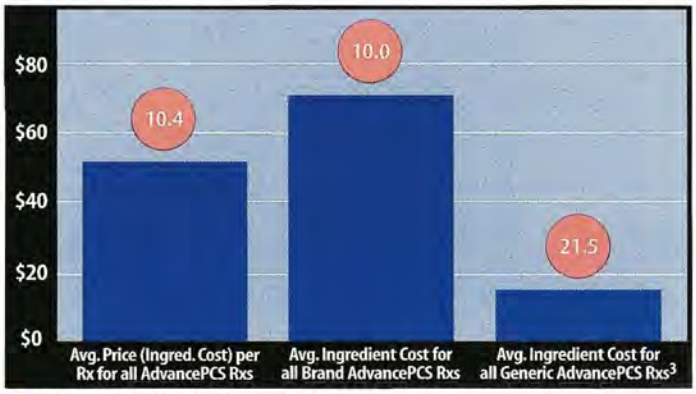
One reason for the increase in overall generic costs is that the ingredient cost of new generic medications was more than twice the average cost of all generic drugs. The average ingredient cost for generics introduced during the past two years is $34.37, compared to $16.85 for all generic prescriptions. It is important to highlight that, on average, prescriptions filled with generics are still about one-fourth the ingredient cost of prescriptions filled with brand drugs.

Prescriptions filled with generics are still about one-fourth the ingredient cost of prescriptions filled with brand drugs.

[2] Prices were evaluated only for those generic prescriptions that were dispensed to AdvancePCS members – not for every generic drug available. Price increases for these more-common generics were greater than the average increase for all generic drugs.

The 21.5 percent increase in generic costs reflects an increase in average price of only $3.00, compared with a $6.00 increase in the average cost of brand prescriptions. This points to a growing dollar spread between the price of a brand drug and the price of a generic drug. The significant price increase in generic prescriptions in 2001 is due only in small part to generic drugs that were new in 2001; most of the increase in cost is due to price inflation, case mix changes, and other factors. Despite the increasing cost of generics, they still represent strong value and savings compared to brand drugs.

Average Ingredient Costs



% Change in Price per Rx from 2000

Generics increased in cost an average of $3 per prescription in 2001, compared with a $6 average increase per brand prescription.

Generic Uptake a Factor in Prescription Cost

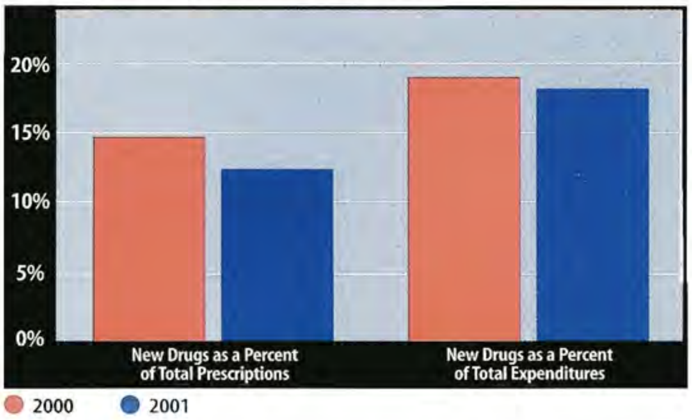
Often, it takes time to achieve savings as the market shifts from using a branded product to its generic counterpart. Under certain circumstances, the manufacturer of a generic drug may be granted 180 days of marketing exclusivity when the product is first launched. Savings may be less during this period, but are likely to become much greater when the exclusivity ends and other manufacturers enter the marketplace. For example, several months after the August 2001 market launch of fluoxetine (the generic version of Prozac®), the cost of generic prescriptions dispensed was still almost 90 percent of Prozac's cost. By April 2002, however, fluoxetine's cost had fallen to about one-eighth of the brand's cost because of additional generic competition.

The Impact of New Drugs

Fewer Drugs Introduced, but New Products More Expensive Than Ever

Prescription drugs new to the market are still a major driver of drug spend increases. The proportion of prescriptions for drugs approved within the previous three years[3], however, decreased from 14.4 percent in 2000 to 12.6 percent in 2001. While there are fewer prescriptions written for new drugs as a proportion of total prescriptions, the newcomers still are very expensive and contribute a significant amount to overall expenditures.

Prescriptions and Costs for New Drugs Decline



AdvancePCS is addressing this issue through programs that focus on monitoring new medications as they enter the market and modeling how these medications could – under various plan design scenarios – best contribute to therapy. AdvancePCS develops budget-impact models and plan-management strategies around products anticipated to have a medium to high impact on pharmaceutical expenditures (e.g., Exanta® for the treatment of thromboembolism).

It is, however, helpful to keep in mind that not all drugs predicted by manufacturers to be "blockbusters" will have a major impact on overall client expenditures. For example, a new medication for migraine headaches would enter a market that currently has multiple therapeutic alternatives. It is unlikely that the new medication would cause overall market growth. Instead, utilization would occur primarily as a result of market-share shift from other agents in the same therapeutic category.

AdvancePCS helps plan sponsors prepare for costly new drugs by providing budget modeling and plan management strategies.

[3] For the year 2000, new medications were those that were approved in 1997, 1998, or 1999. For the year 2001, new medications were those approved in 1998, 1999, or 2000.

Our Performance Drug List identifies pharmaceutical products that maximize clinical results and economic value.

Strategies to Deliver Lowest Net Cost and Health Improvement

AdvancePCS' Lowest-Net-Cost Strategy

AdvancePCS' lowest-net-cost strategy has repeatedly proven effective in helping our clients to outperform industry trend increases. This strategy incorporates our health improvement philosophy that achieving lowest net cost enables health care dollars to go farther. The strategy has delivered substantial savings to plan sponsors that have implemented innovative plan designs and clinical programs that work together to deliver measurable bottom-line results. The strategy takes into account the fact that, on average, 90 percent of the drug benefit cost pays for ingredient costs. Administrative and dispensing fees, and other relatively minor costs, account for the remaining 10 percent. Clearly, the best opportunity to reduce a plan sponsor's drug spend is to target ingredient costs. That is the foundation of AdvancePCS' lowest-net-cost strategy.

A central component of AdvancePCS' approach to helping plan sponsors lower their ingredient costs is the Performance Drug List. A subset of the AdvancePCS Clinical Formulary, the Performance Drug List is a clinically approved and economically modeled list of cost-effective drugs in selected therapeutic categories that represent the majority of prescription costs for the average plan sponsor. Within the categories included, the Performance Drug List helps the physician identify pharmaceutical products that maximize clinical results and economic value. The list is a component of AdvancePCS' voluntary therapeutic intervention and cost-containment program that is designed to encourage physicians, pharmacists and patients to use products on the Performance Drug List whenever clinically appropriate.

AdvancePCS has found that plans that are most effective in lowering ingredient costs incorporate formulary management and compliance programs, along with plan features such as generic incentive programs, managed drug limitations, prior authorization, and drug utilization review. Other major cost-saving components that AdvancePCS leverages for its clients – which go beyond affecting ingredient costs – include customized retail pharmacy networks that can provide 2 percent to 10 percent savings; prescription mail service, which can provide 2 percent to 4 percent savings or more; manufacturer rebates; and wholesale drug discounts. Additional cost-containment strategies, such as specialty pharmacy management and health improvement programs enable health plan sponsors to achieve lower overall costs across the health care spectrum.

Managing High-Cost, Biotech Drugs

Another important opportunity for health care savings lies within the growing industry of biotech drugs. To date, 75 biotech drugs have been approved for the marketplace. In addition, there are currently 370 biotech drugs in development, and projections call for 800 products to be in clinical development by 2005.[4] The total health care spend for this category of drug, estimated at $5 billion to $10 billion annually, is expected to double in the next five years.

AdvancePCS' integrated specialty pharmacy program delivers savings on injectable drug costs of 10 percent to 20 percent, on average. In some cases, the savings are much greater, as a result of improved administrative efficiencies and our ability to separate specialty drug costs from medical plan expenses.

Our specialty pharmacy program, SpecialtyRx, focuses on treating patients with high-cost chronic diseases, such as multiple sclerosis, rheumatoid arthritis, hemophilia, Gaucher disease, cystic fibrosis, hepatitis C, growth hormone deficiency, and pulmonary hypertension. With our integrated pharmacy care management, patient education and nurse-based compliance program, AdvancePCS is uniquely positioned to manage the cost and care of these patients.

Our specialty pharmacy program delivers savings of 10% to 20% or more on injectable drug costs.

Encouraging Best Practices in Health Care

With our strong clinical foundation that incorporates original research and development, AdvancePCS is uniquely able to offer health improvement capabilities that encourage the deployment of best practices to improve the health of individuals while lowering overall costs.

The AdvancePCS Clinical Consulting program is a key example of a health improvement program that supports the delivery of high-quality and cost-efficient health care. Approximately 150 licensed, full-time AdvancePCS pharmacists meet regularly with the top 20,000 prescribing physicians across the country, providing valuable clinical and patient-specific information and resources that promote prescribing of the "right drug" the first time – especially Performance Drug List products, when clinically appropriate.

A recent survey of approximately 200 physicians contacted by the Clinical Consulting program found that 83 percent highly value the actionable information that clinical consultants provide, enabling physicians to lower medical expenses for their patients. An independent review of claims-based data in specific therapeutic categories demonstrated that, compared to their peers, physicians who were visited by Clinical Consultants in 2001 altered their prescribing patterns to preferred drugs an average of 4 percent to 9 percent – thereby actively supporting AdvancePCS' lowest-net-cost strategy of prescribing cost-effective, clinically appropriate drugs.

[4] CIBC World Markets Equity Research, March 5, 2002, p. 7.

AdvancePCS clients are outperforming national drug cost trends by implementing creative plan designs supported by our health improvement programs.

Looking Ahead

As a recognized national leader in understanding and addressing the true costs of health care, AdvancePCS is developing innovative new ways to help plan sponsors improve member health, while lowering overall health care costs. For instance, our scientifically based disease management programs are delivering measurable results in improving health care, patient knowledge, and self-care skills, while lowering costs associated with hospital admissions, emergency room visits, and outpatient care.

Although the rate of annual drug trend increases is slowing, plan sponsors must remain diligent in their efforts to control costs while providing appropriate, accessible pharmaceutical care. AdvancePCS has shown that plan sponsors can readily outperform national trend figures by adopting thoughtful, creative plan designs – complemented by health improvement programs – that are part of a focused and well-integrated strategy.

AdvancePCS

Building Better Health
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