INTELLIGENCE, INSIGHTS, AND OPPORTUNITIES FOR ACTION

Healthcare Management Strategies:
Supporting Compliance, Controlling Cost, Improving Care

In 2001, Pitney Bowes began an experiment. They lowered co-pays for diabetes and asthma drugs to see whether making these prescriptions less expensive would encourage employees to take their drugs more regularly. They knew they might be spending more on these prescriptions; the question was, would they be spending less on overall healthcare for these participants?

It was an uncommon strategy. They were planning to lower participant cost share rather than raise it, encourage increased utilization rather than attempt to lower it, and look at their pharmacy benefit as a means to help control healthcare spend overall, rather than add to it.

As reported in the Wall Street Journal (May 10, 2004), Pitney Bowes’ strategy succeeded. According to Jack Mahoney, M.D., corporate medical director at Pitney Bowes, average annual cost for a participant with diabetes fell about 6 percent. For a participant with asthma, average annual cost fell about 15 percent. Overall, the company expects to save at least $1 million in 2004 on participants with these conditions.

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The Caremark Adherence Index™

Non-adherence can mean that you’re not getting optimal results from your pharmacy benefit investment.

“Take your medicine as directed.” It sounds simple, but if it were, people would probably be better at it than they are. Research consistently shows that only a fraction of patients comply with their doctor’s directions regarding drug therapy (see story above). What’s more, those who are on long-term therapy for chronic conditions have the greatest rates of non-adherence.

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Prelude to the experiment

Concerned about their rising healthcare costs, Pitney Bowes wanted to identify plan participants who were most likely to become high-cost claimants. Surprisingly, data analysis revealed that low possession rates of chronic medications were a more accurate predictor of disease progression than presence of the disease itself. (For more on medication possession, see “The Caremark Adherence Index™”, cover story.)

For people with chronic conditions, appropriate utilization of medicine—adherence to prescribed therapy—is crucial. If your goal is to optimize healthcare investments, these are the people you want to have filling their prescriptions.

At Pitney Bowes, now a Caremark client and former AdvancePCS client, lowered co-pays did result in more prescription refills. There were also more refills for some comparatively costly, but convenient, combination drugs, such as Advair®, a combination of two inhaled asthma drugs. While prescriptions for such maintenance drugs increased, the company's benefit cost associated with “rescue” medications decreased significantly, as did the number of emergency room visits, hospitalizations, and physician office visits—producing substantial overall savings on Pitney Bowes’ healthcare spend.

About adherence

Medication non-adherence is a major healthcare problem. One study involving plan participants with chronic or long-term conditions in the U.S. found that:¹
- only 1/3 took their medication as prescribed,
- 1/3 took their medicine infrequently, and
- 1/3 didn’t take their medicine at all.

Non-adherence often leads to complications due to illness and even death. This, in turn, can increase total healthcare cost. A study published this summer and funded by the National Institute on Aging found that middle-aged and older Americans with heart disease who cut back on their prescribed medications because of cost were 50 percent more likely to suffer heart attacks, strokes, or angina than those who did not.² The cost of medication non-adherence in the United States is estimated at $100 billion annually, including hospitalizations, nursing home admissions, ambulatory costs, and lost productivity.³ ⁴

Why don’t they take their medicine?

Researchers have identified multiple reasons for non-adherence. Medication cost is one factor, but people may also have trouble getting to the pharmacy to pick up their prescription. They wait too long to order their refills, find it difficult to manage therapy for multiple conditions, worry about side effects, doubt that their drug is “working,” or simply have trouble getting the bottle open.

Beyond following their prescription guidelines, individuals with chronic conditions face other challenges in their therapy—including recommended dietary guidelines, lifestyle changes, follow-up testing, and preventive care such as vaccinations. Implementing such changes and adhering to recommended therapy could be difficult even for healthy people.

**Healthcare management strategies**

There is growing recognition among providers, public health officials, legislators, analysts, and payors that high-cost, or potentially high-cost, participants call for additional support in meeting these challenges and managing their conditions. To be effective, such support needs to be individualized, targeted appropriately, and, in many cases, ongoing. Caremark has developed a range of capabilities and strategies to support our clients in meeting these needs.

Caremark healthcare management strategies offer several unique advantages:

- **Pharmacy claims are an early-warning system.** Medical claims typically take three weeks to a month to be entered into a data system. Pharmacy claims are generally entered the day a plan participant receives a prescription.

- **The pharmacy benefit is the most-used medical benefit,** providing greater frequency of data and more opportunities for intervention.

- **Our analytics and predictive modeling capabilities** allow us to identify the plan participants who are most likely to increase their utilization of medical services in the next year. Our analysts can work with pharmacy claims alone, although the integration of medical claims enhances results. *(For more information on these capabilities, see “The Caremark Adherence Index™”, cover story.)*

- **Mail service pharmacy** supports a variety of intervention strategies to encourage optimal therapy. Utilizing mail service also eliminates the need for the plan participant to get to a retail pharmacy.

- **Our continuum of intervention strategies** allows us to tailor our services to meet the needs and goals of the plan sponsor and the particular plan participant. Our clinical pharmacists and consultants can contact the prescribing physician by phone, fax, or mail. Plan participants can be sent health education materials or contacted directly by a clinician or Caremark representative. Contact can be one-time or recurring.

- **Our tracking systems and proven outcomes capabilities** allow us to measure savings and results and guide continuous quality improvements to achieve optimal results in terms of cost and participant well-being.

**Examples of Caremark Healthcare Management Strategies**

- Case management for chronic conditions, including rheumatoid arthritis, multiple sclerosis, lupus, hemophilia, and more.

- Specialty pharmaceutical management, including distribution of specialty pharmaceuticals and necessary supplies, support for medication adherence, and appropriateness monitoring.

- Disease management which utilizes individualized plan participant support and education for common chronic conditions such as asthma, diabetes, and heart disease.

- Interventions alerting physicians to gaps in care and providing recommendations regarding plan participants at risk for chronic diseases.

Every plan population has potentially high-cost participants who are likely to spend substantially more on overall healthcare over time. Consult your Caremark account representative to discuss how we can help identify these individuals and provide the support that will reduce the risk of adverse health events and progression of disease.
The Caremark Adherence Index™

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Adherence consists of two major components—compliance and persistency. Compliance describes how well a plan participant follows the prescribed therapy regimen. It is measured as a ratio and compares the quantity of the drug that is actually taken to the quantity that needs to be taken according to the physician’s directions. Persistency refers to the length of time that a plan participant follows the treatment regimen. A plan participant can be compliant, but cut therapy short—low persistency. Or the individual may partially comply for the full duration of recommended therapy. Either deviation can negatively impact the effectiveness of therapy and health outcomes.

Historically, the Medication Possession Ratio (MPR) has been used to measure adherence. However, MPR measures only the quantity of medication in the plan participant’s possession—compliance. Especially for plan participants with chronic conditions and prescriptions for long-term, maintenance medications, MPR tells only half the story.

In an effort to rectify that imbalance, the Caremark Analytics and Outcomes team developed the Adherence Index™ (AI), a unified measure of compliance and persistency at a plan participant level. Our analysts have found that this combined measure demonstrates a stronger correlation with total healthcare utilization and costs than the historic standard, MPR.

Higher AI scores have been correlated with lower overall healthcare costs for:

- Cardiovascular diseases including high blood pressure, high cholesterol, and congestive heart failure
- Thyroid disease
- Diabetes
- Glaucoma
- HIV
- Hepatitis C
- Alzheimer’s disease
- Depression, anxiety, and other behavioral health conditions
- Neurological diseases
- Epilepsy/seizure disorders
- Rheumatoid arthritis
- Multiple sclerosis

Using historical data to learn and predict

The analytics and outcomes team conducted extensive analysis using integrated medical and pharmacy data to correlate AI to total healthcare costs for 19 chronic conditions. This evaluation revealed that:

- Plan participants with higher AI scores consistently have lower overall total health costs.
- Plan participants using our mail service pharmacy have higher AI scores. Mail service supports adherence because it provides the timely opportunity for clinical review of each prescription and appropriate intervention to support optimal therapy.

Defining predictors of non-adherence—such as age, complexity of recommended therapy, and behavior—allows us to identify potentially high-risk plan participants. Such prediction, in turn, helps to identify actionable adherence interventions to educate plan participants and provide the behavioral skills to support therapy adherence.

Mine your data

Caremark has a suite of proprietary analytic and predictive modeling tools designed to help plan sponsors identify future needs in order to optimize the use of resources for pharmaceutical and comprehensive health management. Ask your Caremark account representative for more information on these tools.
Gross Trend: 8.9%

Trend slowed down in the third quarter in the Caremark Book of Business. Although we are seeing increased utilization in all top-spend categories, the rate of growth in utilization has slowed. Utilization continued to decrease in the non-sedating antihistamines (NSAs, 6% decrease) and the estrogens (13-15% decrease). Increases in the proton pump inhibitors (PPIs, 1-2%), the non-steroidal anti-inflammatories (NSAIDs, 3-4%), and the selective serotonin reuptake inhibitors (SSRIs, <2%) were moderate to flat. Our trend number demonstrates the benefits of the availability of generic and OTC alternatives in several of these categories.

Stricter cholesterol guidelines, additional indications for Lipitor®, and the introduction and marketing of new statins and combination products help to account for increased utilization—almost 14%—in the top-spend cholesterol category. Analysts expect this trend to continue (see page 7). Anticonvulsants and specialty and biotech products also experienced increases.

While utilization of antidepressants increased somewhat, the availability of generics for products such as Paxil®, Prozac®, and Wellbutrin® helped to blunt the impact on spend. The Caremark analytics team is closely monitoring pediatric spend on antidepressants, which had been increasing, to evaluate the effect of new FDA safety recommendations (see page 6).

The manufacturer’s recall of COX-II inhibitor Vioxx® caused immediate market shifts. Two weeks after the recall, national data* indicated that most Vioxx users (70%) who switched migrated to another product within the category, with Celebrex® benefiting a bit more than the more recent introduction Bextra®. NSAIDs also gained, with newcomer Mobic® drawing 10% of Vioxx® switchers. We expect continuing shifts to NSAIDs—and decreased spend in this category—in the months to come due to ongoing concerns in the marketplace about the safety of the entire Cox-II class.

Price increases continue within the normal range. Trend—the annual increase in the cost of providing prescription benefits to plan participants—is calculated as gross cost per employee per month in the Caremark Book of Business.

*Business Wire Oct. 6, 2004

TrendsRx® Quarterly is a publication of Caremark and was developed as an informational resource providing an overview of events and developments in the pharmacy benefit and pharmaceutical industries. Please contact a Caremark representative to discuss possible impact on your specific pharmacy benefit program. If you are not a Caremark client and would like to receive TrendsRx® Quarterly or to learn more about Caremark services, please contact David Joyner, Executive Vice President, Sales and Account Services, at 800-749-6199.

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The Federal Trade Commission (FTC) and the Department of Justice issued a report, “Improving Health Care: A Dose of Competition,” evaluating a number of issues affecting cost, quality and accessibility of healthcare. Concerning PBMs, the report concluded that robust competition benefits consumers by lowering costs and improving quality.

Proposed rules for the Medicare Modernization Act (MMA) drug benefit were released for public comment. Topics under discussion include the employer subsidy provision and the proposed “blueprint” for the benefit’s drug list. The Caremark Government Relations team is evaluating the proposed rules as we continue to assess how we can best support our clients’ priorities under MMA provisions.

Enrollment in the interim drug discount program and initial enrollment in the Medicare Replacement Drug Demonstration (see page 8) has been less than expected, leading to calls for a stepped-up public education program to ensure that beneficiaries take advantage of these savings opportunities. The Medicare drug benefit was also linked to a record increase in Medicare premiums for 2005.

New estimates from the U.S. Census Bureau put the number of uninsured at 45 million. In its annual employer survey, the Kaiser Family Foundation cited an 11.2 percent increase in the cost of health coverage in 2004. While the rate of increase had slowed somewhat, continuing double-digit increases are leading some employers to drop or modify coverage, lowering the percentage of people with job-based health coverage. Moreover, rising health costs have deterred job growth according to some analysts.

Concerning safety and efficacy

Two U.S. Food and Drug Administration (FDA) advisory committees recommended that antidepressants carry a “black box” warning about their safety for use in children and adolescents after hearing testimony from families and health professionals. The committees also advised against contraindicating these products in the pediatric population. Members believed access to these therapies was important for those who could benefit. The hearings also highlighted issues related to disclosure of research from clinical trials. A group of influential medical journals, including the Journal of the American Medical Association, announced plans to stop publishing the results of clinical trials unless a trial is registered at its outset in a public database. Meanwhile, legislators announced plans to call for such a registry.

Federal definitions

A recent decision by the Centers for Medicare and Medicaid Services to change its policy on obesity could open the door to wider coverage of stomach surgery and other therapies that would reduce complications of obesity. For the time being, coverage of weight-loss drugs is not under discussion. In providing guidance on health savings accounts (HSAs), the Treasury Department and the Internal Revenue Service clarified the meaning of preventive care. Disease management and certain prescription drugs—such as antihypertensives and cholesterol drugs for heart attack prevention—will qualify as preventive care.
Combination and dual action products win approval. Cholesterol-lowering combination drug Vytorin® was approved by the FDA in July. Vytorin combines the statin Zocor® and the absorption inhibitor Zetia®, two drugs which target LDL (so-called bad) cholesterol in different ways. The two drugs together are being promoted as more effective than previous options. Recent revision of cholesterol guidelines for high-risk patients could benefit sales of the newly-launched drug. (See story, below.)

Two HIV medicines, Truvada™ (Viread® and Emtriva™) and Epzicom™ (Epivir® and Ziagen®), also won approval. Both combination drugs are indicated for use with other HIV medicines and call for once-a-day dosing, simplifying treatment, and possibly increasing compliance.

Newly approved adult antidepressant Cymbalta® targets norepinephrine and serotonin, two brain chemicals associated with depression; it’s classed as a serotonin/norepinephrine reuptake inhibitor—an SNRI. Cymbalta is indicated for major depressive episodes and for diabetic peripheral neuropathic pain.

Other news from the FDA. Campral® became the first new treatment for alcoholism to win approval in a decade. Top-selling statin Lipitor® is now also approved to lower risk of heart attack for people with risk factors other than elevated cholesterol and to reduce the risk of angina. Geodon®, originally indicated for schizophrenia, received an additional indication for the treatment of acute bipolar mania. Aldara®, a topical cream, is now approved to treat superficial basal cell carcinoma in addition to actinic keratosis—a pre-cancerous skin lesion—and external genital warts.

Thyroid drug levothyroxine sodium has been marketed for many years, both under common trade names including Synthroid® and Levoxyl® and by the generic name. Recently, for the first time, selected labelers gained approval of their bioequivalency studies allowing the FDA to call specific generic and brand products therapeutically equivalent. The new A-rating does not apply to every generic and brand product, but assures physicians, pharmacists, and patients that A-rated generic substitutes will provide the same clinical effect as the brand product. Synthroid has been cited as the second most prescribed drug in the United States with annual sales of over $800 million.

Category to Watch: Statins

This summer the National Cholesterol Education Program (NCEP) issued new, more aggressive guidelines for people at high and moderately high risk of coronary heart disease. Wall Street analysts expect a 25 percent to 50 percent increase in statin utilization as a result of these updated guidelines, increasing drug spend in this already highly utilized class. Caremark experienced a significant increase in this class in 2001 after the last NCEP guideline update. The result for plan participants who comply with therapy over the long-term may be better health outcomes and a reduction in heart attacks and other serious cardiovascular events. Caremark clinical pharmacy and disease management programs can support your plan participants in complying with statin therapy and getting the best results from their (and your) prescription investment.
Caremark Administers Medicare Pilot Project, First Trial of the Part D Drug Benefit

As the PBM chosen to administer the Medicare Replacement Drug Demonstration (MRDD), Caremark is providing pharmacy benefit management and specialty pharmacy services to a group of up to 50,000 Medicare beneficiaries over a 16-month period.

When it goes into effect in 2006, Part D of the Medicare Reform Bill will introduce sweeping changes in the healthcare marketplace, affecting retirees, employers, and the benefit and pharmaceutical industries. Implications and implementation of the bill have been under discussion throughout 2004, but the Medicare Replacement Drug Demonstration will provide the first actual experience with its provisions.

Moving away from the physician’s office

MRDD provides coverage for more than two dozen self-injected or oral “specialty” drugs, which can be used to replace drugs normally provided in a physician’s office. Forty percent of allotted funding is dedicated to oral cancer drugs; other selected products are used to treat multiple sclerosis, hepatitis C, rheumatoid arthritis, and other conditions. Most covered drugs are high cost, ranging from $1,200 up to $4,200 per month. The program incorporates the same cost-sharing structure as Medicare Part D, incurring significant out-of-pocket expense for plan participants. However, beneficiaries with no other coverage who are using these products have the opportunity to save tens of thousands of dollars per year.

Centers for Medicare/Medicaid Services developed the program to significantly improve access to self-administered medications for severely ill beneficiaries. The program will be monitored to evaluate savings in overall medical costs.

Caremark role

Caremark has been contracted to provide benefit administration, retail network management, and mail service through Caremark Specialty Pharmacy Services. Caremark is providing the full range of MRDD-covered medications, 24/7 clinical support from a pharmacist-led CareTeam, and savings through competitive pricing and free shipping and supplies.

Transitioning from receiving medication in a physician’s office to self-administration can add to an already challenging treatment regimen. The support provided through our Specialty Pharmacy Services is crucial in maintaining and even improving compliance and medical outcomes for these patients.

Our experience with MRDD will provide in-depth, first-hand knowledge of claims adjudication, reporting requirements, actuarial modeling, plan participant cost-sharing strategies, and other provisions of the new drug benefit. This will provide crucial insight as we work with plan sponsors to evaluate how best to serve their retiree population.

Caremark continues to be closely involved in the Federal rule-making process to improve and clarify the intent of Medicare Part D. Clients interested in learning more about our Medicare experience, including initial Part D administration, can contact Adina Safer at 1-469-524-4712.

Medicare beneficiaries with limited drug coverage, including employer-sponsored supplemental prescription drug coverage, may be eligible for MRDD. They can learn more about the program by calling TrailBlazer Health Enterprises toll-free at 1-866-563-5386.

MRDD Covered Drugs Include:
- Copaxone®, Rebi®, Avonex®, Betaseron® – multiple sclerosis
- Gleevec®, Iressa®, Thalomid®, Targetrin® – cancer
- Enbrel®, Humira®, Kineret® – rheumatoid arthritis
- Pegasys®, Peg-Intron® – hepatitis C
- Tracleer® – pulmonary hypertension

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