The Changing Role of Pharmacy Benefit Administration in Managing Chronic Conditions

There will be an estimated 157 million individuals in the U.S. population with chronic conditions by 2020. The cost burden of chronic illness is currently more than 75% of total health care costs and is projected to grow to $4.2 trillion by 2023. While employers have long understood the impact of chronic diseases on health care costs, many do not have a full appreciation of the key role of pharmacy benefit management in controlling and preventing chronic diseases. In fact, pharmacy benefit management programs and services should be a critical part of any strategy for managing the cost and quality of care associated with chronic diseases such as diabetes, hypertension, pulmonary conditions, heart disease, mental disorders and stroke.

by Allan Zimmerman | PricewaterhouseCoopers

Employee health care benefits strategies today often are increasingly focused on wellness and population health initiatives including related change management, coverage, incentives and vendor management activities. Managing chronic diseases is critical to managing the overall health of our populations with a focus on both treatment and preventive strategies. However, the role of pharmacy benefit administration is often perceived to be independent of and isolated from these strategies. This article outlines some of the key areas where pharmacy benefit administration can move beyond its traditional role to become a full partner in the health management continuum.

Evolving Role of Pharmacy Benefit Administration in Chronic Disease

While the distributive function of providing drug products to patients is critical in the treatment and prevention of chronic diseases, there should be equal recognition of how contemporary pharmacy benefit management strategies need to evolve. The maximum value of pharmacy benefit management is delivered through a multifaceted approach that includes both traditional distribution functions and new innovations in health care delivery. The benefits of medication adherence, medication therapy management (MTM) and utilizing pharmacists in various nontraditional
settings should not be underestimated. Pharmacists and professionals within a pharmacy benefit management organization can be leveraged much more significantly and should be integrated as critical contributors to a comprehensive health care team and strategy focused on prevention and treatment of chronic disease.

Assessing and Improving Medication Adherence

Improper medication therapy adherence to prescribed therapy regimens has been shown to result in therapeutic failures and complications, death and significant increases in overall health care costs.\(^2\)\(^3\) Medication-adherence rates in the United States are often only 50-60% for key chronic conditions in spite of the fact that medications for chronic disease positively impact quality of life and outcomes.\(^4\) While there are multiple reasons for poor medication adherence for chronic diseases, key reasons include patients’ lack of useful understanding of the disease, poor understanding of medications and their role in the treatment of disease, and not knowing how to identify and respond to side effects related to drug therapy and cost.

At a minimum, plan sponsors have relied on the legacy role of the dispensing pharmacist in mitigating deficiencies in the patients’ understanding of disease and the importance of ongoing medication adherence. However, successful pharmacy benefit administration adherence strategies should not simply assume such activities are taking place and are effective. Strategies also should ensure additional monitoring and oversight by pharmacy benefit managers (PBMs), claim adjudicators and related pharmacy providers that are actively engaged. These entities can readily produce reports from claim data on patients who are nonadherent in the treatment of chronic and other diseases. These reports can serve as the basis for understanding, trending and tracking the gaps in medication adherence. Furthermore, this pharmacy-based adherence information can inform pharmacists, help to target and assess the impact of subsequent intervention and outreach to the patient, and advance the effectiveness of pharmacists and the broader care management teams.

Understanding and measuring medication adherence can be one of the most powerful components in our overall strategies for improving treatment of chronic disease.

Broadening the Use of Medication Therapy Management

MTM is a service or group of services intended to optimize drug therapy in order to improve therapeutic outcomes for individual patients. MTM services are routinely defined as independent of the dispensing of a medication to a patient but also can occur in conjunction with dispensing. These services are typically provided by pharmacists and directed toward patients with chronic diseases. They involve:

- Performing comprehensive medication history reviews
- Developing a medication treatment plan for identified gaps in pharmaceutical care
- Providing patient education and enhancing adherence to prescribed medication regimens
- Interacting with prescribing physicians in order to maximize the value of integration of care.

Leading MTM chronic disease targets and annual prescription volumes are shown in the table.

While the general concept of MTM has been in the lexicon of pharmacy practice for years, its use as a common concept in the administration of pharmacy benefits for chronic disease was pushed to the forefront of health care narrative by the passage of the Medicare Prescription Drug Improvement and Modernization Act of 2003 (Medicare Part D) and its implementation in 2006. The regulatory requirements mandate that a Medicare Part D plan provide an MTM program for purposes of maximizing the benefits of prescribed medication regimens, increasing medication adherence and reducing the risk of adverse drug events and drug interactions.\(^5\) These requirements significantly advanced the perception that MTM is important for the management of chronic diseases and demonstrated that pharmacy benefit administration has a primary role in care delivery.

While studies have varied in identifying the overall impact of MTM, there have been consistent findings directionally in reinforcing that MTM initiatives have a positive impact on the treatment of chronic diseases in terms of quality of life and overall health care cost reductions. One study showed that an opt-in employer-based MTM pro-
gram resulted in the identification of 3.3 medication therapy problems per member and 63% of the subsequent pharmacist recommendations being implemented, which resulted in reduced drug costs.6

While MTM initiatives are often designed to target the retiree population, they should not be overlooked for their positive impact on members under the age of 65 with chronic conditions. Younger members exhibit, in many ways, the same lack of understanding of their chronic disease, treatment regimens and unwanted medication side effects, resulting in increased health care costs. Increasingly, technologies (including smartphone applications) are being used, particularly in the younger chronic disease population, to support reminders to adhere to prescribed regimens. A study involving Medicaid members with diabetes found that the average monthly health care costs were $949 for those utilizing the drug adherence technology and $1,233 for those members without the reminders.7

**Integrating Pharmacists Into Collaborative Care Models for Individuals With Chronic Disease**

In the U.S. health care system, treatment of individuals with chronic disease may come in multiple forms:

- Disease specialists providing primary care
- Care primarily provided by primary care providers (PCPs)
- Care provided by multidisciplinary teams.

Current evidence demonstrates that multidisciplinary configurations that include pharmacists and other ancillary health care providers offer one of the best approaches to improve care and lower costs for patients with chronic conditions. The pharmacist, either through an on-site or centralized location, can provide the primary care provider with key drug therapy information and be involved in shared decision making. That results in a patient experience that exceeds the experience that the PCP could provide acting alone.

In addition, MTM programs are evolving to include a more integrated model. MTM-based collaborative drug therapy management refers to arrangements between pharmacists and prescribers that allow for pharmacists to initiate, appropriately alter or establish a continuation of drug therapy for typical chronic disease patients, such as those with asthma, hyperlipidemia, diabetes, anticoagulation situations and smoking cessation. By 2012, 46 states had authorized these types of collaborative arrangements.9

**Evolving Plan Sponsor Role and Considerations**

Plan sponsors play the fundamental role in defining the

---

**TABLE**

<table>
<thead>
<tr>
<th>MTM Chronic Disease</th>
<th>MTM Providers Targeting the Disease (%)</th>
<th>Volume of Annual Prescriptions in U.S. for Disease (2012)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>88</td>
<td>174 million</td>
</tr>
<tr>
<td>Hypertension</td>
<td>77</td>
<td>646 million</td>
</tr>
<tr>
<td>Dyslipidemia</td>
<td>70</td>
<td>255 million</td>
</tr>
<tr>
<td>Respiratory Failure</td>
<td>52</td>
<td>159 million</td>
</tr>
<tr>
<td>Heart Failure</td>
<td>49</td>
<td>44 million</td>
</tr>
<tr>
<td>Mental Health</td>
<td>24</td>
<td>329 million</td>
</tr>
</tbody>
</table>

*Sources: American Pharmacist Association, Medication Therapy Management Digest, March 2013; IMS Health, Top Therapeutic Classes by Dispensed Prescription (U.S.), May 2013.*
system of treatment and support for members with chronic disease, including the role and extent of pharmacy benefit management. Specifically related to pharmacy benefit management, plan sponsors define or help to define:

- The drug coverage
- The clinical rules and related requirements for drug coverage
- The cost-sharing parameters
- The medical carriers and pharmacy benefit managers and related interfaces
- The application of prevention, wellness and other program initiatives.

Collectively, these also help to define the overall comprehensiveness of applying pharmacy benefit administration strategies in the treatment of chronic disease. Each of these areas has the potential to have a profound impact on the management of chronic disease and associated costs and outcomes.

**Redefining the Drugs Covered**

Managing chronic disease requires a combination of both prevention and treatment and the coverage of drugs for each purpose. The increased prevalence of chronic disease has several causes but primarily is related to the aging population and a significant rise in risk factors, such as obesity and the continued use of tobacco in the population.

However, some of the preventive medications often excluded from coverage by employers are associated with those very risk factors: smoking-cessation drugs and drugs for obesity. Employers may want to reconsider previous decisions to exclude these drugs based on the relationship between smoking and chronic diseases such as asthma, chronic obstructive lung disease, diabetes and hypertension. Smoking-cessation drugs, while not effective for all patients, have been effective in certain patients. When used in conjunction with pharmacy benefit management utilization strategies such as quantity or time limitations, these drugs are a reasonable investment in preventive drug therapy that may have a quantifiable and significant impact on overall health care costs. According to the Centers for Disease Control and Prevention, tobacco-cessation treatment remains a missed opportunity for employers because it is often eliminated from coverage.10

The other common employer coverage exclusion is in the area of antiobesity drugs. The various classes of drugs represented in this category have in the past experienced serious side effects, including some drugs that have been removed from the market. However, some of the newer entrants into the market and those drugs still in the pharmaceutical company pipeline have shown a more favorable side-effect profile. Consequently, while these drugs no doubt will bear the burden and stigma of the older and less safe agents, employers should provide careful consideration to coverage of the newer anti-obesity drugs for their members based on the relationship between chronic diseases and obesity. Coverage of these drugs should be considered in conjunction with duration or length of therapy constraints and, in some cases, may also include prior authorization requirements based on the patient’s body mass index to enhance appropriate use and value.

**Leveraging Value-Based Benefit Design**

Recognizing the importance of medication adherence in chronic disease management, some employers have implemented value-based benefit design (VBBD) innovations. VBBD dates back for more than a decade and represents an effective strategy for establishing and maintaining adherence. Studies have shown that financial barriers to chronic disease care, such as co-payments and coinsurance, lower drug compliance and increase use of more expensive health care services.11

One study indicated that $100 bil-
ion per year and 33-69% of medication-related hospital admissions were a result of poor medication adherence. Benefit-based member cost share generally involves one of two approaches. The most common strategy is to exempt classes of drugs (or certain drugs within a class) from copayments or coinsurance. The second strategy is to exempt classes of patients with specific chronic disease conditions from member cost sharing.

Some studies have shown that for each $10 rise in copayments, there was a corresponding 5% decrease in compliance with the prescribed regimen. Another study indicated that removing a coinsurance that was approximately 40% of the cost of the drug and providing first-dollar coverage for ACE inhibitors in diabetic patients resulted in an increase in compliance of the drug and a savings of $1,606 per member over those who were not provided this first-dollar coverage.

These studies indicate that the savings potential originates from two sources: better control of the chronic disease, which leads to fewer hospital and emergency room visits, and a reduction in drug spending because patients no longer buy drugs to treat the undesired consequences of nonadherence to the drug prescribed to treat the chronic disease.

Pharmacy benefit managers have the flexibility to administer a wide array of VBBD programs. The decision of whether to implement VBBD is employer-centric and best determined by considering the demographics of the population being managed. Medical and pharmacy claims data also will show the prevalence of the respective chronic diseases in the population as well as identify the type and intensity of prescription drug utilization for chronic diseases.

Given the general lack of awareness patients have regarding their disease and treatment regimens, employers should seek to leverage the impact of their VBBD initiatives with wellness training, MTM programs or other pharmacy educational efforts. These initiatives will maximize the impact of the VBBD and further enable and motivate patients to understand their disease and adhere to prescribed treatment regimens.

**Deploying Delivery-Based Strategies**

Employers that have a critical mass of patients with chronic disease in the workplace should give serious consideration to on-site pharmacies or clinics. These on-site facilities improve access and understanding of chronic diseases and associated medication therapy, improving medication adherence and lowering costs. Patients can benefit from extended clinician time for more effective health education and management because of improved access to pharmaceutical care and elimination of the traditional service model.

One recent study showed that there were significant differences in medication adherence between workplace-treated patients and community-treated patients. The workplace-treated patients had 9.72% higher adherence to medication therapy than the non-workplace-treated patients. The study concluded that integrated workplace primary care and pharmacy services had the potential not only to save health care dollars, but also improve quality of life in patients with chronic diseases.

Similarly, employers should consider the value of integrated delivery systems that fully engage pharmacy benefit administration and pharmacists as part of their total health solution. Whether working through an insurance carrier or directly with the provider, employers should inquire as to whether their health care delivery channel integrates phar-

---

**AUTHOR**

Allan Zimmerman is director of PwC’s human resource services national pharmacy practice. He has more than 30 years of experience in the prescription benefit management (PBM) and managed care pharmacy industries. Prior to joining PwC in 2010, Zimmerman was involved in starting up several PBM companies where he held positions of president and CEO and COO. He is a registered pharmacist and holds a B.S. degree in pharmacy from the University of Nebraska Medical Center and an executive M.B.A. degree from Rockhurst University in Kansas City. Zimmerman is a past president of the Academy of Managed Care Pharmacy and the Foundation of Managed Care Pharmacy.
Pharmacy benefit administration whereby pharmacists or the pharmacy benefit administration team are part of a multi-disciplinary health care team that cares for patients with chronic conditions.

Conclusions

The escalation of chronic diseases has become an increasing challenge from both a plan sponsor cost and individual quality-of-life perspective. Employers that are committed to managing chronic disease from both a preventive and a treatment perspective should increase their awareness of the value of engaging pharmacy benefit administration into the overall strategy for treatment of chronic diseases. Equally important will be selecting and collaborating with health plans and PBMs that demonstrate the level of innovation, dedication and commitment to this integrated approach and that will provide valuable insights to improve the model over time. (See figure.)

As pharmacy benefit administration evolves from a legacy drug product distribution model to a service model capable of providing an expanded impact on the management of chronic disease, plan sponsors will realize additional benefits and continuing innovations in MTM; medication adherence; flexible, value-based benefit designs; and on-site and community-based integrated health care delivery teams.

Endnotes


