Innovative Program Helps Prevent Drug-Related Problems, Especially Among The Elderly

Program resolves incidents of excessive or unnecessary medication use in patients identified as at risk for adverse drug events (ADEs)

Program Description

Polypharmacy intervention program identifies patients at risk for ADEs and intervenes to help prevent them.

Situation

The excessive or unnecessary use of medications, otherwise known as polypharmacy, is potentially dangerous because as people take more drugs, their risk for complications increases. These complications can lead to illness, injury and hospitalization, and can even be fatal.

Polypharmacy, which can lead to an ADE, is more likely to occur in the elderly, since the elderly are more likely to be treated for multiple medical conditions and under the care of multiple physicians. An analysis by Prescription Solutions that examined seniors age 65 years or older over a three-month period showed that one in six patients had at least one polypharmacy event. Sixty-one percent of older people seeing a physician are taking at least one prescription medication, and most older Americans take an average of three to five medications.

Medication misuse costs the health care system more than $177 billion and results in more than 200,000 deaths annually, as reported in the Journal of the American Pharmaceutical Association. The Veterans Affairs medical system found that the potential for an ADE among more than 40,000 individuals studied was six percent when two drugs were taken, 50 percent when five drugs were taken and nearly 100 percent when eight or more drugs were taken.

Solution

In the polypharmacy intervention program, pharmacists at Prescription Solutions conducted interventions with both physicians and patients in a large employee population. Approximately 3,000 members were quickly identified as at risk for an ADE. The criteria for identifying members at risk for a polypharmacy incident included:

- Duplicate or overlapping therapy to treat the same disease or condition.
- Concurrent use of interacting medications.
- Use of a medication that interacts with a co-existing disease or condition.
- Use of an inappropriate drug for the elderly.
- Use of drug therapy to treat an adverse event caused by another drug.

About Prescription Solutions

Prescription Solutions is a focused, collaborative, and innovative leader in the pharmacy benefits management (PBM) industry. A pharmacist-grown company with extensive experience serving large organizations and managed care organizations, we offer a unique perspective on total pharmacy and medical management. By focusing on clinical quality and complete patient care, we help our clients improve outcomes while managing overall health care costs.
Prescription Solutions’ pharmacists evaluated each identified patient’s entire prescription medication regimen. Then they contacted physicians and patients by mail to alert them to the situation, as well as providing educational information about polypharmacy.

Results
Prescription Solutions Polypharmacy Program was able to resolve incidents for about two-thirds of the individuals identified as at risk for a polypharmacy incident. This resolution of polypharmacy incidents, which reduces the potential for ADEs, may result in improved quality of life for patients, more cost-effective use of health care dollars, and medical and prescription drug cost savings.

For the other one-third of polypharmacy cases, neither the physician nor patient responded.

The following specific findings were determined:

- 62 percent of identified polypharmacy cases were categorized as older adults using drugs not recommended for the elderly due to the increased potential for ADEs.
- 30 percent of polypharmacy cases represented patients who had an increased risk for an ADE because they were using a medication that interacted negatively with one or more of their clinical conditions.

For example, a patient with asthma and high blood pressure is prescribed a beta-blocker to reduce blood pressure. However, the beta-blocker also prevents widening of the airways in the lungs, which could worsen the asthma (having a negative effect).

- 15 percent were receiving medications with a known potential for interacting with other medications they were also taking.

For more information about this program and to discuss potential pharmacy benefit savings, please call us at 1.877.309.5345 or visit www.PrescriptionSolutions.com.

1 Huang, JY; Vanderplas, AM; Lew, KH. “Prevalence of Polypharmacy in the Elderly within a Managed Care Organization,” Presented at the Academy of Managed Care Pharmacy 2006 Annual Meeting in Seattle, WA, April 5-8, 2006.

2 Rathore, SS; Mehta, SS; Boyko, WL, Jr; Schulman, KA. “Prescription Medication Use in Older Americans: A National Report Card on Prescribing,” Family Medicine, 1998; 30:733-739.


“By evaluating the patient’s entire prescription medication regimen and notifying physicians and patients about potential problems by telephone or mail, or by alerting the pharmacist at the community or mail service pharmacy in real-time when a prescription is being filled, we’ve demonstrated that we can work with physicians and patients to avoid therapies that could be harmful. As a result, physicians have more complete information on their patients, patient safety is improved, and plan sponsors know that their health care dollars are being used cost-effectively and efficiently to promote optimal health for their members and employees.”

Edmund Pezalla, M.D.
Prescription Solutions
Vice President
and Medical Director

A UnitedHealth Group Company
2300 Main Street, Irvine, CA 92614  1.877.309.5345  www.PrescriptionSolutions.com

©2008 Prescription Solutions. This document is proprietary to Prescription Solutions and is subject to federal copyright protection. Any unauthorized reproduction, dissemination or use of this document is strictly prohibited.