

Outcomes Briefing

Benefits of Polypharmacy Medication Therapy Management

This Outcomes Briefing assesses the impact of the polypharmacy interventions of the Walgreens Health Initiatives Medication Therapy Management (MTM) Program on Medication Expenditures in a Medicare Part D Population and shows a cost savings of \$52 per member per month (PMPM) and a client return on investment of 2.5:1.

Background

Although only 12 percent of the population is elderly, they represent 34 percent of overall prescription costs, according to a published study on the impact of age and chronic disease status on prescription drug spending. Approximately one-third of the elderly population is at risk for polypharmacy and its complications, due to taking multiple medications for multiple chronic diseases.¹ The polypharmacy component of our Medication Therapy Management (MTM) Program is designed to help ensure optimum therapeutic outcomes through improved medication use, which can lead to a reduced risk of adverse drug events as well as reduced overall healthcare costs.

Implementing Change

With extensive managed care and community pharmacy experience, Walgreens Health Initiatives understands the financial and healthcare-related pressures that both clients and patients face. Balancing cost and care can be a challenge, but we believe that promoting appropriate medication therapy helps to control overall healthcare costs. The goals of our MTM program are to help patients understand their medications, avoid inappropriate or potentially dangerous medications, increase compliance, and optimize medication therapy. By achieving these goals, patient care may increase and overall healthcare costs may decline.

Study Methodology

This is a case-control study, based on a 2006 Medicare Part D population. The case group contains cases which have received polypharmacy interventions, whereas the control group contains cases for which no interventions were performed. Per member per month medication savings were calculated as the difference between the projected post-intervention medication cost of the case group and the actual post-intervention medication cost of the *case group*. The projected post-intervention medication cost is based on the pre-post intervention percent change in the PMPM medication cost of the *control group*.

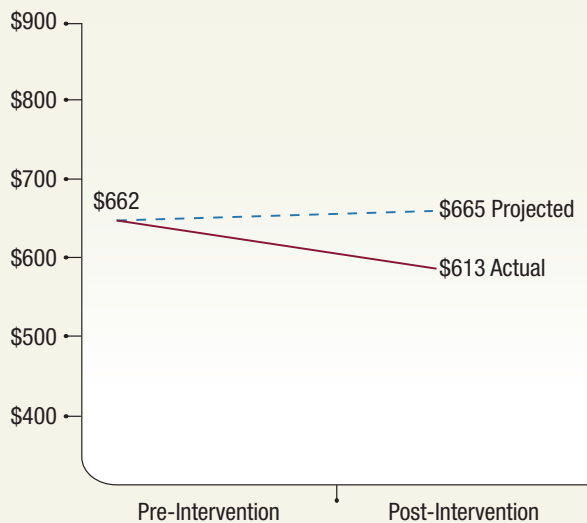
Results

First-year results produced an overall Medicare Part D client return on investment of 2.5 to 1 for MTM interventions throughout 2006. There were 4,259 polypharmacy case interventions. The actual post-intervention PMPM medication cost for the case group was \$613, and the projected post-intervention PMPM medication cost for the same group was \$665, a difference of \$52, representing \$52 PMPM medication cost savings. An extrapolation of this data from the clients studied for a 100,000 commercial life group showed an annualized net prescription savings of \$782,400 for the polypharmacy program. This assumes that employer groups have a lower polypharmacy eligibility rate as compared to Medicare Part D groups. This savings is also net of the costs to administer the program.

Table: Pharmacy Cost Savings for 2006

Member Count		PMPM Rx Cost		Avg Monthly Rx Savings	Avg Monthly MTM Fee	ROI	PMPM RX Savings
Plan Eligible	Cases	Pre Intervention	Post Intervention				
108,288	4,259	\$662	\$613	\$221,468	\$89,336	2.5	\$52

Pre and Post Intervention PMPM Rx Cost



Cases: Intervened polypharmacy cases.

Pre-Intervention PMPM Rx Cost: Sum of Rx cost up to the intervention point divided by sum of plan eligible months up to the intervention point.

Post-Intervention PMPM Rx Cost: Sum of Rx cost from intervention to the end of reporting period divided by sum of plan eligible months from intervention to the end of reporting period.

Projected: What would be the post-intervention PMPM Rx cost, if intervention did not happen. It is based on the pre-post percent change in PMPM Rx cost for the control group (un-intervened polypharmacy cases, in this case).

Avg Monthly Rx Savings: (Projected post-intervention PMPM Rx cost of the case group minus Actual post-intervention PMPM Rx cost of the case group) times total cases.

Avg Monthly MTM fee: Plan eligible members x Fee per member.

Return on investment (ROI): Avg Monthly Rx savings/Avg Monthly fee. ROI here is solely based on Rx savings and does not include medical cost savings at this point.

Conclusion

Polypharmacy medication therapy management may not only help improve therapeutic outcomes through improved medication use, but may also reduce overall healthcare costs. The present study showed significant pharmacy savings as a result of polypharmacy interventions. This study did not address medical cost savings due to the lack of longitudinal medical claims data. However, it would not be unreasonable to assume polypharmacy interventions could significantly reduce medical costs.

MTM is proving to be a valuable tool for creating better patient therapeutic outcomes through a variety of pharmacist-initiated patient interventions which have the potential to significantly reduce overall healthcare costs.

Reference: Mueller C, Schur C, et al. Prescription drug spending: the impact of age and chronic disease status. American Journal of Public Health. 1997; vol 87: pp 1626-1629.



For more information, call 800-926-6779, e-mail whi@walgreens.com, or visit us at www.mywhi.com.