A medication therapy management program's impact on low-density lipoprotein cholesterol goal attainment in Medicare Part D patients with diabetes

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Abstract

Objectives: To determine a medication therapy management (MTM) service's impact on (1) Healthcare Effectiveness Data and Information Set (HEDIS) quality measures and (2) use and cost expenditures.

Design: Nonequivalent group, quasiexperimental study.

Setting: Florida, January 1, 2006, through September 30, 2007.

Participants: 2,114 Florida Health Care Plans Medicare Part D enrollees with diabetes.

Intervention: Intervention group participated in the MTM program during the HEDIS measurement year.

Main outcome measures: Presence of low-density lipoprotein cholesterol (LDL-C) screening, LDL-C values, and LDL-C control (<100 mg/dL). The use measure was the total number of 30-day medication equivalents. Cost measures were (1) total Medicare Part D drug cost, (2) enrollees' out-of-pocket Part D medication costs, and (3) total medication copayments. Statistical analyses included chi-square, independent and paired *t* tests, and analysis of variance with post hoc comparisons.

Results: Of 2,114 enrollees eligible for comprehensive diabetes care (CDC) according to HEDIS guidelines, 255 participated in the MTM intervention group and 56 patients were MTM eligible but opted out of the program or could not be reached for medication review during 2008 (MTM nonparticipants). A higher proportion of patients in the MTM participant group had LDL-C levels less than 100 mg/dL (69.0%) compared with those in the MTM nonparticipant (50.0%) and CDC only (54.1%) groups ($\chi^2 = 20.9_{(3)}$, $P < 0.001$). The two control groups' average LDL-C (90.8 and 93.6 mg/dL) was significantly higher than the intervention group (83.4 mg/dL, $P < 0.001$). Overall, per member per month use and drug costs differed from 2007 to 2008 and enrollees in the MTM participant group had greater percentage cost reductions.

Conclusion: Enrollees who were eligible for MTM services but did not receive them had poorer clinical, use, and cost outcomes compared with the MTM intervention group. Pharmacists collaborating with physicians through a MTM program can improve quality of metrics for chronic diseases and reduce medication costs.

Keywords: Dyslipidemias, medication therapy management, quality improvement, diabetes, lipids.

J Am Pharm Assoc. 2009;49:192–199.
doi: 10.1331/JAPhA.2009.09016

Received January 30, 2009, and in revised form February 25, 2009. Accepted for publication February 26, 2009.

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Acknowledgments: To Sarah Rivera, MSHL, MBA, Director, Medical Informatics, Florida Health Care Plans, Holly Hill, and John Sim, Student Pharmacist, College of Pharmacy, University of Florida, Gainesville.

See related article on page 143.

The Medicare Part D Prescription Drug Benefit became available for Medicare beneficiaries January 1, 2006. Along with providing prescription drug coverage to Part D–covered beneficiaries, Medicare Part D plan sponsors also must provide enrollees meeting Centers for Medicare & Medicaid Services (CMS)-approved eligibility criteria access to a medication therapy management (MTM) program. MTM is a partnership of the pharmacist, the patient or his/her caregiver, and other health professionals that promotes the safe and effective use of medications and helps patients achieve the targeted outcomes from medication therapy.[1] Although Part D plan sponsors were required to establish an MTM program, plans were given flexibility by CMS for implementing, designing, staffing, and measuring program performance. CMS was deliberately vague in program specifications so that health plans could develop programs that best suited their landscape. CMS could then later identify successful MTM programs and adopt best practices as requirements.

One method of measuring MTM performance is to use the validated Healthcare Effectiveness Data and Information Set (HEDIS) quality of care indicators developed by the National Committee for Quality Assurance (NCQA). More than 90 percent of America's health plans use the HEDIS quality measures. According to NCQA, "Altogether, HEDIS consists of 71 measures across 8 domains of care. Because so many plans collect HEDIS data, and because the measures are so specifically defined, HEDIS makes it possible to compare the performance of health plans on an 'apples-to-apples' basis."[2] Health plans also use HEDIS results themselves to see where they need to focus their improvement efforts. These improvements in quality of care hope to translate into lives saved, illnesses avoided, and costs reduced.

Evidence for collaborative multidisciplinary programs such as this has been supported by higher attainment of National Cholesterol Education Program (NCEP) low-density lipoprotein cholesterol (LDL-C) goals.[3–8] In a prospective cohort study, a pharmacist-managed therapeutic statin conversion program was associated with an increase in control of dyslipidemia compared with a usual care control group.[5] Patients followed by interdisciplinary teams that included a clinical pharmacist who actively ordered and interpreted lab tests, prescribed, and monitored lipid therapy achieved greater mean reductions in LDL-C compared with those without a pharmacist as the primary manager of dyslipidemia in a primary care setting.[6] Kaiser Permanente of Colorado established the Clinical Pharmacy Cardiac Risk Service, which focuses on long-term therapy in patients with coronary artery disease.[7] In another study, a clinical pharmacy cardiac risk service provided cardiac risk reduction in patients with coronary artery disease in a large health maintenance organization (HMO).[8] In the ACTION (Achieving Cholesterol Target in a Managed Care Organization) trial, a collaborative approach to LDL-C management resulted in more patients reaching the HEDIS goal (<100 mg/dL) compared with a usual care control group receiving usual care in the setting of a staff model HMO.[9] These results suggest that a collaborative approach to LDL-C management improves clinical outcomes for hypercholesterolemia while simultaneously lowering total health expenditures at the same time.

Florida Health Care Plans (FHCP), an independent licensee of the Blue Cross Blue Shield Association, is a mixed-staff model HMO serving more than 53,000 members in Volusia and Flagler counties in Florida. FHCP has more than 15,000 Medicare members enrolled in its Medicare Advantage Part D plan. FHCP has eight outpatient pharmacies, including a mail order pharmacy, and more than 60 staff specialist and primary care physicians. FHCP is the oldest federally qualified HMO in Florida and the second oldest HMO in continuous existence in the United States. The MTM program at FHCP is done in-house using staff clinical pharmacists.

FHCP's MTM program was developed by the plan's chief medical officer, clinical pharmacy manager, and administrator of pharmacy services. Enrollees were targeted for MTM services if they were a Medicare Part D member and met the following three criteria: (1) three or more chronic diseases *and* (2) four or more maintenance medications *and* (3) likely to have Part D medication costs $4,000 or more per year. The program consisted of a medication therapy review and evalu-

At a Glance

Synopsis: Pharmacists collaborating with physicians through a medication therapy management (MTM) program can improve quality of metrics for chronic diseases and reduce medication costs, as demonstrated by this study of Medicare Part D patients with diabetes enrolled in a managed care organization (Florida Health Care Plans). Mean (±SD) low-density lipoprotein cholesterol (LDL-C) levels in the two control groups were significantly higher than the intervention group of patients receiving MTM (83.4 ± 31.1 mg/dL for the MTM participant group, 93.6 ± 30.5 mg/dL for the group receiving comprehensive diabetes care only, and 90.8 ± 31.0 mg/dL for the group not participating in MTM). Overall, per member per month use and drug costs differed from 2007 to 2008 and enrollees in the MTM participant group had greater percentage cost reductions.

Analysis: *Pharmacist participation in successful MTM services that assist physicians and health plans in meeting their quality measures may have considerable positive effects for the profession. Pay for performance (P4P) for individual physicians and for health plans is being tested in prominent health plans and statewide programs. As pharmacy-based measures become validated, accepted, and commonplace, P4P and other incentives for pharmacists and the organizations that they represent may become a reality. According to data from the current work, in addition to managed care organizations being paid as an incentive for meeting clinical quality goals, patients and payers may realize direct economic savings.*