

Value-Based Insurance Found To Increase Medication Use

BY DAMIAN McNAMARA

MIAMI BEACH — A value-based insurance program with lower copayments significantly increased use of medications for secondary prevention among people with diabetes, compared with traditional insurance coverage, according to a prospective, controlled study.

There was a nearly 5% increase in metformin use, an almost 9% increase in utilization of ACE inhibitors or angiotensin II receptor blockers (ARBs), and a greater than 9% increase in statin use among 1,777 diabetics with value-based insurance, compared with a control group of 3,273 diabetics with conventional insurance.

With value-based insurance design (VBID), copayments are lowered for procedures or medications deemed beneficial according to the evidence-based literature. At the same time, copayments are increased for services or drugs that are not well demonstrated to improve outcomes, Dr. Allison B. Rosen said at the annual meeting of the Society of General Internal Medicine.

VBID also improved the other primary study outcome, medication adherence. For example, there was a significant 7% increase in ACE/ARB adherence and a nonsignificant 4% increase in statin adherence in the intervention group.

Although evidence-based medicine supports use of many secondary prevention agents for people with diabetes, underutilization remains a concern, Dr.

Rosen said. High out-of-pocket costs are often cited as a culprit, and VBID might make a difference by linking patient copayments to value.

"There are few rigorous studies to support these positive claims," said Dr. Rosen of the University of Michigan, Ann Arbor.

So she and her colleagues enrolled active University of Michigan employees and their dependents with diabetes into a VBID program that reduced their copays for antihypertensive, lipid-lowering, and glucose-lowering agents starting in July 2006. The control patients were employees of other institutions or companies and their dependents with diabetes enrolled in the same managed care plan.

All participants had at least one glycemic drug prescription filled in the year before implementation and at least one prescription filled for a secondary preventive medication in the 12 months thereafter.

Medication utilization at baseline ranged from 53% for statins to 65% for metformin. Following implementation of the VBID program, there was a significant increase in use of medications from all drug classes in the intervention group, compared with the control group: Metformin use increased by 4.8%, ACE/ARB use by 8.5%, and statin use by 9.3%.

The study was funded by the National Institutes of Health, the University of Michigan, and the John A. Hartford Foundation. ■

Diabetes Ups Cardiovascular Risks Despite Preventive Tx

BY MIRIAM E. TUCKER

NEW ORLEANS — Among patients with established cardiovascular disease, diabetes increased the risk for secondary cardiovascular hospitalization or death by 42% in a prospective analysis of data from more than 12,000 members of Kaiser Permanente Northwest.

That increased risk was seen after adjustment for risk factors associated with cardiovascular events, and in the setting of relatively high use of guideline-recommended medications for secondary prevention.

"Cardiovascular disease prevention in patients with diabetes remains the Holy Grail. Despite widespread use of secondary prevention medications, the risk of CVD was still high. It seems unlikely that 'more of same' will be the answer," Gregory A. Nichols, Ph.D., said at the annual scientific sessions of the American Diabetes Association.

The study, funded by GlaxoSmithKline, is the first to document CVD hospitalizations and all-cause mortality among patients with and without diabetes outside of a clinical trial, said Dr. Nichols of Kaiser Permanente NW, Portland, Ore.

The study population comprised

12,278 patients who were added to Kaiser's cardiovascular disease registry during 2000-2005 and followed through 2008 or until they died or left the health plan. Of the registry patients, 2,384 (19%) had diabetes and 9,894 (81%) did not. Both groups had a mean age of 66 years at baseline.

The patients with diabetes were significantly more likely than were those without to be receiving antiplatelets (86% vs. 71%), ACE inhibitors and/or angiotensin receptor blockers (60% vs. 40%), beta-blockers (76% vs. 67%), and statins (71% vs. 64%).

Nonetheless, over a mean follow-up of nearly 4 years, 17% of the diabetes patients had a CVD hospitalization, compared with 10% of those without, a significant difference. Death occurred in 15% of the diabetes patients, compared with 13% of the nondiabetic patients, a nonsignificant difference. Cardiovascular disease hospitalizations occurred at an age- and sex-adjusted rate of 41/1,000 person-years in the diabetes group, compared with 25/1,000 in those without diabetes, Dr. Nichols reported.

Dr. Nichols disclosed that he received research funding from GlaxoSmithKline, Merck & Co., Novartis Pharmaceuticals, and Novo Nordisk. ■



'Cardiovascular disease prevention in patients with diabetes remains the Holy Grail.'

DR. NICHOLS

Lower Medication Costs Yield Better Patient Compliance

BY MIRIAM E. TUCKER

NEW ORLEANS — Prescription plans offered by large discount stores could save diabetes patients at least \$85 per month in out-of-pocket expenses compared with local chain or independent pharmacies, a cost analysis found.

Previous data suggest that one in every five U.S. patients with diabetes cuts back on medications because of cost. Recently,

large retail stores such as Wal-Mart, Target, and Kmart have launched programs that offer generic medications at much lower cost to customers than that of other types of pharmacies.

An analysis of medical and pharmaceutical claims from the PharMetrics patient-centric database on 52 million unique insured patients from 91 U.S. health plans confirms that these programs can save patients a significant amount of

money out-of-pocket, Dr. Clifton M. Jackness and Dr. Ronald Tamler reported in a poster at the annual scientific sessions of the American Diabetes Association.

"Doctors and patients should work together to find the best pharmacy that serves their needs, and some smaller pharmacies may be able to compete with Wal-Mart's prices. However, Wal-Mart, Target, and Kmart are full-service pharmacies that answer patient questions, ask about interactions, and keep computerized records on all drugs prescribed through their stores," Dr. Jackness, an internist at Mount Sinai School of Medicine, New York, said in an interview.

He and Dr. Tamler, an endocrinologist at Mt. Sinai, analyzed claims for the 10 most commonly prescribed medications for all adults younger than age 65 years with a diagnosis of diabetes (ICD-9 code 250) prior to Jan. 1, 2005. (See box.) Rosiglitazone is prescribed less often today, so it was removed and #11, atenolol (47,070 patients) was included in the analysis instead. The average number of medications taken by a patient with diabetes is 8.9, according to the investigators.

Some generic drugs offered by Wal-Mart, Target, and Kmart cost much less than the same drugs sold by other phar-

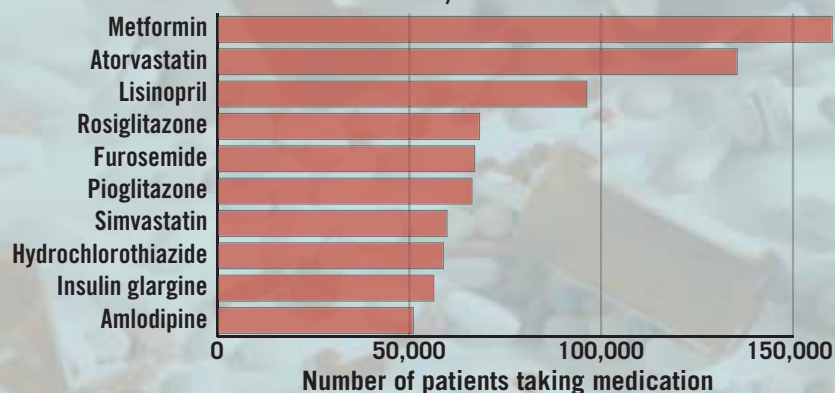
macies, while other medications were similar in price. On the price of non-generic medications, those three discounters, www.drugstore.com, and Medco by Mail seemed to be more competitive than the neighborhood retailer and chains. For example, the 30-day out-of-pocket cost for generic metformin (500 mg) ranged from \$4.00 at both Wal-Mart and Target to \$39.99 at Rite-Aid.

When added up, the price of all 10 medications was lowest at Medco by Mail (\$428.35), not including shipping and handling. Next lowest was Wal-Mart (\$432.53), while the highest was a local pharmacy (\$639.30).

The superstores and mail-order firms did not always have the lowest price for every medication, but a patient who bought all 10 prescriptions at one of these stores would save a minimum of \$85 per month compared with the local chain or independent pharmacy, Dr. Jackness and Dr. Tamler said.

Neither Dr. Jackness nor Dr. Tamler had any disclosures or conflicts of interest. The PharMetrics prescribing data came from Eli Lilly & Co. representatives, but they did not request compensation for that database. There was no funding necessary for the study itself. ■

Ten Most Widely Used Medications Among Diabetic Patients, 2005-2006



Note: Based on PharMetrics Patient-Centric Database claims from 52 million patients.
Sources: Dr. Jackness, Dr. Tamler