

Pharmaceutical case management helps Iowa Medicaid patients

Results from a study conducted by the University of Iowa found that a pharmaceutical case management (PCM) program for Medicaid beneficiaries significantly improved medication safety for patients at high risk for adverse events.

Most notable, researchers said, was that the program did not increase costs to Medicaid, suggesting that payments for professional services were offset by reductions in the use of emergency rooms and outpatient facilities.

Pharmacist-physician care teams. Iowa's PCM program began in 2000 with funds appropriated by the state's legislature and was implemented as an amendment to the Medicaid plan, said Iowa Pharmacy Association Vice President Nancy Bell.

"The plan amendment changed the basic level of services to include this service for patients who qualify," she said. "The program is now part of Medicaid's basic services in Iowa, and we anticipate for it to continue."

Federal approval of the change came from the Centers for Medicare & Medicaid Services, Bell said.

Iowa's PCM program was based on models used in hospitals and clinics where pharmacists and physicians work as teams to provide drug therapy management services, Bell said. The Iowa plan, however, involves community and ambulatory care settings.

A pharmacist in a PCM care team monitors a patient's drug therapy and provides recommendations to the physician in written reports. The pharmacist-physician care team must develop an action plan that is to be completed for each initial assessment. This teamwork does not involve a collaborative practice agreement in which the pharmacist has the authority to change the patient's medication regimen.

Under the state's initiative, pharmacists and physicians trained in case management are eligible to provide and be

reimbursed for services to patients with 1 of 12 conditions and taking 4 or more nontopical medications.

"The program identifies those patients who are the most sick," Bell said. "They are patients that have the hardest time controlling their medications and have the most complex profiles."

The 12 eligible conditions are congestive heart disease, ischemic heart disease, diabetes mellitus, hypertension, hyperlipidemia, asthma, depression, atrial fibrillation, osteoarthritis, gastroesophageal reflux, peptic ulcer disease, and chronic obstructive pulmonary disease.

Pharmacists and physicians are equally eligible to provide services and are paid at the same rate: \$75 for one initial assessment, \$40 each visit for up to four problem follow-up assessments per year, \$40 each visit for up to two new problem assessments per year, and \$25 each visit for one preventive follow-up assessment every six months.

Under the program, eligible patients may choose to receive services from any eligible pharmacist-physician care team of their choice. It is generally expected, the state's plan notes, that a patient's primary care provider will be a member of that team. However, if a physician on the care team is a specialist, the team is required to communicate with the patient's primary care provider.

Physicians and pharmacists must complete an Iowa Medicaid provider agreement, have an Iowa Medicaid provider number, and receive training under the direction of the state's department of human services regarding the provision of PCM services.

A copy of PCM records, including documentation of services provided, must be maintained on file in each provider's facility and made available for audit by the state.

Study findings. Of the 3037 patients eligible during the first year of the program, pharmacists had met with 943 (31.1%), sent recommendations to phy-

sicians for 500, and received replies from physicians for 327 within the first three months of patients' eligibility.

The mean age of patients was 52.2 years, and almost two thirds of eligible patients were age 45 years or older. About 6.4% of patients in the study were children. Adults ranged in age from 18 to 101 years. Some 71% of patients were women.

Pharmacists detected an average of 2.6 medication-related problems per patient, investigators found. The most common recommendation (52%) made by pharmacists was for the patient to start a new medication. This finding, the researchers noted, indicated that many patients have conditions that go untreated.

Pharmacists recommended a change in medication for 36% of patients and discontinuation of medications for 33%.

About half the time, physicians did not accept pharmacists' recommendations—most being ignored rather than actively rejected, researchers said.

Charges for PCM services through May 31, 2002, totaled \$94,170. Two thirds of this amount, researchers said, was billed for initial assessments, and 21.5% was billed for problem follow-up assessments.

Of the 1599 service episodes for which pharmacists and physicians were paid during the study, pharmacists from the 117 participating pharmacies had performed 90% of the services.

Researchers found that 30% of patients had self-reported an adverse drug reaction in the previous year—three times the rate observed in a non-Medicaid population.

A drug-drug interaction was detected in the regimen of about 35% of eligible patients, the study found. Of greater concern, researchers said, was the finding that, among those age 60 years or over who were taking antihypertensive medications, about 75% had a drug-drug interaction.

About 35% of patients age 60 years or older had been taking at least one medication considered to have a poor risk-benefit ratio and to be inappropriate for use among older adults.

Physicians who responded to a questionnaire about the program reported that they had had a mostly positive experience with pharmacists. About 17% of the responding physicians said they would not be willing to cooperate with a pharmacist in PCM.

On average, investigators said, physicians and pharmacists responded that their interprofessional discussions led to higher quality of care, better health outcomes, and increased continuity of care.

Many patients presented a challenge for pharmacists, investigators said. Some

patients were difficult to contact or schedule for a visit, and many missed their appointments. Nearly 1 in 10 patients refused services.

—*Donna Young*