



American Pharmacists Association

Improving medication use. Advancing patient care.

Pharmacist-Provided Disease Management Programs: Evidence of Success *Lower Medical Costs and Improved Health Outcomes*

Implementing a team approach to care improves diabetes management.ⁱ Increasingly, pharmacists are members of these teams, providing such services as education, screening, and medication monitoring as they work collaboratively with physician colleagues to help patients meet their goals.ⁱⁱ

The Role for Pharmacists

Pharmacists can get involved in the care of patients who have or are at risk for developing diabetes; some activities include:

- ✍ Identifying patients at risk for Type II diabetes due to known risk factors
- ✍ Conducting blood glucose screening of patients with risk factors
- ✍ Offering point-of-dispensing services including reminders for proper preventive care and glucose testing
- ✍ Disease state management
- ✍ Providing patient education

Research Shows Positive Impact from Empowering Patients

The Asheville Project: Participants' Perceptions of Factors Contributing to the Success of a Patient Self-Management Diabetes Program

Objective: To ascertain patients', providers', and managers' perceptions of the factors that contributed to the success of the Asheville Project. **Design:** One-time focus groups of patients and diabetes care providers and individual interviews with managers involved in the project. **Setting:** The City of Asheville and Mission–St. Joseph's Health System (MSJ), Asheville, N.C. **Patients and Other Participants:** Twenty-one patients with diabetes who were employees of the two self-insured employers participating in the Asheville Project; four specially trained pharmacists who provided diabetes-related pharmaceutical care and one diabetes educator, all of whom received reimbursement for their services; six managers employed by the City of Asheville or MSJ who were involved in the project. **Intervention:** A trained facilitator conducted four focus groups and six manager interviews in September 2001. Each session lasted 60 to 90 minutes, and the facilitator used a standard list of open-ended questions. The focus group sessions were recorded for subsequent analysis. **Main Outcome Measures:** Perceptions of focus group participants and managers of how the Asheville Project enabled patients with diabetes to become more responsible and successful in self-managing their condition. **Results:** Focus group participants and managers were enthusiastic about their experiences with the project. Patients valued the relationships they established with their pharmacist or diabetes educator; as a result of these providers' support, patients felt more in control of their lives and were healthier. The waived co-payments for diabetes medications and related supplies was the decisive incentive for getting many patients to enroll in the project. For the providers, the project was a source of professional growth and satisfaction. Managers felt the project helped them fulfill their health care responsibilities to their employees, reduced overall costs, enhanced their organizations' reputations in health care delivery, and resulted in less absenteeism. **Conclusion:** Patients, providers, and managers in the Asheville Project believed that aligned incentives and community-based resources that provide health care services to patients with diabetes offer a practical, patient-empowering, and cost-effective solution to escalating health care costs.

Daniel G. Garrett and Leslie A. Martin, *Journal of the American Pharmacists Association* 2003;43:185–90.

Patient Care Success Stories

The Asheville Projectⁱⁱⁱ

- ✍ Pharmacists were compensated (by two employer groups) on a fee-for-service basis for providing cognitive services to employees
- ✍ Patients' clinical results improved significantly
 - Within the first eight months, the average A1c was at or below 7% and has been sustained for five years
- ✍ Employer total mean medical costs decreased by \$1,622 per patient to \$3,356 per patient per year compared with baseline
- ✍ Days of sick time decreased every year for one employer, with estimated increases in productivity estimated to be \$18,000 annually
- ✍ Both employers have permanently added the benefit to their health plan

The Patient Self Management Program: a diabetes pilot project

- ✍ Five employers participate in an initiative to help patients utilize their treatment regimens by linking patients with pharmacists
 - Healthcare Coalition Cooperative, Manitowoc County, Wisconsin
 - Mohawk Industries, Inc., Dublin, Georgia
 - The Kroger Company, Columbus, Ohio
 - The Ohio State University, Columbus, Ohio
 - VF Corporation, Greensboro, North Carolina
- ✍ A voluntary benefit for employees of these organizations, provided at the sites specified by each employer.
- ✍ Over 300 participants with diabetes have been in the program from 4-12 months
- ✍ Pharmacists help educate and empower patients to learn to better manage their diabetes and each patient's physician receives a status report
- ✍ Patients A1c values have been reduced by almost one point for the entire enrolled population
- ✍ Remarkably, in just seven months, there has been a 26% increase in the number of patients with an A1c value less than or equal to seven
- ✍ Dramatic improvements have been found in other key indicators of diabetes care, such as influenza vaccinations, recorded blood pressure, lipid profiles and the percentage of patients receiving foot and eye exams.

✍ Percentages at Initial Visit

- ✍ Influenza Vaccination
 - ✍ 40% current
- ✍ Foot Exam
 - ✍ 28% current
- ✍ Eye Exam
 - ✍ 34% current
- ✍ Blood Pressure
 - ✍ 73% current
- ✍ Lipid Profile
 - ✍ 49% current

✍ Percentages at the 6th Visit

- ✍ Influenza Vaccination
 - ✍ 75% current
- ✍ Foot Exam
 - ✍ 80% current
- ✍ Eye Exam
 - ✍ 80% current
- ✍ Blood Pressure
 - ✍ 92% current
- ✍ Lipid Profile
 - ✍ 94% current

**Pharmacists Improve Health Outcomes
And Cut The Cost Of Providing Diabetic Health Care**

**I. The Washington Post, *In NC, Improving Worker Health –and Cutting Costs*
August 20, 2002; page A01**

While federal and state lawmakers are struggling to find ways to control rising health care costs, this small city tucked between the Blue Ridge and Great Smoky Mountains has found a way to save thousands of dollars and improve the health of its employees. Unlike academic theories and political rhetoric, the six-year-old Asheville Project offers real-life lessons on the great potential -- and limitations -- of an approach known as disease management.

p. 3 - 6

**II. Business Insurance, *Pharmacist oversight cuts cost of chronic diseases*
April 28, 2003**

Many employers now are turning their attention to the experience of Asheville, N.C., and with good reason. Since 1997, when the disease management program was launched to improve the health of a few hundred city workers... Besides the potential for savings on medical expenses for chronic diseases, employers are attracted to the unique way the project operates. The program relies on specially trained pharmacists to monitor participants.

p. 6 - 9

**III. Journal of the American Pharmaceutical Association, *The Asheville Project:
Long-Term Clinical and Economic Outcomes of Community Pharmacy
Diabetes Program*
March/April, 2003**

Conclusion: Patients who received ongoing community-based pharmaceutical care services (PCS) maintained improvement in A1C over time, and employers experienced a decline in mean total direct costs.

p. 11 - 22

**IV. Journal of the American Pharmaceutical Association, *The Asheville Project:
Participants' Perceptions of Factors Contributing to the Success of a Patient
Self-Management Diabetes Program*
March/April, 2003**

Conclusion: Patients, providers and managers in the Asheville Project believed that aligned incentives and community-based resources that provide health care services to patients with diabetes, offer a practical, patient-empowering, and cost-effective solution to escalating health care costs.

p. 23 - 28

**V. Manitowoc Herald Times Reporter, *Team Approach*
October 12, 2003**

Diabetes patients work with health care coalition, reduce medical expenses through area pilot program.

p. 29 – 31.

ⁱ Haines ST. The diabetes epidemic: can we stop the spread? *Pharmacotherapy* 2003;23(10):1227-31.

ⁱⁱ Centers for Disease Control and Prevention. *Team care: comprehensive lifetime management for diabetes*. Atlanta, GA: US Department of Health and Humans Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion; 2001.

ⁱⁱⁱ Cranor, CW, Bunting, BA, Christensen, DB. The Asheville Project: Long-Term Clinical and Economic Outcomes of a Community Pharmacy Diabetes Care Program. *J Am Pharm Assoc.* 2003 43:173-84.