



Diabetes Ten City Challenge *A Case Study on PSM Solutions Success*

Background

The diabetes epidemic is one of the greatest challenges facing our healthcare system today. More than 29 million Americans – 9.3% of the U.S. population – have diabetes and that number could increase to 50 million by 2025.¹

With annual costs of \$176 billion, diabetes not only accounts for more than 15 million work days absent, 120 million work days with reduced performance and an additional 107 million work days lost due to unemployment disability attributed to diabetes, but it also multiplies the potential for heart disease, stroke, blindness, amputations and kidney failure.²

The Diabetes Ten City Challenge (DTCC), conducted by the APhA Foundation with support from GlaxoSmithKline, demonstrated that self-insured employers can improve recognized standards of diabetes care and reduce health care expenditures when they offer employees, dependents and retirees the opportunity to meet with specially-trained pharmacist “coaches” to help manage their diabetes.

Through the DTCC, 30 employers in 10 cities (Charleston/Spartanburg, S.C.; Cumberland, Md.; Chicago, Ill.; Colorado Springs, Colo.; Dalton, Ga.; Honolulu, Hawaii; Los Angeles, Calif.; Milwaukee, Wis.; Pittsburgh, Pa.; and Tampa Bay, Fla.) established a voluntary health benefit for employees, family members and retirees with diabetes and provided incentives such as waived co-pays for diabetes medications and supplies if participants met regularly with specially trained pharmacists to manage their medications, monitor key diabetes indicators and control their diabetes through diet, exercise and other lifestyle changes.



Methods

All ten cities participating in DTCC included pharmacists as an integral part of their diabetes care teams. More than 100 specially trained community pharmacists used the Patient Self-Management Credential to “coach” people on how to manage their diabetes, including setting goals, using medications properly, and tracking their condition consistently with indicators such as cholesterol tests, blood pressure, foot exams and eye exams. Interdisciplinary healthcare teams including pharmacists, diabetes educators and physicians were assembled in the community, educated about the program and compensated for their involvement. Team members communicated regularly to optimize patient care.

Self-insured employers invested in pharmacists' patient care services to help their employees manage all chronic conditions. Resources were allocated to prevention and monitoring, allowing for a reduction in treatment costs for complications of chronic disease. Positive health outcomes and cost savings justified model sustainability.

Employers contracted with the APhA Foundation to establish the program in their community, and align employee benefit incentives to encourage success. Co-payments for diabetes medications and related supplies typically were waived for patients who participated. Other incentives included counting participation toward wellness points and waiving copayments for education classes and/or laboratory tests.



Results

Average total health care costs were reduced annually by **\$1,079 per patient** compared to projected costs if the DTCC had not been implemented. This is a net savings after payment for patient incentives and pharmacist services are taken into account. Aggregate data for 573 participants, who were in the program for an average of 14.8 months, show patients saved an average of \$593 per year on their diabetes medications and supplies because employers waived co-pays to encourage people to participate in the program.

People included in the analysis showed significant improvements in clinical measures including hemoglobin A1C (blood sugar control), LDL cholesterol and blood pressure. There was a 23% increase in the number of participants achieving the American Diabetes Association goal of <7%; an 11% increase in the number of participants achieving National Cholesterol Education Goals; and a 39% increase in the number of participants with a combined diastolic/systolic goal achievement of 130/80.

The percentage of participants with current flu vaccines increased from 32% to 65%; those with current eye exams increased from 57% to 81%; and those with current foot exams increased from 34% to 74%.

Conclusion

The DTCC further scaled the success of the Patient Self-Management Program for Diabetes into even more self-insured employer populations, and the results prove that the PSM Solutions included in the DTCC are effective for managing diabetes and replicable in diverse locations and employers.

A report published in the May/June 2009 issue of the *Journal of the America Pharmacists Association (JAPhA)* documented favorable economic and clinical results for employers and participants. Participants also improved in all of the recognized standards for diabetes care, including decreases in A1C, LDL cholesterol and blood pressure; and increases in current flu vaccinations and foot and eye exams.

¹CDC—National Diabetes Statistics Report, 2014

²American Diabetes Association—Economic Costs of Diabetes in the U.S. in 2012

