



# Empowering Youth as Self-Management Coaches for Diabetic Family Members

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AN EAST PALO ALTO, CALIFORNIA, project funded by the California HealthCare Foundation (CHCF) recently showed that high school students can acquire the knowledge and communication skills to help diabetic family members manage their diabetes.

Chronic disease is a major public health concern in the United States, and a particular burden for members of underserved ethnic minority communities who are also contending with economic, linguistic, and other challenges. Self-management is an essential part of managing chronic disease, and family members can support it both through general awareness and by helping their chronically ill relatives set health-related goals and create and carry out action plans. One community-based strategy of interest to public health professionals is school-based interventions to train young family members to play this role.

## Project Purpose and the Diabetes Coaches Curriculum

The East Palo Alto project explored whether non-diabetic high school students could serve as self-management coaches for diabetic family members after learning about the disease and developing communication and coaching skills in a structured school program. The project was implemented in the 2009–10 school year by a partnership between East Palo Alto Academy High School and the Stanford University School of Medicine Center for Education in Family and Community Medicine. This charter high school's students come from highly diverse ethnic and economic family backgrounds, and 69 percent

speak a language other than English at home. The Stanford Center has provided health education to East Palo Alto students for many years.

The school-based intervention was modeled on the Stanford University Diabetes Self-Management Program, developed by Dr. Kate Lorig of Stanford. It is one of several chronic disease self-management programs that have consistently been shown to improve outcomes for people with chronic illness. In the East Palo Alto Academy project, three groups of tenth-, eleventh-, and twelfth-grade student volunteers, 23 in all, participated in an eight-week training program for a trimester each.

The instructors used a tailored, interactive “Diabetes Coach” curriculum to teach the students about diabetes and train them in communication, active problem-solving, and goal-setting, to equip them to be self-management coaches for their diabetic family members and friends. The curriculum was presented in hour-long sessions using tight scripts, PowerPoint slides, and role-playing exercises. Every session included the same five elements: a quiz, check-ins, instruction about diabetes, training in coaching skills, and homework assignments and review.

The high school classes served a dual educational purpose. Physicians from Stanford's Department of Family Medicine served as the lead instructors and also trained Stanford Family Medicine residents to teach the classes, thereby fulfilling part of the residents' community-medicine requirement. The research staff for the project included a bilingual physician who explained the program

# PROJECT OVERVIEW

to and answered questions from Spanish-speaking family members. All assignments to students were provided in Spanish and English.

Project leaders modified the program over the three trimesters to increase its effectiveness, for example by making the curriculum more pictorial and enriching the communication training to cover body language and active listening. Through this process, they created a standardized curriculum they believe can be used in any high school to train students as diabetes self-management coaches.

### What the Students Achieved

Pre- and post-tests and homework showed that the students' knowledge of diabetes increased significantly as a result of the program, and role-playing exercises demonstrated that their communication skills improved. The students also expressed new insight into the challenges their diabetic family members were facing, and they shared qualitative information about what they had learned on such topics as family connectedness and self-efficacy. In addition, they reported learning beneficial self-management practices, such as goal-setting, and better health behaviors, such as eating better and getting more exercise, that they could use in their own lives. One student said, "The class is about a lot more than just diabetes."

### Project Findings and Lessons

The project leaders reported to CHCF that collecting data from diabetic family members was more difficult than they had anticipated, for many reasons. Most students' family "partners" did not have personal physicians and did not check blood sugar levels at home; and they were either unable or unwilling to share information about medications with their young coaches.

Recruitment and retention of student participants also proved difficult. The barriers to study participation included busy school schedules and lack of time to

spend with the diabetic family partner. The first cohort of students to complete the program, however, helped recruit others to subsequent groups. In addition, project leaders introduced successful incentives for full participation, including first choice on healthy snacks for those submitting their homework on time and a diploma to students who completed their out-of-class work.

The lessons from the project were as follows:

1. Develop strategies to remind students about the class and incentives for participation.
2. Get health information from the diabetic family member through self-report.
3. Include bicultural, bilingual individuals as project staff.
4. Secure administrative support from the school.

The study leaders noted, as well, that the ideal trainers for the diabetes curriculum are health care personnel who care for patients with diabetes. Partnerships that align family medicine training with high school health education can have the dual benefits of increasing the capacity of schools to provide health education to their communities and improving the expertise of family physicians in chronic illness education. The study leaders believe that such programs have the potential to become an integral, self-sustaining part of the training for family medicine physicians.

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