Evaluating Home-Based Health Coaching from Community Health Representatives for Navajo Adults with Type 2 Diabetes

What was the research about?
Type 2 diabetes causes a person's blood sugar level to rise higher than normal. Good health care can prevent diabetes from damaging organs such as the kidneys and heart. But many adults living on the Navajo reservation can't get the care they need.

Since 2010, the Indian Health Service and the Navajo Nation Department of Health have run an at-home diabetes education program for the Navajo Nation. Community health representatives, or CHRs, carry out the program and are part of the clinic healthcare team. They are from the Navajo community and speak the Navajo language. Doctors and CHRs invite adults with high risks related to diabetes to take part in the program. CHRs visit those in the program at home once or twice a month for up to one year. During home visits, CHRs check health, share information, and give support. People choose topics they want to learn about and decide on healthy changes they want to make. The CHRs leave notes in health records to let doctors at the clinics know about people's needs.

In this study, the research team wanted to learn if the program improved health and healthcare use. The team compared health records of people in the program with people who weren't in the program.

What were the results?
Blood sugar levels. People in the program lowered their blood sugar levels more than people who weren't in the program.

Risks related to diabetes. People in the program reduced some risks related to diabetes, such as high cholesterol, more than people who weren't in the program. For other risks, such as having high blood pressure or being overweight, the two groups didn't show differences likely to affect health.

Use of health care. People in the program improved their use of some health services. They had more visits to primary care doctors, counselors, and pharmacies than people who weren't in the program. The two groups didn't differ in the number of visits to emergency rooms or hospital stays.

Who was in the study?
The study looked at health records from 173 Navajo adults with type 2 diabetes in the program and 2,885 Navajo adults with type 2 diabetes who weren't in the program. Of those in the program, 77 percent were age 56 or older, 62 percent were women, and 58 percent preferred to use an indigenous language. Of those not in the program, 77 percent were age 56 or older, 69 percent were women, and 41 percent preferred to use an indigenous language. All received health care from Navajo Area Indian Health Service clinics.

What did the research team do?
Using health records of the Navajo Area Indian Health Service, the research team identified people in the program and people with similar traits, such as age, who weren't in the program. The team compared blood sugar levels, risks related to diabetes, and
healthcare use at the start of the study and again two years later.

Navajo adults who had been in the program, their relatives, tribal leaders, CHRs, doctors, and nurses helped design and carry out the study.

What were the limits of the study?
People who took part in the program chose to do so. They may differ from people who didn't take part in the program. Also, health records were missing some information.

Future research could test the program in other communities with few healthcare resources or in people with other health problems.

How can people use the results?
Clinics could use these results when planning how best to provide care for people with diabetes.

To learn more about this project, visit www.pcori.org/Shin168.