A Targeted Pilot Program for Prediabetic Hispanic Patients

PURPOSE
There is a lack of a diabetes prevention program (DPP) among Hispanic adults in the Harris Health System. This quality improvement (QI) project aims to implement a culture-specific diabetes prevention pilot program among prediabetic Hispanics in a Harris Health primary care clinic.

BACKGROUND
Per the American Diabetes Association’s definition, prediabetes is a condition where the blood sugar is higher than normal but not enough to warrant a diagnosis of diabetes. An individual must meet at least one of the following criteria to be considered prediabetic: (1) hemoglobin A1C of 5.7 percent to 6.4 percent, (2) fasting glucose of 100 to 125 milligrams per deciliter (mg/dL) on one occasion, and (c) blood glucose from 140 to 199 mg/dL two hours after an oral glucose tolerance test. About 50,000 diabetic patients are seen in Harris Health System, and many of them of Hispanic origin.

METHODOLOGY
The model chosen to guide this pilot program was the Institute for Healthcare Improvement (IHI) Model for Improvement. The project was comprised of a Prediabetes Clinic with group visits with the Nurse Practitioner (NP) followed by classes for the clinic attendees. Follow-up phone calls to participants were incorporated into the plan. Clinic and classes were held one Friday of each month for the first three months and phone follow-ups were completed in the fourth, fifth, and sixth month of the program. All patients attended a group clinic visit with the NP prior to the classes. Consents were provided to eligible patients prior to the first visit. The NP collected measurements of patients’ hemoglobin A1C and fasting glucose at baseline, 3 months, and 6 months. Each patient’s weight, body mass index (BMI), physical activity per week, and dietary habits were assessed monthly. Qualitative analyses were used to evaluate results.

RESULTS
There were some improvements with weight, BMI, diet, and physical activities. Reductions in hemoglobin A1Cs varied. An 80% class attendance rate was not achieved.

IMPLICATIONS
Incorporating a culturally specific Spanish diabetes prevention program does show some promise of care quality improvement in the Hispanic population. However, some modifications of the program are needed, in order to help such programs achieve consistently high outcomes.