Program Overview
The County of Santa Barbara Public Health Department is a federally qualified health center with a long history of providing high quality care to the underinsured and uninsured residents of Santa Barbara County. Patients who have diabetes and are considered high risk based upon co-morbidities, elevated HA1c levels, or nonadherence to treatment regimens are referred to the diabetes clinic. During the diabetes clinic, a team approach to care is used. Through Project IMPACT: Diabetes, a pharmacist was added to the team to focus on the importance of medications in the treatment and management of diabetes. Linking the physician, dietician, and pharmacist during the visit is a powerful tool because it provides an opportunity for the health care team to collaborate together using a comprehensive approach to the patient during just one visit. Currently, the County of Santa Barbara Public Health Department uses this model of care in two diabetes clinics in their system but hopes to expand this model to other clinics to reach more patients affected by diabetes.

Program Partners
The health care team at each clinic consists of a physician, pharmacist, and dietician who collaborate together to provide patient care. Other important project stakeholders that supported the County of Santa Barbara Public Health Department during Project IMPACT: Diabetes included CenCal, the local Medicaid/MediCal administrator for Santa Barbara County, and the Advisory Board for the health department.

Community Champion: Carol Millage, PharmD

Patient Profile
The majority of the patients are uninsured, self-pay Spanish speakers. The rest are patients on Medicare and MediCal, individuals who qualify for the county’s Medically Indigent Adult program, homeless patients, and self-pay patients. Patients often experience limited levels of literacy and may face barriers that create issues with access to care or adherence to medications and diabetes recommendations.

Pharmacists’ Role on the Collaborative Care Team
After first meeting with the medical assistant, who records vitals and gathers important patient information, the patient sees the physician. The physician performs an assessment of the patient’s health and identifies any specific needs that must be addressed. The patient then meets with the pharmacist and dietician together. The dietician reviews the patient’s nutrition while the pharmacist focuses on the patient’s medications. The pharmacist conducts a thorough review of the patient’s medication regimen and reconciles the patient’s medical record with prescription records to assess for potential adherence issues. The pharmacist assesses the degree to which the patient understands how his or her diabetes medications work and how to take them and identifies if there are any issues related to their medications or if any changes to the medication regimen are needed based on the patient’s labs and blood glucose readings. The pharmacist addresses any adherence issues, provides education about the medications, and makes recommendations as needed. Using a team approach, the pharmacist and dietician work with the patient to help them understand how important nutrition and medication adherence are to managing their diabetes. The open dialogue between the patient, dietician, and pharmacist provides the patient with an opportunity to ask questions and open up about any concerns they may have related to their diabetes therapy. The dietician and pharmacist then communicate their findings and recommendations back to the physician. This
collaborative team approach has received positive feedback from patients and has shown improvements in key patient outcomes.

**Relevant Statistics – Community Level**

According to the California Diabetes Program:¹
- 3.9 million (13.8%) adults in California are estimated to have diabetes
- 1 in 7 adults in Californian has diabetes
- Among U.S. states, California has the greatest number of new cases of diabetes annually, and cases of diabetes have increased 32% over the past decade
- Diabetes costs in California exceed $24 billion each year
- Diagnosed diabetes prevalence was much higher among those with a family income below 100% of the federal poverty level (FPL) (10.2%) compared to those whose income is above 300% of the FPL (6.7%)
- Diagnosed diabetes prevalence was much higher among those with less than a high school degree (13.1%) compared to those with a college degree or higher (7.5%)

**Diabetes Epidemic at the National Level**

**Impact of Diabetes²,³**
- 25.8 million people, which is 8.3% of the U.S. population, are estimated to have diabetes
  - 18.8 million people have been diagnosed with diabetes
  - 7 million people are undiagnosed; in other words, are unaware they have diabetes
- 1.9 million people aged 20 years and older are newly diagnosed with diabetes each year
- The prevalence of diabetes in the United States increased by 128% from 1988 to 2008
- If present trends continue, 1 in 3 adults in America will have diabetes in 2050
- 79 million adults have prediabetes, which increases their risk of developing Type 2 diabetes later in life
- Diabetes is a major cause of heart disease and stroke
- Diabetes is the leading cause of kidney failure, nontraumatic lower-limb amputations, and new cases of blindness among adults in the United States
- Diabetes contributes to the death of 231,404 Americans each year

**Cost of Diabetes³**
- Total cost of diagnosed diabetes in the United States = $245 billion per year
  - Direct medical costs = $176 billion per year
  - Indirect costs (e.g., disability, reduced productivity) = $69 billion per year
- Health care costs for a person with diabetes are 2.3 times higher than a person without diabetes
- 1 out of every 10 health care dollars is spent treating diabetes and its complications

**References:**