



DIABETES

SUCCESSES AND OPPORTUNITIES FOR POPULATION-BASED PREVENTION AND CONTROL

2011

Success Stories

Minnesota Diabetes Prevention and Control

Program: Raising Awareness to Improve Health

Working with a diverse group of partners, health officials in the Minnesota Diabetes Prevention and Control Program (DPCP) developed a strategy focused on raising awareness of prediabetes and preventing type 2 diabetes as a way to improve the health of state residents. This strategy included collecting data, disseminating guidelines, increasing awareness of resources, and building infrastructure. For example, health officials

- Collected information on key diabetes risk factors, as well as background data and evidence, and used mathematical models to demonstrate the burden of diabetes.
- Worked to ensure that evidence-based guidelines for addressing chronic disease risk factors and prediabetes care were adopted by health care providers in the state.
- Worked to increase awareness of the importance of preventing type 2 diabetes among populations at risk.

Partners in these efforts included public health and health care systems, local and state employers, health insurers, legislators, professional and community groups, consumers, academic institutions, and quality improvement groups. These partnerships helped shape comprehensive health reform in Minnesota. Key provisions in the law, which was enacted in May 2008, included reimbursement for diabetes preventive services and creation of the \$47 million Statewide Health Improvement Program. The Minnesota DPCP and other groups also worked to build the infrastructure for a 16-week, evidence-based program called **Individuals and Communities Acting Now to Prevent Diabetes (I CAN Prevent Diabetes)**. This program is based on the landmark Diabetes Prevention Program study, which showed that people at high risk of developing type 2 diabetes could prevent or delay the disease by losing weight and being physically active.

The I CAN Prevent Diabetes program works with health care providers, insurers, and employers to increase participation and reimburse the cost of prediabetes services. As a result of these efforts, the percentage of prediabetes cases detected in Minnesota increased from 2.4% in 2004 to 5.3% in 2008, and program participants lost an average 5.7% of their body weight.

Ninety lifestyle coaches were certified to deliver the program in multiple settings for diverse groups, including Hmong, Somali, American Indian, and Hispanic populations, as well as for people who are hearing impaired. Program partners include Steps to a Healthier Minnesota and its community coalitions, the YMCA, UnitedHealth Group, health care systems in the state, industry groups, senior centers, and Indiana University.

Kansas Diabetes Prevention and Control Program: Strengthening the Quality of Care

In Kansas, about 180,000 (8.5%) adults have been told they have diabetes; another 120,000 are estimated to have undiagnosed diabetes. The rate of obesity—a major risk factor for type 2 diabetes—among Kansas adults has more than doubled in recent years, from 13.1% in 1992 to 28.8% in 2009.

To help improve the health of people with diabetes, the Kansas Diabetes Prevention and Control Program launched the Kansas Quality of Care Project in 2004 to collect information about the quality of diabetes preventive services available in the state. The program was later expanded to include information on services for people with high blood pressure and high cholesterol, which are often associated with diabetes.

Across the state, 38 health care organizations working with 68 clinics participate in this project. Each clinic collects information about patient and clinic-level measures of diabetes and blood pressure control and reports it weekly to a central registry. These measures include the percentage of patients who receive



regular A1c tests (a measure of blood glucose control), annual eye and foot exams, and regular blood pressure checks, as well as the percentage who have had their body mass index (BMI, a measure of body fat) calculated.

As of April 2011, the registry had data on 15,275 patients. Health officials and health care providers can use the data to analyze the quality of diabetes care for a single clinic, a group of clinics, all clinics in one county, or all clinics statewide. An analysis of state data for 2005–2008 found that the percentage of patients who got recommended preventive services increased from 46% to 87% for A1c tests, from 19% to 43% for eye exams, from 26% to 56% for foot exams, and from 36% to 88% for blood pressure checks. The percentage of patients who had their BMI calculated increased from 9% to 73%.

In 2010, the Kansas Quality of Care Project began requiring health care organizations to participate in quarterly quality improvement projects, such as increasing the number of patients who receive chronic disease self-management education.

Native Diabetes Wellness Program Honors Traditional Culture to Promote Health

Just 60 years ago, type 2 diabetes was rare in Native American communities. Today, it is a common and serious condition among American Indian and Alaska Native (AI/AN) people, woven together with complex interactions that have environmental, sociological, and historical roots. During 1994–2004, the prevalence of diagnosed diabetes doubled among AI/AN adults aged 35 years or younger who are served by the Indian Health Service (IHS) and increased 68% among AI/AN youth aged 15–19 years. The risk of developing heart disease is nearly four times higher for AI/ANs with type 2 diabetes than for those without this disease.

To address these health disparities, the CDC Native Diabetes Wellness Program (Wellness Program) was established. Listening sessions with tribal leaders and community members guided the program's development. Founded on principles that honor the traditional knowledge of AI/AN cultures as key resources for improving health in tribal communities, the program values collaborations with tribal communities and organizations across the country and partners such as IHS, the National Institutes of Health, and other federal agencies.

In 2008, the Wellness Program established 5-year cooperative agreements with 17 AI/AN tribes and tribal organizations to support community efforts to restore and enhance access to locally grown and gathered traditional foods, such as tepary beans, seaweed, and squash, and to foster participation in traditional physical activities such as stickball and canoeing.

As part of the project, tribal programs across the country are identifying community-developed strategies and using storytelling as a way to convey them. One example is the Standing Rock Sioux Tribe's Native Gardens Project. The tribe, which borders North Dakota and South Dakota, is reclaiming the traditions of companion gardening, hunting, and gathering. Indigenous foods, including squash, melons, and beans from local farms and *timpshila* (prairie turnips), are made available through summer and winter farmers' markets.

A farmers' market in one district held 19 market days in 2010, with hundreds of participants. These events included social gatherings and demonstrations on food preparation. More than 60% of vouchers given to tribal elders in 2010 to buy locally grown foods were redeemed, generating \$9,000 in sales and encouraging local farmers to participate. Market activities also go hand-in-hand with strategies recommended by CDC to promote health and prevent obesity through community interventions.

Project partners include the Standing Rock Sioux Tribe Nutrition for the Elderly Program, the U.S. Department of Agriculture's Senior Farmers' Market Program, the North Dakota State University Extension Service Sioux County, the Boys and Girls Clubs, and National Relief Charities.

The project uses Lakota names for foods and seasons, providing a natural way for elders to teach the Lakota language to tribal children. Stories that reinforce the wisdom of traditional ways are being remembered and retold in homes, schools, and communities. Through stories shared with the Wellness Program, public health leaders learn to respect the connection of time-honored community approaches, wisdom, and values to health and the prevention of chronic diseases.