

## The Connecticut Diabetes Prevention and Control State Plan Updates

January 2010

On October 2, 2007 the Department of Public Health (DPH), Diabetes Prevention and Control Program, released the Connecticut Diabetes Prevention and Control Plan (CTDPCP) for 2007-2012. This plan represents the insight of over seventy partners from around the state representing a variety of expertise. Each participating partner provided input into one or more workgroups that included: Diabetes Prevention, Disease Management, Access and Policy, Education and Awareness, and Surveillance. Each group developed goals, objectives, and strategies to address diabetes in Connecticut.

This is the second update designed to inform diabetes stakeholders in Connecticut of the progress made on these goals, objectives, and strategies. The update covers October 1, 2008 through September 30, 2009. Updates are reported from DPH projects and from initiatives of community partners. Partners were asked to report on the progress of meeting the objectives in the CTDPCP through an e-mail survey in October 2009. The updates represent the responses from the survey. There are other initiatives taking place across the state.

The DPH and our partners have made significant achievements with the use of limited resources. To enable the implementation of the Plan objectives through enhanced funding, the DPH DPCP provided a grant writing technical assistance program to eight community-based organizations. Evaluations from the program were extremely positive. Attendees are now charged to pursue grant funding.

Within the Chronic Diseases Section at DPH, coordination and linkages have been made with the Heart Disease and Stroke Prevention Program to develop a comprehensive plan for stroke. The Stroke Plan that was released in July 2009 identifies diabetes as one of the risk factors for stroke. In addition, the CTDPCP is active in the development of the "Heart Healthy, Smoke Free, Physically Fit Communities Plan."

The Diabetes Advisory Council and the DPH are proud to provide this update on progress made thus far. The following pages highlight achievements and updates under the appropriate objective for each work group. Please note that only the objectives that had specific achievements or updates are listed below.

### Diabetes Prevention

**Prevention Objective 1: By 2012, reduce by .5% the prevalence of type 2 diabetes by preventing or delaying the progression of pre-diabetes to diabetes. This is being achieved by:**

1. Increasing the awareness of providers and people with pre-diabetes about the potential to prevent diabetes onset through lifestyle change, and by developing and promoting pre-diabetes screening programs accessible to all at risk Connecticut residents with referrals to health care providers as appropriate.

Updates:

- Fairhaven Community Health Center is working with Yale University to identify women who have pre-diabetes through a two-hour Glucose Tolerance Test. For those who screen positive, an Intensive Lifestyle Intervention Program on exercise and nutrition is offered to the woman and her family.
  - The Yale Maternal and Fetal Medicine Department has submitted a grant to the National Institute of Health (NIH) to look at Vitamin D supplementation and the potential reduction of glucose intolerance as well as overt diabetes at the post-partum visit.
  - With funding from the Connecticut Community Foundation and the Foundation for Community Health, New Milford Hospital, in partnership with the New Milford Senior Center, has offered screening and education for pre-diabetes. Goals for new contacts have been exceeded; 5.5% of those reached were identified as having pre-diabetes and were provided follow-up to help avoid/delay progression to diabetes.
  - Bristol Hospital has provided pre-diabetes classes that include information on risk factor management to prevent diabetes/cardiovascular disease and nutrition/exercise interventions.
2. Delivering cost-effective pre-diabetes interventions as efficiently as possible.
- Updates:
- St. Francis Hospital and Medical Center is working with a NIH funded research project entitled “Stop Diabetes.” This is a faith-based program geared toward African Americans in Hartford.
  - The Yale School of Nursing has two grants.
    - One grant from the Robert Wood Johnson Foundation will look at “Diabetes Prevention in the Community.” The purpose of the study is to evaluate the effect of a diabetes prevention, provided by home care nurses, that targets adults at risk for type 2 diabetes who live in low-income housing.
    - The second grant is from the National Institute of Nursing Research entitled “Reducing Obesity and Diabetes in High Risk Youth.” The grant will work collaboratively with high schools in New Haven and West Haven, Connecticut to translate a diabetes prevention program with and without coping skills to the internet
3. Supporting interventions promoted by other programs, such as the CT DPH Obesity Program, that include modifications to school lunch programs to provide healthy school nutrition environments.
- Updates:
- The Eastern Highlands Health District, one of four selected healthy communities in the state, has implemented four changes in the communities they serve including:  
A healthy dining certificate with healthy eating guidelines for food establishments;  
Active living resources for free access to physical activities;  
Employee wellness programs; and  
Produce of the week campaign that promotes fruit and vegetable consumption via the Health district website.

## **Disease Management**

**Disease Management Objective 1: By 2012, increase by 50% the number of Connecticut physicians and other health care providers who use ADA and other evidence-based guidelines to diagnose and monitor pre-diabetes and diabetes as measured by the number of physicians recognized by the ADA. This is being achieved by:**

1. Promoting the adoption and integration of ADA and other evidence-based guidelines into clinical practice to support early diabetes diagnosis and use of ABC (A1c, blood pressure, cholesterol) values.

Updates:

- ProHealth Physician's disease management program strives to achieve A1c targets. Using a registry to identify patients who need follow-up, visits are scheduled with an emphasis on goal setting, medication management, and education.
- Yale New Haven Community Group has achieved NCQA Diabetes Physician Recognition for two internists.
- The ADA distributed twelve resource manuals to health care providers.
- The St. Francis Healthcare Partners assists physicians to apply for Diabetes Physician Recognition through the National Committee for Quality Assurance. Currently forty-four St. Francis physicians have achieved this recognition. As a result, St. Francis Healthcare Partners has developed the St. Francis Diabetes Care Alliance. This is a comprehensive network composed of hospital based services and community physicians who deliver coordinated care in the management of diabetes across the continuum of health care services.
- Aetna Better Health developed a tool kit for providers that contains ADA guidelines and charting tools. Their disease management program stratifies members based on severity with appropriate interventions. Their vision vendor conducts telephonic outreach to members non compliant with diabetic retinal exams.

**Disease Management Objective 2: By 2012, improve patient care by increasing the number of health care providers using electronic medical records or disease registries by 10% to establish a statewide health data exchange, increase outreach, and improve communication among providers. This is being accomplished by:**

1. Developing effective communication vehicles to demonstrate the value of reporting clinical outcomes to providers using evidenced-based literature, peer-to-peer outreach and other means, and showing providers how such clinical outcomes, reporting through incentive programs, or other vehicles can be valuable for their patients, their practices, and others.

Updates:

- Middlesex Hospital offers care management services to provide comprehensive diabetes care in cooperation with the patient's primary care physician.
- Charter Oak Health Center has used the chronic care model to increase the rate of A1c testing, screening for early renal disease, and lipid testing. They use case management and education via classes, one-to-one counseling, and an educational kiosk with a bi-lingual/bi-cultural health educator. In addition, foot clinics and diabetes group visits are conducted.

- Fairhaven Community Health Center continues with a population of over 1,100 patients with diabetes. Using a diabetes registry, case management and education, their average A1c is at 7.4%. They are currently focusing on a special project to identify those at high risk of chronic kidney disease.
- Generations Community Health Center uses Patient Electronic Care System (PECS) to track successes and needs of patients. Goals include A1c equal to or lower than 7%, two A1c checks per year, and annual comprehensive foot exams.

**Disease Management Objective 3: By 2012 establish a system of process and outcome measurement used by all health care providers on the patient care team. This is being achieved by:**

1. Adopting evidence-based guidelines as evaluation benchmarks for clinical outcomes. Highlight and communicate recommendations in these guidelines for provider accountability in monitoring clinical care.  
Update:
  - Community Health Center instituted a point of service A1c test using the A1c Now meter. This enables the provider to make treatment decisions at the time of the visit.
2. Using quality assurance processes to assess outcomes.  
Updates:
  - Greenwich Hospital has a diabetes in pregnancy program to manage women with type 1, type 2, and gestational diabetes.
  - The Richard R. Pivrotto Center for Healthy Living at Greenwich Hospital uses an algorithm to assess glycemic control and hypoglycemia risk reduction before, during, and after exercise to assess patient needs including blood sugar monitoring and education.

**Disease Management Objective 4: By 2012, increase by 5% the percentage of adults, age 18 and older, who are conducting comprehensive self-management to control their disease. This is being achieved by:**

1. Assessing current disparities and creating plans to remove identified disparities through culturally focused diabetes care, and involving community leaders in creating community health initiatives.  
Updates:
  - The University of Connecticut School of Pharmacy and Hartford Hospital published a study with diabetes patients entitled, “Predictors of Medication Adherence in a Urban Community with Health Care Disparities.” This study demonstrated medication adherence is positively influenced by increased support by a physician or healthcare team, and is negatively influenced by low socio-economic background.

Working with the Department of Social Services, Aging Services Division, using a \$275,000, three year grant from the Administration on Aging, the DPCP has been working with various community-based organizations to implement the Stanford Chronic Disease Self-Management Program for seniors with diabetes (and other chronic diseases). From Oct 1, 2008- Sept 30, 2009 two leader trainings and thirteen group programs were conducted.

2. Training health care professionals, para-professionals, and lay health workers in the community health setting on diabetes prevention, care, and management.

Update:

- The CT State Department of Education has provided training and technical assistance to school nurse on the self-administration of medication regulations and self-monitoring of blood glucose.

3. Fostering patient responsibility for diabetes care by adopting and promoting self-management education programs that engage the patient, and provide the patient financial incentives and personalized nutrition guides and exercise plans.

Update:

- There are currently twenty- five ADA recognized education programs in Connecticut. Each education center provides a variety of services including group education classes, (on diabetes and pre-diabetes), community programs and one-on-one counseling.

## Education and Awareness

**Education and Awareness Objective 1: By 2012, increase by 5%, the proportion of people with diabetes participating in diabetes self-management education programs in order to learn about controlling their diabetes. This is being accomplished by:**

1. Making available training curricula options for patient education.

Updates:

- DPH, community health centers (CHC), and Southern Connecticut State University (SCSU) worked together to develop a curriculum for teaching low literacy patients with diabetes. It has been distributed to community health centers.
- The Hungerford Diabetes Center at Charlotte Hungerford Hospital conducted a “Diabetes Boot Camp” for people with type 1 diabetes. This intensive three-day program featured lectures, exercise equipment demonstrations, continuous glucose monitoring, and intensive exercise.
- The Community Health and Wellness Center of Torrington has trained staff in the use of Healthy Interactions Diabetes Conversation Maps. Goal is to implement this new patient education program in 2010.

2. Creating partnerships with hospitals, CHCs, volunteer health organizations, CT Association of Directors of Health, the American Heart Association, and local health departments to

ensure staff has information relevant to care through education resources added to organizational newsletters (hospitals, CT DPH, etc.) and Websites.

Updates:

- The DPCP publishes and distributes a quarterly newsletter to over 400 partners, which includes updates from DPH, as well as from our partners.
- For people with diabetes: Aetna Better Health includes articles on diabetes care in member newsletters. In addition, a mailer on the ABCs of diabetes care was sent to all members with diabetes.

3. Training non-CDEs, including school nurses, medical assistants, certified nurse aides, peer-to-peer educators, faith organization members, senior center staff, local health department educators, and lay persons as referral resources, to augment traditional education programs.

Updates:

- The DPCP, through a contract with SCSU, has developed and is implementing a medical assistant (MA) training program on diabetes. Six programs were conducted from October 2008 through November 2009. Research on the program indicates it results in a statically significant increase in MAs recommending foot exams.
- The American Diabetes Association (ADA) conducts the Family Link Program to offer programs and social activities for parents, children, and siblings affected by diabetes. A “Back to School” advocacy training program was also offered to parents.

4. Engaging schools, libraries, senior centers, town halls, and other public places to make diabetes, nutrition, and general health information available.

Updates:

- The First Cathedral in Bloomfield conducted a diabetes/cancer health fair on October 10, 2009, which attracted an attendance of 1,825 primarily African Americans.
- The DPCP provides diabetes and diabetes prevention information at a variety of venues for health fairs conducted across the state.
- The National Kidney Foundation (NKF) Connecticut chapter has conducted diabetes/blood pressure and kidney disease prevention workshops throughout the state. NKF’s Urban Outreach Program targets high-risk groups through faith-based community workshops. Their “Kidney Early Evaluation Program” provides comprehensive screening to detect diabetes, kidney disease, and hypertension at early stages.
- The ADA has partnered with churches to conduct “Diabetes Days,” and has assisted community-based organizations offering diabetes awareness events.
- CT DPH block grant funding was used by six health departments to offer free, comprehensive, community based diabetes education programs.
- The Joslin Diabetes Center, Affiliate at The Hospital of Central CT, provides patient education, blood glucose screenings, in-services for skilled nursing facilities, community programs, support groups, and professional education programs.
- The Mohegan Tribe Health Services offers education programs, support groups, one-to-one diabetes self-management education and health promotion programs for youth.
- The City of Bridgeport continues it’s Mayor’s Diabetes Initiative by holding diabetes luncheons in conjunction with the Sanofi Aventis A1c Champions Program, Vitale Restaurant, and the East Side Senior Center.
- The Heart Center of Greater Waterbury presented eight sessions of a four-week program entitled, “Sugar Tips” at churches, senior centers, libraries, and assisted living facilities.

The program was funded by the American Heart Association through the Margaret A. Hallen Fund.

- The Connecticut Association of Optometrists, with assistance from The Connecticut Lions Eye Health Program, volunteered at the 2009 Diabetes Expo and the Hispanic Health Council Health Fair to conduct eye health screenings.
- Animas Corporation offered a series of free education programs across the state, which focused on improving diabetes management.
- The Bloomfield Senior Diabetes Center is seeking funding to provide preventive services focused on nutrition, exercise, and health education.
- Generations Community Health Center conducted eighteen educational events on diabetes in a variety of settings including soup kitchens, Veterans of Foreign War (VFW) chapters, and on the radio.
- The ADA conducted its annual Diabetes EXPO April 18, 2008. The exposition was attended by 3,184 people who received information on diabetes products, attended educational sessions, received a variety of screenings, and viewed demonstrations.

**Education and Awareness Objective 2: By 2012, increase by 10% the number of providers who participate in continuing education programs focused on diabetes. This is being achieved through:**

1. Conducting ongoing professional education with a curriculum that incorporates best practices and prevention (e.g., Grand Rounds, CMEs, etc.) for physicians/providers involved in providing diabetes services.

Updates:

- A Diabetes Review and Update course was provided by the DPCP on September 21, 2009. This program highlights ADA and other evidence-based guidelines. The program was attended by 118 health care professionals.
- The ADA conducted its 40<sup>th</sup> annual symposium for healthcare professionals as well as the 13th Annual Endocrinology Seminar.
- Generations Community Health Center provided two on-site, mandatory, half-day seminars for providers

2. Engaging hospital and clinic administrators to foster mentoring or peer education to change physician behavior and to support the increased number of, and enrollment in, patient education programs; engage medical directors from Managed Care Organizations and Physician Health Organizations to encourage their members to receive regular diabetes education.

Updates:

- The CT DPCP partnered with the Joslin Diabetes Center Affiliate at the Hospital of Central CT to offer a one-day mentorship program where by health care providers could shadow a Joslin diabetes specialist.
- Interim Healthcare education staff bring new diabetes information to their staff in the field.

**Education and Awareness Objective 3: By 2012, improve public awareness of the impact of diabetes by increasing by 10% the number of partnerships with community**

**organizations (i.e., schools, libraries, media, town halls, and other public places). This is being achieved by:**

1. Engaging schools, libraries, senior centers, town halls and other public places, workplaces, faith-based and community-based organizations to share information on the risks, burden, and impact of diabetes, and on the availability of screenings.

Update:

- The DPCP has developed a diabetes awareness poster targeting African Americans, which was distributed to beauty salons and barber shops in New Haven, Hartford, and Bridgeport. An evaluation of the poster project showed 83% of the survey respondents displayed the poster. A second poster from the National Diabetes Education Program encouraging people with diabetes to make a plan to address their diabetes was distributed 226 libraries across the state.

2. Launching an information campaign drawing on partnerships, existing programs, and national campaigns to highlight the rapid rise in diabetes diagnoses; connect with a public figure to promote the message.

Update:

- The DPCP has partnered with Dlife TV to provide commercial free past episodes of Dlife to 20 cable TV stations.

## Access and Policy

**Access and Policy Objective 1: By 2012, increase by 5% the proportion of people who receive comprehensive diabetes care, i.e., diabetes preventive care, treatment, supplies, equipment, medication, education, and medical nutrition therapy. This is being achieved by:**

1. Demonstrating the cost-effectiveness of diabetes education programs and promoting a partnership among CT DPH, private groups, and public groups to implement universal diabetes education.

Updates:

- The Yale Griffin Prevention Research Center has worked with four community health centers (CHC) to evaluate a grant from the Connecticut Health Foundation entitled, "Systems Approaches to Diabetes Management and Prevention." Behavioral and clinical outcomes measures were assessed. Preliminary data demonstrates evidence of effectiveness of each of the interventions.
- CHCs across the state are providing a variety of services to thousands of patients with diabetes. Services include patient education classes, staff education, and tracking of measures via electronic medical records or registries.

**Access and Policy Objective 2: By 2012, increase by 5% the number of diabetes education services and disease management supports for people with diabetes. This is being achieved by:**

1. Assessing diabetes public health infrastructure to determine system gaps and develop policies that encourage the development of strong, efficient networks of providers by engaging legislators and insurers to make them aware of the barriers that exist to proper care.

Update:

Update: Qualidigm is recruiting twelve private physician practices which serve large minority populations to participate in the Connecticut Health Foundation funded Equity and Quality in Health Care Equal Healthcare Project. This \$592,000 two-year grant strives to improve patient-provider interactions and enhance quality improvement, knowledge, and systems for private physicians whose practices serve diverse populations.

## Surveillance

**Surveillance Objective 1: By 2012, increase by 5% the number of hits to the diabetes surveillance Web page as a means of increasing accessibility to the diabetes prevalence, morbidity, and mortality data. This is being achieved by:**

1. Developing partnerships with large centers, registries, community-based organizations, CHCs, occupational health services, and use academia to assist in research and data collection projects. Identify other data sources and data-collecting agencies to meet with state planning groups to determine how best to create data sharing networks, providing technical assistance on how to collect data to organizations that provide diabetes services, providing resources to community-based organizations to gather data about diabetes services, and conducting surveillance of priority subpopulations, as limited resources allow, and make information resources available to non-DPH organizations as appropriate.

Update:

- The CT State Department of Education conducted a school health services survey which showed diabetes related services were provided to the 1,167 students with type 1 diabetes and the 1,537 students with type 2 diabetes.

2. Disseminating available diabetes surveillance data to the general public through the CT DPH Website and other appropriate venues.

Updates:

An Issue Brief on Gestational Diabetes in Connecticut was developed and posted on the DPH website and distributed to OB/GYN physicians, diabetes educators and others who work with woman of child bearing age. It was also presented at the CDC Division of Diabetes Translation National Conference.

Other postings to the DPH website include: Diabetes Prevalence in Connecticut, 2006-08, Diabetes and Diabetes Related Hospitalizations for Connecticut Residents, Hospitalization tables by gender, race and ethnicity, median charges and length of stay, Diabetes and Diabetes Related Mortality Tables, 1999-2007, by gender, race and ethnicity, town and health district. Single-year, three and five year mortality tables are available.