The Connecticut Diabetes Prevention and Control State Plan Updates

December 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 third update designed to inform diabetes stakeholders in Connecticut of the progress made on these goals, objectives, and strategies. The update covers October 1, 2009 through September 30, 2010. 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 2010. This updates document 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 CTDPCP provided two grant writing technical assistance programs, one on Oct 29, 2009 and the second on March 25, 2010 for community-based organizations. Evaluations from the program were extremely positive. Attendees are now charged to pursue grant funding. Within DPH the CTDPCP received two grants during the time from October 1, 2009-September 30, 2010. One is a joint grant with the Department of Social Services, Aging Services Division. This is a two-year, $400,000 American Reinvestment and Recovery Act grant to implement the Stanford Chronic Disease Self-management Program. The second grant is a $48,000 grant from the National Association of Chronic Disease Directors to examine the facilitating factors and barriers to group diabetes self -management education.

Within the DPH, coordination with the following programs is currently in process to create a more comprehensive, cross cutting state plan: Heart Disease and Stroke Prevention, Nutrition, Physical Activity and Obesity, Tobacco Use, Control and Prevention, Asthma and Comprehensive Cancer.

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 and treat women who have pre-diabetes using a two-hour Glucose Tolerance Test. For those who screen positive, an Intensive Lifestyle Intervention Program based on the Diabetes Prevention Program but tailored to meet the needs of low income Latina and African American is offered to the woman and her family. To date, more than 1400 of the identified 3200 adults with risk factors for diabetes have been screened using a two-hour glucose tolerance test. One hundred and ten of the 350 patients identified with pre-diabetes have participated in the program.
   - Griffin Hospital Community Outreach and Parish Nursing conducted 706 A1c screenings for pre-diabetes and diabetes with counseling throughout the year at churches, businesses, community fairs and senior centers. They were provided free of charge, using grant funds in lower income areas.
   - Fairhaven Community Health Center, (CHC), in partnership with Chabaso Bakery, instituted a community garden project whereby participants in the CHC's Diabetes Prevention Program work in the garden in exchange for a share of the harvest. A greenhouse was created from donated materials and is heated by the bakery's ovens.
   - New Milford Hospital has been able to incorporate programs funded under grants from the Connecticut Community Foundation and the Foundation for Community Health in partnership with the New Milford

Senior Center, to offer screening and education for pre-diabetes into their hospital budget.

2. Delivering cost-effective, pre-diabetes interventions as efficiently as possible.

Updates:

- Norwalk Hospital conducts "Kids Healthy Weight" Classes for children age 5 -16 years old in both English and Spanish.
- St. Francis Hospital and Medical Center diabetes team is working with researchers at the Ethel Donaghue Center for Translating Research into Practice at the University of Connecticut Health Center and Mercer University of Macon, GA on a Nation Institutes of Health funded research project entitled "Stop Diabetes." This is a faith-based program that offers a lifestyle education program to those who screen positive for diabetes and is geared toward African Americans in Hartford. The goal is to achieve a 7% weight loss.
- The ADA of CT and Western MA distributed" Stop Diabetes" toolkits to 25 community organizations and human resource departments.
- The Yale School of Nursing has two grants:
  - A grant from the Robert Wood Johnson Foundation is looking at diabetes prevention in the community. The purpose of the study is to evaluate the effect of a diabetes prevention program, provided by home care nurses, that targets adults at risk for type-2 diabetes who live in low-income housing. They have rolled out the program at three sites and have begun recruiting, collecting baseline data and conducting classes.
  - The second grant is from the National Institute of Nursing Research entitled "Reducing Obesity and Diabetes in High Risk Youth." Starting in November 2010, the grant will be working collaboratively with three high schools in New Haven, Connecticut to translate a diabetes prevention program with and without coping skills on the Internet using a highly interactive reality television format.

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:

Glastonbury Health Department participates in the Public Schools Wellness Advisory Council to make recommendations on foods served in schools.

Norwalk's High Five Fun is a social marketing campaign partnership with Stew Leonard's Children's Charities and Stepping Stones Museum.

The Connecticut River Area Health District's "Fun with Food" is an interactive program for parents and children.
Farmington Valley Health District sponsors a Teen Iron Chef contest.
Eastern Highlands Health District developed a tool kit for schools to promote consumption of fruit and vegetables.

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 National Council on Quality Assurance (NCQA). 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:

   - Community Health Services Community Health Center (CHC), through their application for the ADA Education Recognition has documented an improvement in medication compliance that is now at 92%. They have also shown that 69% of their patients with diabetes have an A1c <7%.
   - There are currently 95 National Council on Quality Assurance (NCQA) recognized physicians for the diabetes recognition program. This is a 279% increase from the baseline of 34 physicians with this recognition in 2006.
   - Community Health Services CHC has instituted a policy to screen all patients at high risk for diabetes at their first visit. They now see 5-8 new diabetes patients per month.
   - The East Hartford Community Health Center has conducted diabetes group visits.
   - Generations CHC use a Patient Electronic Care System (PECS) to track diabetes patients/ A1c levels. Training is provided annually to providers to update them on new medications and insulin use. An APRN/CDE travels to various satellite offices to assist with difficult cases and provide resources. A new protocol is in place using medical assistants and LPNs to increase the rate of immunizations. Early data show that over a two-month period there was an increase of 6% for influenza and 26% increase for pneumonia vaccinations.

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 contracts with the Community Health Center, Inc. to provide chronic care coordination and diabetes self-management. They offer care management services to provide comprehensive care for diabetes, asthma, chronic heart failure and childhood weight management in cooperation with the patient's primary care physician.
   - Interim Healthcare audits twenty -five diabetes charts per month and follows up with clinicians as needed. Charter Oak Health Center has created a new Chronic Disease Department to make proactive chronic care a part of the organization's vision, mission, goals, performance improvement and business plan. A team of various staff members developed and implemented various Performance Improvement Plans including protocols to increase the number of patients screened for diabetes. A new (part-time) APRN/CDE has been hired to exclusively see diabetes patients.
   - SEARCH {SPELL OUT} students working through Community Health Center Association of Connecticut conducted the following projects: metabolic syndrome screening at Optimus CHC, physician compliance with clinical guidelines at Cornell Scott Hill Health Center, an oral health and diabetes project at Staywell CHC and Taking the Fear out of Diabetes and Insulin at Optimus CHC Park City site.

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:

- Yale Maternal and Fetal Medicine runs a diabetes management during pregnancy program. They manage pregnant women with gestational or pre-gestational diabetes. Patient volume increased 83% from 2005 to 2009. Outcomes show the frequency of A1c>8% was reduced from 34% at the beginning of prenatal care to 2% after the program. Fetal birth weights over 4000g were also reduced from 16% in 2005 to 7% in 2009.
- Fairhaven Community Health Center is currently focusing on a special project to identify those at high risk of chronic kidney disease.

2. Using quality assurance processes to assess outcomes.
   Updates:
   - Johnson Memorial Cardiac Rehabilitation assesses diabetes patients and tailors education to meet their needs. They compare blood glucose levels during the first two-weeks and the last two-weeks of the program to assess outcomes.

3. Encourage employers to provide meaningful financial incentives for employees and their providers to reach established benchmarks.
   - Updates:Starting in 2011, Daymon Worldwide, based in Stamford, CT, will cover diabetes related treatment at 100% in Network including diabetes supplies, medical nutrition therapy, lab tests and prescription drugs.

Disease Management Objective 4: By 2012, increase by 5% the percentage of adults, age 18 and older, that 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 CTDPCP worked with Khmer Health Advocates on an educational tool for their "Eat -Walk -Sleep" program to promote appropriate serving size for rice.
   - Khmer Health Advocates conducted a diabetes "town hall meeting" that linked Cambodian refugee agencies from across the country.
   - The CTDPCP worked with the Mohegan Tribal Nation on a diabetes self-management program
   - The CTDPCP partnered with the Optimus Community Health Center to develop diabetes quality improvement projects.

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 DPCP conducted a three-month follow-up survey for attendees at the annual Diabetes Review and Update held on September 21, 2009. There were 120 attendees. Survey indicated 89% of them felt the program was helpful in their daily work with diabetes patients. See also Education and Awareness section.
   - The DPCP presented on diabetes and the flu at the September 15, 2010 state wide Flu Coalition Conference which was attended by over 100 health care and public health professional.
   - The CT Association of Diabetes Educators conducted five continuing education programs at their meetings which allows for member sharing and networking.

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-six ADA recognized diabetes 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. Most centers offer day and evening classes. Some centers, including Hartford Hospital Diabetes Life Care, offer group and individual education in Spanish.
   - The CT DPH worked with educators at Hartford Hospital to develop a poster promoting Medicare's coverage of diabetes self-management education. It was mailed to Senior Centers and libraries across the state in November, 2010.

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:
   - The Hungerford Diabetes Center at Charlotte Hungerford Hospital conducted two sessions of "Diabetes Boot Camp", one for people with type-1 diabetes and a second for patients with type-2. This intensive three-day program featured lectures, exercise equipment demonstrations, continuous glucose monitoring, and intensive exercise.
   - The CTDPCP is working with diabetes education centers at Norwalk and Windham Community Memorial Hospitals to study the use of the Healthy Interactions diabetes conversation maps. The Hospital of Central Connecticut and William W. Backus Hospital are serving as control groups.
   - Merck Pharmaceuticals is promoting the use of Diabetes Conversation Maps as an interactive method of teaching. Using diabetes educators across the state they offered nineteen programs to reach eighty-seven participants.
   - The DPCP in partnership with the Department of Social Services, Aging Services Division, is using an American Recovery and Reinvestment Act grant to conduct the Stanford Chronic Disease Self-management Program called Live Well across the state. This evidence -based program, which targets people with diabetes and a variety of other chronic diseases, focuses on goal setting to develop effective self-management techniques. To date, 129 leaders have been trained in Live Well and they have offered the program to hundreds of participants across the state.

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 500 partners, which includes updates from DPH, as well as from our partners.
   - The DPCP, in conjunction with the CT DPH Tobacco Use, Prevention and Control Program (TUPAC) produced and distributed more than 5,000 bilingual diabetes, smoking and your health brochures. The DPCP also worked with TUPAC to coordinate with the Quitline so that any caller

who describes having diabetes was sent a National Diabetes Education Program booklet entitled, "Four Steps to Controlling 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 conducted two diabetes trainings for Medical Assistants.

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 Church in Bloomfield conducted a diabetes/cancer health fair on October 10, 2009, which attracted an attendance of 1,825 primarily African Americans.
   - Various "November is Diabetes Month" activities took place in November, 2009. These include patient and provider education programs and screenings to help diagnose diabetes earlier in its progression.
   - 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.
   - The dietitian for the Hartford Public Schools provides carbohydrate counting information for all school lunch menu items.
   - The CTDPCP 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 conducted their "Kidney Early Evaluation Program" which provides comprehensive screening to detect diabetes, kidney disease, and hypertension at early stages. Their data indicate that 66% of the screening participants have between one to three values outside the normal range. Often they are unaware of these abnormalities due to lack of insurance/medical care.
   - The ADA has partnered with churches to conduct "Diabetes Days," and has assisted community-based organizations offering diabetes awareness events.
   - The CTDPCP worked with a Connecticut children's book author to write and promote a colorfully illustrated book on diabetes.
   - CT DPH block grant funding was used by six health departments to offer free, comprehensive, community based diabetes 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 Heart Center of Greater Waterbury presented eight sessions of a four-week program entitled, "Sugar Tips: Detection and Prevention of Diabetes" to various age groups ranging from elementary school and colleges to women's groups and senior centers.
- Animas Corporation offered a series of free diabetes management /education programs across the state to reach 270 people.
- The ADA conducted its annual Diabetes EXPO on April 17, 2010. The exposition was attended by 3,310 people who received information on diabetes products, attended educational sessions and viewed demonstrations. 1,423 people also received a variety of health screenings.
- The Connecticut Association of Optometrists volunteered at the 2010 Diabetes Expo to conduct 101 eye health screenings.

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 professional education with a curriculum that incorporates best practices and prevention guidelines (e.g., Grand Rounds, CMEs, etc.) for physicians/providers involved in providing diabetes services.**
   Updates:
   - A Diabetes Review and Update course provided by the DPCP was conducted on October 20, 2010. The program highlights ADA and other evidence-based guidelines. 115 health care professionals attended.
   - The ADA conducted its 40th annual symposium for healthcare professionals on Nov 13, 2009. Their 13th Annual Endocrinology Seminar was held on Sept 24, 2009.
   - The CT DPCP conducted two "Hands On" Diabetes trainings that provided a variety of tools (e.g. food models and clogged artery models) for health care workers to use when teaching people with diabetes.
   - Diabetes and the Flu was presented at the annual Flu Coalition conference using CT immunization data prepared by the diabetes epidemiologist

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 CTDPCP has developed a diabetes awareness poster targeting African Americans, which was distributed to family practice physician offices New Haven, Hartford, and Bridgeport.
   - The CTDPCP provided posters highlighting the importance of developing a diabetes self -management plan to over 200 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 CTDPCP conducted a media campaign in November, 2009 which included radio and print messages using National Diabetes Education Program advertisements. A paycheck insert highlighting the ADA diabetes risk assessment for 70,000 state employees was included in a November 2009 paycheck.

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:
   - Kevin's Community Center, a free clinic for Newtown residents without insurance, plans a "Power to Prevent" diabetes program for fourteen people starting Oct 16, 2010.

- Malta House of Care provides free patient care through a staff of over seventy physician, nurse and lay volunteers. Using an Electronic Medical Record obtained through in kind donations from St Francis Hospital, data has informed a "Bringing Diabetes Care for the Uninsured into the 21st Century to address diabetes care through improved diagnosis, treatment, education and referral.

- 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.

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. Disseminating available diabetes surveillance data to the general public through the CT DPH Website and other appropriate venues.
   Updates:
   - BRFSS data for 2007-09 has been aggregated to estimate diabetes prevalence and to estimate the prevalence of modifiable risk factors and the percent of people with diabetes who receive preventive care practices.
   - Hospitalization data for diabetes, diabetes-related causes and diabetes related amputation as well as mortality data for diabetes and diabetes related causes by gender, race and ethnicity have been posted on the Diabetes Data and Surveillance web-page.

   - In the eight months between April and November, 2010 there were 2514 downloads on the CT DPH diabetes surveillance web page.