The Connecticut Diabetes Prevention and Control State Plan Updates
February, 2013

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 fifth and final update designed to inform diabetes stakeholders in Connecticut of the progress made on these goals, objectives, and strategies. The update covers October 1, 2011 through September 30, 2012. 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 November 2012. This updates document represents 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. Within DPH, the CTDPCP has been part of a transition to a more integrated public health system. Efforts at the CTDPCP during 2011-12 have concentrated on the Diabetes Prevention Program and the Stanford University Chronic Disease Self Management Program. Next steps at the DPH will be based on the level of funding received from the CDC for 2013-18. As of February, 2013 the DPH is in the process of developing an application for a Funding Opportunity announcement entitled, “State Public Health Actions to Prevent and Control Diabetes, Heart Disease, Obesity and Associated Risk Factors and Promote School Health”. This joint application emphasizes collaborative work across programs. It will focus on four chronic disease prevention and health prevention domains: 1) Epidemiology and Surveillance; 2) Environmental approaches that promote health and support and reinforce healthful behaviors; 3) Health system interventions to improve the effective delivery and use of clinical and other preventive services; and 4) Community-clinical linkages to support cardiovascular disease and diabetes prevention and control efforts and the management of chronic diseases.

DPH is 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.***

There are currently five organizations listed on the Centers for Disease Control Diabetes Prevention Recognition website. These include: Exerscrip LLC, Norwalk Community Health Center, St. Vincent's Health Services, Western CT Health Network and Windham Hospital. Other organizations including Empower Health Solutions have been trained in diabetes prevention and are currently recruiting clients for classes.

The Mohegan Tribe provides counseling for nutrition, wellness, diabetes management, chronic disease prevention and youth obesity prevention as well as a walking program for adults and seniors.

The Area Agency on Aging for Southwest CT provided a diabetes prevention community forum focused on the Hispanic community. Several tools produced by the National Diabetes Education Program were incorporated into the program.

Stamford Hospital has developed and implemented pre-diabetes classes and has submitted an application for the CDC Diabetes Prevention Recognition Program.

Yale New Haven Hospital- St Raphael Campus offered two Diabetes Prevention Seminars for the community which were based on the National Diabetes Education Program Small Steps Big Rewards Program.

Yale New Haven Clinical Nutrition Outpatient Services Department offered 24 community presentations/health fairs providing information on diabetes prevention, healthy lifestyles and diabetes. A total of 1422 consumers were served.

Summary of Progress:

Table 1. Prevalence of diagnosed diabetes among Connecticut adults (18 years and older)

	Unadjusted Percent	95% C.I.	Data Source
Baseline	6.2%	5.7-6.6	2003-2005 BRFSS
Final	6.9%	6.5-7.4	2008-2010 BRFSS
Target	5.7%		

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 Committee 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.***

At baseline, 34 physicians had achieved diabetes recognition status (2006). There are currently 127 physicians who have achieved diabetes recognition by NCQA (2012).

Middlesex Hospital Center for Chronic Care Management has achieved Practitioner Oriented Disease Management Accreditation for Asthma, Childhood Weight Management, Diabetes and Smoking program.

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.***

Generations Community Health Center continues to use the Chronic Care Model and Plan-Do-Study- Act cycles to improve the quality of care provided to patients with diabetes. Generations implemented Electronic Health Records and will use this tool to increase the tracking and management of their diabetes panel.

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.***

Middlesex Hospital Center for Chronic Care Management collaborates with Community Health Center Inc. in Middletown and Clinton on “Rent a CDE” disease management and diabetes education services.

This successful partnership places a CDE in the CHC NCQA Medical Home for chronic care support and patient access within the primary care office.

Summary of Progress:

Table 2. Prevalence of daily self-monitoring of blood glucose and prevalence of ever attending a diabetes self-management class among Connecticut adults (18 years and older) with diabetes

Practice	Baseline % (95% C.I.)	Data Source	Final % (95% C.I.)	Data Source	Target
Daily self-monitoring blood glucose	67.7% (62.2-73.2)	2005 BRFSS	60.4% (57.3-63.4)	2008-2010 BRFSS	72.7%
Ever attended diabetes self-management class	47.7% (44.2-51.0)	2003-2005 BRFSS	47.7% (44.6-50.8)	2008-2010 BRFSS	52.7%

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.***

There are twenty-eight out-patient diabetes education programs across the state recognized by either the American Diabetes Association or the American Association of Diabetes Educators. Most of these centers also provide in-patient diabetes education.

Middlesex Hospital used Diabetes Conversation Maps and information on smoking cessation to present to the City of Middletown employees.

The CT DPCP worked with the Department of Social Services/ Aging Services Division to implement the Stanford University Chronic Disease Self-Management Program (CDSMP) and the Diabetes Self-Management Program. The CDSMP has been offered in a variety of sites across the state including churches, senior centers, YMCAs, senior housing and others. Approximately 400 people per year complete the chronic disease class which is administered through Area Agencies on Aging across the state. The Diabetes version of the program is being explored for feasibility in Connecticut.

Middlesex Hospital Center for Chronic Care Management, Diabetes Care Program in conjunction with its collaborative partner, Middlesex Hospital Homecare, successfully launched a pilot project to offer "Medical Nutrition Therapy in the Home" for patients with diabetes receiving home care services.

Charlotte Hungerford Hospital conducted their third "Type 1 Boot Camp". Campers were provided with presentations and exercised on ergometers, walked on the Bantam River boardwalk and dined on healthy meals. The program was funded by a grant from the Charlotte Hungerford Hospital.

Optimus Community Health Center provides diabetes education and tracks patient progress. Nearly 70% of patients over the past year have shown improvements in body mass index and A1c.

Greenwich Hospital provided ten monthly meetings to the community at no charge. Examples of topics covered include information on new medications, nephropathy, nutrition strategies and behavior change.

Greenwich Hospital conducted its annual diabetes health fair open to the community and to health care provided as well as their annual heart health fair. Both provided information on medications, devices and services to manage diabetes and heart disease.

Summary of Progress:

Table 3. Prevalence of ever attending a diabetes self-management class among Connecticut adults (18 years and older) with diabetes

	Unadjusted Percent	95% C.I.	Data Source
Baseline	47.7%	44.2-51.0	2003-2005 BRFSS
Final	47.7%	44.6-50.8	2008-2010 BRFSS
Target	52.7%		

2. Create partnerships with hospitals, community health centers, local health departments and others to ensure staff has information relevant to care through educational resources added to organizational newsletters and websites.

Middlesex Hospital submitted "Healthy Plate Eating" for the hospital newsletter and afforded the opportunity to meet with a registered dietitian-certified diabetes educator.

3. Train non-Certified Diabetes Educators as referral resources to augment traditional education programs.

The American Diabetes Association trained five individuals to be church ambassadors to assist with promoting/conducting Live Empowered Programs in their church and community. Nine programs were conducted.

The East Hartford Community Health Center conducted a diabetes breakfast program for their patients.

4. Partner with grocery stores, libraries, senior centers, town halls and other public places to make diabetes, nutrition and general health information available.

The World without Limits Wellness Event at First Cathedral October 2012 reached 1,850 (primarily) African American adults and children and provided 1,043 free screenings.

Pomperaug Health District offered bi-monthly screenings for cholesterol, blood sugar and blood pressure and provided educational and counseling on these topics.

The American Diabetes Association provides support groups and social outings for families and children with diabetes.

The American Diabetes Association conducted a Safe at School Program and provided three families with mentors.

The American Diabetes Association worked with twenty two African American churches on the National Identification Day campaign in November reaching 7,590+ individuals.

The Hartford Dispensary conducted three diabetes education workshop series using the Healthy Interactions Diabetes Conversation maps.

The Arthritis Foundation provides a brochure on diabetes and arthritis.

Lawrence and Memorial Hospital presented "Cooking for Life- Choice Matters" cooking demonstration, tasting and information for the prevention and management of diabetes.

Bridgeport Hospital diabetes educator presented on a radio discussion about diabetes management, participated in two health fairs and provided a lecture on diabetes prevention at an area church. She also serves as a committee member of Healthy Eating CT, a greater Bridgeport initiative to raise awareness of the prevention of obesity through better eating habits.

Optimus Community Health Center conducted diabetes outreach efforts in their main lobby to promote National Nutrition Month in March and National Diabetes Month in November.

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.***

Forty-five endocrinologists, internal medicine physicians and certified diabetes educators attended the Annual American Diabetes Association Endocrinology Seminar in September 2012 and ninety-three health care professionals attended the Annual American Diabetes Association Symposium held November 2012. Both of the professional seminars offered continuing education credits (CEU).

Seventy two health care professionals attended the CT DPCP the annual Diabetes Review and Update in October 2012. This program also provided CEU credits.

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, diabetes self-management education, and medical nutrition therapy.

Progress:

Table 4. Prevalence of diabetes preventive care practices among Connecticut adults (18 years and older) with diabetes

Practice	Baseline % (95% C.I.)	Data Source	Final % (95% C.I.)	Data Source	Target
Annual doctor visit	88.4% (86.1-90.7)	2003-2005 BRFSS	88.0% (86.0-90.1)	2008-2010 BRFSS	93.4%
Annual foot exam	72.4% (69.3-75.6)	2003-2005 BRFSS	74.3% (71.5-77.2)	2008-2010 BRFSS	77.4%
Annual dilated eye exam	78.3% (75.4-81.2	2003-2005 BRFSS	74.5% (71.7-77.3)	2008-2010 BRFSS	83.3%
Daily self-monitoring blood glucose	67.7% (62.2-73.2)	2005 BRFSS	60.4% (57.3-63.4)	2008-2010 BRFSS	72.7%
Ever attended diabetes self-management class	47.7% (44.2-51.0)	2003-2005 BRFSS	47.7% (44.6-50.8)	2008-2010 BRFSS	52.7%

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.***

Table 5. Number of visits to the Connecticut Department of Public Health websites

March 29, 2012 to September 29, 2012 **Web Page/Document**	**#Visits/ Downloads**
Diabetes Surveillance Web Page	487
Diabetes Prev & Control Program Web Page	264
Diabetes Partners in Prevention Newsletters	147
Diabetes Burden Doc	20
Diabetes Preventive Care Practices	33
Diabetes Surveillance Past Present Future	21
Diabetes Prevalence 2007 - 2009	28
Gestational Diabetes Mellitus Issue Brief	8
Diabetes Prev & Control Plan 2007-2012	47
Diabetes Burden Doc 2010 (posted 6/2011)	98
Spring 2011 Diabetes Newsletter	19

Prediabetes Fact Sheet Apr2012	49
Diabetes Fact Sheet, 2011	58

The *Prediabetes Fact Sheet* was created and posted on the CT Diabetes Surveillance System Website (www.ct.gov/dph/diabetesdata).

Two news briefs were written on the decline of diabetes-related nontraumatic lower-extremity amputations in Connecticut (one on trends in the overall Connecticut population and one on trends in subgroups in Connecticut). These news briefs are posted on the CT Diabetes Surveillance System Website (www.ct.gov/dph/diabetesdata).

The Future

In 2012, the draft of Connecticut's Coordinated Chronic Disease Plan was created. The plan identifies priority areas (health equity; nutrition and physical activity; obesity; tobacco; heart health; cancer; **diabetes**; asthma; oral health; health care quality; and health care access) and strategies to reduce the burden and impact of chronic disease in Connecticut. These strategies, adapted from the CDC's four domains of work, include:

- Create a **policy and leadership environment** that supports the inclusion of multiple stakeholders and the promotion of evidence-based strategies to increase health equity.
- Use **environmental approaches** to promote health and support and reinforce healthful behaviors.
- Promote **health system interventions** that improve the effective delivery and use of clinical and preventive services and evidence-based management of chronic disease and intermediate risk factors.
- Improve **community-clinical linkages** to ensure that communities support and clinics refer patients to evidence-based programs that prevent or improve management of chronic diseases.
- Support an **epidemiology and surveillance** system that gathers, analyzes, and disseminates data and information and conducts evaluation to inform, prioritize, deliver, and monitor programs and population health.

This chronic disease plan is being developed with guidance and consultation from the Centers for Disease Control and Prevention's (CDC) Division of Population Health in the National Center for Disease Prevention and Health Promotion and builds on the successes of several categorical disease-specific and risk-factor-based plans by diverse health partners across the state (ex. Connecticut Diabetes Prevention and Control Plan, 2007-2012). The Coordinated Chronic Disease Plan transcends categorical or disease specific plans and focuses on promoting system changes that produce a higher collective impact across multiple disease conditions.