GENERAL ASSEMBLY REPORT

Illinois State Diabetes Commission
Illinois Diabetes Prevention and Control Program

As required by PA 098-0097
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January 1, 2015

Gov. Pat Quinn and Members of the General Assembly:

I am pleased to present the General Assembly with a report that details the financial impact and reach that diabetes of all types is having on Illinois, an assessment of benefits of implemented programs and activities aimed at controlling diabetes and preventing the disease, a description of the level of coordination that exists between the Illinois Department of Public Health and its partners, the development of a detailed action plan for battling diabetes, and the development of a detailed budget blueprint identifying costs and resources required to implement the state diabetes plan.

Diabetes is the eighth leading cause of death in Illinois and, according to the 2011 Illinois Behavioral Risk Factor Surveillance System (BRFSS), approximately 969,000 adults (18 years of age or older) in the state have diabetes. According to the U.S. Centers for Disease Control and Prevention (CDC) the estimated medical cost of diabetes in Illinois is $8.98 billion, which includes $6.6 billion in direct medical costs and $2.4 billion in indirect costs, such as disability, work loss and premature mortality.

The Department along with the commission and partners throughout the state, is collaborating to ensure people with diabetes, especially those at greater risk for health disparities, achieve their optimal lifespan with the best possible quality of health. Those involved are working to encourage lifestyle changes that include moderate weight loss and exercise to prevent the onset of diabetes among those at high risk. The Department also has strived to gather timely data essential for developing a better understanding of how diabetes affects different population groups and how quality of care can be improved.

I would like to recognize the assistance the Department received from the Illinois Department of Healthcare and Family Services (HFS) in compiling the data presented in this report. We look forward to a continuing partnership with you, HFS, the Illinois Legislative Diabetes Caucus, and other programs and divisions throughout the state that encourage management and prevention of diabetes with the goal to reduce its burden and complications.

Sincerely,

LaMar Hasbrouck, M.D., M.P.H.
Director
Chair, Illinois State Diabetes Commission
Public Act 098-0977 was enacted with a goal of decreasing the incidence of diabetes in Illinois. The law states that by January 10, 2015 and January 10 of each odd-numbered year thereafter, the Illinois State Diabetes Commission shall submit a report to the General Assembly containing the following:

(1) The financial impact and reach that diabetes of all types is having on the state and the Department. This assessment shall include the number of people with diabetes impacted in Illinois or covered by the state Medicaid program, the number of people with diabetes and family members impacted by prevention and diabetes control programs implemented by the Department, the financial toll or impact diabetes and its complications places on the Department’s diabetes program, and the financial toll or impact diabetes and its complications places on the diabetes program in comparison to other chronic diseases and conditions.

(2) An assessment of the benefits of implemented programs and activities aimed at controlling diabetes and preventing the disease. This assessment shall also document the amount and source for any funding directed to the Department from the General Assembly for programs and activities aimed at reaching those with diabetes.

(3) A description of the level of coordination that exists between the Department and other entities on activities, programs, and messaging on managing, treating or preventing all forms of diabetes and its complications.

(4) The development or revision of a detailed action plan for battling diabetes with a range of actionable items for consideration by the General Assembly and the plan of diabetes, pre-diabetes, and related diabetes complications. The plan also shall identify expected outcomes of the action steps proposed for the two years following the submission of the report, while also establishing benchmarks for controlling and preventing relevant forms of diabetes.

(5) The development of a detailed budget blueprint identifying needs, costs and resources required to implement the plan identified in item (4) of this subsection. This blueprint shall include a budget range for options presented in the plan identified in item (4) of this subsection for consideration by the General Assembly.

The Illinois Department of Healthcare and Family Services shall provide cooperation to the Illinois Department of Public Health to facilitate the implementation of this subsection. (Source: P.A. 98-97, effective 01/01/2014.)
As required, this document is presented to the General Assembly in compliance with Public Act 098-0097 to report on the effects and financial impact of diabetes in Illinois and a plan of action to address the impact of pre-diabetes, diabetes and related diabetes complications. This document, as well as previous reports from 2011, 2012, and 2013, is available on the Department’s website at: http://www.idph.state.il.us/diabetes/about.htm The Illinois Diabetes State Plan also is available on the Department’s website at: http://www.idph.state.il.us/diabetes/pdf/IllinoisDiabetesStatePlan2013-2018.pdf
LaMar Hasbrouck, M.D., M.P.H., Illinois Department of Public Health, Chair

Thomas L. Pitts, M.D., Northwestern University Feinberg School of Medicine, Co-chair

Kimbra Bell, M.D., Northwestern University Feinberg School of Medicine

The Honorable Tom Cross, State Representative

Jay Gandhi, PharmD, C.D.M., Fidelis Senior Care Inc.

Fil Guipoco, M.A., American Heart Association

Neil Horsley, M.D., Rosalind Franklin University of Medicine and Science

Patricia Horton, Representing the Public with Diabetes

The Honorable Mattie Hunter, State Senator

Rosemary F. Jaffe, American Diabetes Association, Representing the Public with Diabetes

Mary Kreiter, M.D., Pediatric Endocrinologist

Rev. David O. Kyllo, Rehabilitation Institute of Chicago

Luis Munoz, M.D., Illinois Hispanic Physicians Association

Marla C. Solomon, R.D., LD/N., C.D.E., University of Chicago

Fred Wendler, Physical Therapist, Representing the Public with Diabetes
In accordance with Public Act 094-0788, the Illinois State Diabetes Commission was created in 2006 to:

- Hold public hearings to gather information from the general public on issues pertaining to the prevention, treatment and control of diabetes.
- Develop a strategy for the prevention, treatment and control of diabetes.
- Examine the needs of adults, children, racial and ethnic minorities, and medically underserved populations who have diabetes.

The Department has managed oversight and support of the 14-member commission since July 2010 when the duties and responsibilities for the state’s diabetes prevention and control program were transferred from the Illinois Department of Human Services by Executive Order 10-06 and legislation. Over the past four years, the priorities of the commission have been to restructure objectives and goals to help reduce the burden of diabetes among Illinois residents.

The commission consists of physicians, who are board certified in endocrinology, have expertise and experience in the treatment of childhood diabetes and the treatment of adult onset diabetes; health care professionals with expertise and experience in the prevention, treatment and control of diabetes; representatives of organizations or groups that advocate on behalf of persons suffering from diabetes; legislators; and members of the public who have been diagnosed with diabetes.

The commission met four times in fiscal year 2014 and to date has met three times in fiscal year 2015. The issue of members not attending commission meetings regularly was discussed and the commission members present urged the Department to end the memberships of those individuals who were no longer attending the meetings. After surveying members regarding their continued service, the Department has closed out memberships of inactive members. The Illinois State Diabetes Commission Bylaws were changed to allow commission voting members to appoint a delegate to attend on their behalf when they are unable to participate in a meeting.

During the last year, the commission made progress with outreach and public awareness to prevent and to reduce diabetes, to address the Burden of Diabetes in Illinois and to complete development of the five-year Illinois State Diabetes Plan.
In July 2013, the Department entered into a new grant agreement with U.S. Centers for Disease Control and Prevention (CDC) for the State Public Health Actions to Prevent and Control Diabetes, Heart Disease, Obesity and Associated Risk Factors and Promote School Health – FOA – DP13-1305 approach to preventing and to reducing the risk factors associated with childhood and adult obesity, diabetes, heart disease and stroke; and addressing the management of chronic diseases. The Department’s program, entitled Chronic Disease and School Health (CDASH), addresses the CDC’s four chronic disease and health promotion 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.

The two grant strategies specific to diabetes include: 1) promoting awareness of prediabetes among people at high risk for type 2 diabetes and 2) promoting participation in American Diabetes Association-recognized, American Association of Diabetes Educators-accredited, state-accredited/certified, and/or Stanford University-licensed Diabetes Self-Management Education (DSME) programs.

In strengthening community-clinical linkages for the management of diabetes, the Department is referring partners to CDC evidence-based, on-line resources and guidelines and developing a single point of access for these resources through the Department’s website. The health communication will raise awareness among people at high risk of the following:

- Prediabetes risk factors
- The location of sites offering the CDC-recognized National Diabetes Prevention (DPP) lifestyle change program
- How to enroll in the program

The online resource will be used in training and technical assistance statewide for health care systems, local health departments, health educators, parish nurses and others. The online resource will include guidelines for discussing impaired glucose tolerance and hemoglobin A1c measurements, risk factors and lifestyle modifications to reduce the risk of diabetes and to promote the use of materials from the National Diabetes Education Program, and the American Diabetes Association for American Diabetes Association Alert Day, American Diabetes Month and World Diabetes Day.
To improve access to DSME, the Department is exploring ways to work with health insurance carriers (Medicaid and private health insurance plans sold through the Illinois Insurance Marketplace) to include DSME as part of the standards of care for patients with diabetes and monitor the quality of care through reports from Illinois’ Health Information Exchange. The second part of the Department’s strategy to improve access to DSME is to work with hospitals to encourage development of outpatient programs that meet American Association of Diabetes Educators standards and will therefore be eligible for reimbursement through the Medicare program.

**Illinois Tobacco Quitline**
The Illinois Tobacco Quitline (ITQL), which is operated by the American Lung Association through a Department grant, regularly refers people with diabetes who call the ITQL to quitline services and to community smoking cessation programs. This activity was expanded in fiscal years 2012 and 2013 and tracked for the number of people with diabetes who smoke and who were referred to the quitline, who called the quitline, who initiated a smoking cessation program, and who quit and remained tobacco free for at least seven months. National Diabetes Education program materials are provided to diabetic smokers. Local health departments share information about community-based resource information, such as smoking cessation programs, chronic disease self-management and DSME programs with the ITQL. In fiscal year 2012, persons with diabetes accounted for 990 callers to the ITQL. During fiscal year 2013, persons with diabetes totaled 1,309 calls to the ITQL. The increase is due to the efforts of the local health department diabetes prevention and control programs. The programs referred persons with diabetes to the ITQL from their Diabetes Self-Management Program (DSMP)/Chronic Disease Self-Management Program (CDSMP) classes, health events, community events, outreach programs and patient clinics. The programs also heavily marketed the ITQL via websites and social media.

**Public Awareness and Education**
The CDASH program and the Illinois State Diabetes Commission were active in promotion of diabetes education to partnering agencies through distribution of National Diabetes Education Program (NDEP) material during American Diabetes Month (November). On July 17, 2012, Public Act 097-0819 became effective and designated November 14 each year as Diabetes Awareness Day to be observed as a day for the people of Illinois to support efforts to decrease the prevalence of diabetes, to develop better treatments, and to work toward an eventual cure for Type 1 and Type 2 diabetes through increased research, treatment and prevention.
Also, many commission members and Department staff attended Diabetes Alert Day (March 25) activities throughout the state and Diabetes Advocacy Day (April 30). In partnership with the Illinois Diabetes Policy Coalition, the Illinois Legislative Diabetes Caucus hosted a Diabetes Advocacy Day on April 30 at the Illinois State Capitol. Illinois’ policy makers were educated on issues that directly affect persons living with diabetes and its complications.

*A Burden of Diabetes in Illinois* update was published this year. The report contains updates on state data regarding the prevalence of diabetes, prediabetes, weight status, tobacco use, economic cost, and health care access among adults with and without diabetes. The commission members utilized the burden update towards selecting goals and strategies to include in the draft Diabetes State Plan.

**Diabetes Coalitions**

Local diabetes coalitions are collaborative efforts by former Diabetes Prevention and Control Programs that share the goal of stimulating improvements in early detection, prevention and control of diabetes. This goal is met by increasing public awareness about healthy lifestyles, increasing the focus on prevention among health care providers, and supporting legislative action to increase funding for and access to prevention programs.

Diabetes Prevention and Control Programs throughout Illinois received training on how to develop, to maintain and to manage diabetes coalitions, and advocate for people who have diabetes or are at risk of the disease. In 2011-2013, the grantees developed a coalition, completed a needs assessment, and determined a priority focus area for their diabetes efforts in relation to Diabetes Alert Day and American Diabetes Month. The local diabetes coalitions are a driving force for diabetes prevention and control in Illinois communities.
I. Financial impact and reach that diabetes of all types is having on the state and the Department

A. Number of people with diabetes impacted in the state or covered by the state Medicaid program

According to the Illinois Behavioral Risk Factor Surveillance System, approximately 969,000 Illinois adults (10%) have been diagnosed with diabetes and another 7 percent have been diagnosed with pre-diabetes. In the Medicaid population, 202,904 people have diabetes, which is 7.3 percent of all enrollees (see table 1).

Table 1 Number and Percent of Medicaid Population with Diabetes and Other Chronic Conditions, Illinois, 2013

<table>
<thead>
<tr>
<th>Condition</th>
<th># of Medicaid Population with Condition</th>
<th>% of Medicaid Population with Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>202,904</td>
<td>7.30%</td>
</tr>
<tr>
<td>Arthritis</td>
<td>50,863</td>
<td>1.83%</td>
</tr>
<tr>
<td>Asthma</td>
<td>238,153</td>
<td>8.56%</td>
</tr>
<tr>
<td>Cancer</td>
<td>136,282</td>
<td>4.90%</td>
</tr>
<tr>
<td>Congestive Heart Failure</td>
<td>62,564</td>
<td>2.25%</td>
</tr>
<tr>
<td>Coronary Heart Disease</td>
<td>82,047</td>
<td>2.95%</td>
</tr>
<tr>
<td>Hypertension</td>
<td>365,855</td>
<td>13.16%</td>
</tr>
<tr>
<td>Stroke</td>
<td>19,751</td>
<td>0.71%</td>
</tr>
<tr>
<td>Depression</td>
<td>63,427</td>
<td>2.28%</td>
</tr>
</tbody>
</table>

*Mid-year 2013 Medicaid enrollment = 2,780,804
Source: Illinois Department of Health and Family Services, Medicaid Program

B. Number of people with diabetes and family members impacted by prevention and diabetes control programs implemented by the Department

The Department promotes and supports evidence-based DSME programs. Programs are either accredited by the American Diabetes Association (ADA) or the American Association of Diabetes Educators (AADE), or are licensed through the Stanford DSME program. As of July 2014, there were 122 ADA programs and 26 AADE programs, and 15 local health departments or not-for-profits licensed to implement Stanford DSME. According to the CDC’s Diabetes Prevention Recognition Program, 46,704 people with diabetes had at least one encounter with an ADA, AADE or Stanford program in 2013.
C. Financial toll or impact diabetes and its complications places on the Department’s Diabetes Prevention and Control Program

The CDC’s Diabetes Cost Calculator estimates the costs of diabetes at the national and state levels. According to CDC, in 2012, medical expenses attributable to diabetes in Illinois totaled $8.98 billion and indirect expenses, such as lost productivity and premature mortality, totaled more than $2.39 billion. People with diagnosed diabetes, on average, have medical expenditures that total approximately 2.3 times higher than expenditures would be in the absence of diabetes. Direct costs pertain to the medical expenditures incurred with treating and controlling the symptoms and the complications of diabetes. Indirect costs include increased factors, such as absenteeism, reduced productivity and lost productive capacity due to early mortality.

Hospitalizations due to diabetes place a large toll on the Illinois health care system. The average length of stay for a diabetes hospitalization is 4.5 days and the median cost is $21,422. Length of time and expense is greater for males who are hospitalized than females and for adults aged 35 years and above compared to those under age 35 (table 2).

The financial toll of diabetes on the Medicaid system results in an average cost of $3,135 per person covered for a total of $636 million dollars in pharmacy and non-pharmacy payments (table 4).

**Table 2 Financial Toll of Diabetes Hospitalizations by Sex and Age, Illinois, 2013**

<table>
<thead>
<tr>
<th>Diabetes</th>
<th>Average length of stay</th>
<th>Total hospitalization charges</th>
<th>Median charge per hospitalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>4.33</td>
<td>$ 473,462,768</td>
<td>$20,530</td>
</tr>
<tr>
<td>Male</td>
<td>4.78</td>
<td>$ 633,509,731</td>
<td>$22,315</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;5 Years</td>
<td>2.66</td>
<td>$ 2,285,939</td>
<td>$15,001</td>
</tr>
<tr>
<td>5-14 Years</td>
<td>2.23</td>
<td>$ 17,857,989</td>
<td>$13,561</td>
</tr>
<tr>
<td>15-34 Years</td>
<td>2.94</td>
<td>$ 128,572,314</td>
<td>$16,112</td>
</tr>
<tr>
<td>35-64 Years</td>
<td>4.84</td>
<td>$ 376,219,832</td>
<td>$22,920</td>
</tr>
<tr>
<td>65 and Above</td>
<td>5.44</td>
<td>$ 582,036,425</td>
<td>$25,310</td>
</tr>
<tr>
<td>Total</td>
<td>4.57</td>
<td>$1,106,972,499</td>
<td>$21,442</td>
</tr>
</tbody>
</table>

*Source: Illinois Department of Public Health, Hospital Discharge Database*
D. Financial toll or impact diabetes and its complications places on the diabetes program in comparison to other chronic diseases and conditions

Diabetes hospitalizations result in longer hospital stays and greater charges than hypertension, asthma and arthritis, but shorter stays than hospitalizations due to other cardiovascular and stroke related hospitalizations (table 3).

<table>
<thead>
<tr>
<th>Condition</th>
<th>Average length of stay (days)</th>
<th>Total hospitalization charges</th>
<th>Median charge per hospitalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>4.57</td>
<td>$ 1,106,972,499</td>
<td>$ 21,442</td>
</tr>
<tr>
<td>Other Heart Disease</td>
<td>5.77</td>
<td>$ 1,434,357,951</td>
<td>$ 69,577</td>
</tr>
<tr>
<td>Congestive Heart Failure</td>
<td>5.09</td>
<td>$ 2,397,397,817</td>
<td>$ 25,902</td>
</tr>
<tr>
<td>Cerebrovascular disease</td>
<td>4.78</td>
<td>$ 2,729,830,004</td>
<td>$ 31,924</td>
</tr>
<tr>
<td>Major cardiovascular disease</td>
<td>4.67</td>
<td>$ 16,110,941,081</td>
<td>$ 34,689</td>
</tr>
<tr>
<td>Ischemic Heart Disease</td>
<td>4.32</td>
<td>$ 4,767,976,641</td>
<td>$ 63,329</td>
</tr>
<tr>
<td>Arthritis</td>
<td>3.89</td>
<td>$ 29,569,603</td>
<td>$ 30,892</td>
</tr>
<tr>
<td>Asthma</td>
<td>3.42</td>
<td>$ 596,187,325</td>
<td>$ 17,274</td>
</tr>
<tr>
<td>Hypertension</td>
<td>2.72</td>
<td>$ 122,469,820</td>
<td>$ 17,998</td>
</tr>
</tbody>
</table>

ICD9 Codes Used: Diabetes (250 series); Arthritis (714 series); Asthma (493 series); Congestive Heart Failure (428 series); Major Cardiovascular Disease (390-398, 401-438, 440-448); Hypertension (401 series); Ischemic Heart Disease (410-414); Cerebrovascular Disease (430-438); Other Heart Disease (440-448).
Source: Illinois Department of Public Health, Hospital Discharge Database

The Medicaid system spends more money on diabetes enrollees than enrollees with congestive heart failure, asthma, coronary heart disease, depression, stroke and arthritis, but less than enrollees with cancer or hypertension. Pharmacy payments for enrollees for diabetes medications are second highest after asthma (table 4).
Table 4  Financial Toll Diabetes and Other Chronic Conditions Place on Medicaid System, Illinois, 2013

<table>
<thead>
<tr>
<th>Condition</th>
<th># of Medicaid Population with Condition</th>
<th>Non Pharmacy Payments</th>
<th>Pharmacy Payments</th>
<th>Cost per person with condition</th>
<th>Total costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer</td>
<td>136,282</td>
<td>$725,285,540</td>
<td>$34,313,351</td>
<td>$5,574</td>
<td>$759,598,890</td>
</tr>
<tr>
<td>Hypertension</td>
<td>365,855</td>
<td>$648,342,361</td>
<td>$17,042,531</td>
<td>$1,819</td>
<td>$665,384,892</td>
</tr>
<tr>
<td>Diabetess</td>
<td>202,904</td>
<td>$561,753,501</td>
<td>$74,381,054</td>
<td>$3,135</td>
<td>$636,134,555</td>
</tr>
<tr>
<td>Congestive Heart Failure</td>
<td>62,564</td>
<td>$406,974,742</td>
<td>$67,150,363</td>
<td>$7,578</td>
<td>$474,125,106</td>
</tr>
<tr>
<td>Asthma</td>
<td>238,153</td>
<td>$347,433,407</td>
<td>$126,262,225</td>
<td>$1,989</td>
<td>$473,695,632</td>
</tr>
<tr>
<td>Coronary Heart Disease</td>
<td>82,047</td>
<td>$248,988,852</td>
<td>$10,086,870</td>
<td>$3,158</td>
<td>$259,075,722</td>
</tr>
<tr>
<td>Depression</td>
<td>63,427</td>
<td>$123,234,078</td>
<td>$23,073,212</td>
<td>$2,307</td>
<td>$146,307,290</td>
</tr>
<tr>
<td>Stroke</td>
<td>19,751</td>
<td>$52,279,791</td>
<td>$24,830,531</td>
<td>$3,904</td>
<td>$77,110,323</td>
</tr>
<tr>
<td>Arthritis</td>
<td>50,863</td>
<td>$38,706,992</td>
<td>$33,150,582</td>
<td>$1,413</td>
<td>$71,857,574</td>
</tr>
</tbody>
</table>

*Mid-year 2013 Medicaid enrollment = 2,780,804; all information is based on data for services directly linked a specific disease/condition as identified in the HFS EDW service table.
II. Assessment of the benefits of implemented program and activities aimed at controlling diabetes and preventing the disease. This assessment also shall document the amount and source for any funding directed to the Department from the General Assembly for programs and activities aimed at reaching those with diabetes.

In July 2012, the Department implemented the Coordinated Chronic Disease Program to share functions among all of the chronic disease programs, such as epidemiology and surveillance, communication, policy development and partner engagement to free up resources for additional programmatic efforts. This program was funded by CDC and provided direction to the Department by allowing more flexibility in how categorical funding is used to deliver a common set of public health functions. The imperative for improving coordination in chronic disease programs is recognized by chronic diseases, conditions and risk factors public health programs are addressing and are interrelated and often co-occur. The strategies used to address risk factors and improve health are complementary and similar across all chronic disease prevention and control programs.

The Chronic Disease and School Health Program (CDASH) is a result of the coordinated chronic disease efforts by the CDC and state health departments across the United States. The purpose of the Department’s CDASH program, which includes statewide diabetes prevention and control activities is to reduce the burden of chronic disease in Illinois through primary and secondary prevention strategies that focus on the implementation of standards for healthy nutrition and physical activity in early care and education centers, schools and hospitals. The goal also is to improve the quality of care through statewide reporting and technical assistance to health care providers on the management of hypertension and diabetes; and raise awareness of hypertension and pre-diabetes, promoting hypertension self-monitoring and medication therapy management and expanding diabetes self-management education.

**Outcomes** – The Department and its partners are addressing seven primary outcomes during the CDASH five-year project period:

- Increased consumption of nutritious food and beverages and increased physical activity across the life span.
- Improved medication adherence for adults with high blood pressure and adults with diabetes.
- Increased self-monitoring of high blood pressure tied to clinical support.
• Increased use of diabetes self-management programs.
• Improved prevention and control of hypertension.
• Improved prevention and control of diabetes.
• Improved prevention and control of overweight and obesity.

The Department’s diabetes prevention and control activities are supported by core public health activities, such as partnership engagement, workforce development, guidance and support for programmatic efforts, strategic communication, surveillance and epidemiology, and evaluation. The CDASH program is striving to increase state, community, worksite, school and early care and education environments that promote and reinforce healthful behaviors, and practices across the life span related to diabetes, cardiovascular health, physical activity and healthful food and beverages, and obesity. The program is planning to improve the quality, effective delivery and use of clinical and other preventive services to address prevention and management of hypertension and diabetes. The CDASH program is striving to increase community clinical linkages to support prevention, self-management and control of diabetes, hypertension and obesity during the project period.

CDASH bases program activities on the Expanded Chronic Care Model, which provides a framework that re-orients public health and health care services to better address the needs of individuals with chronic disease(s), placing greater emphasis on prevention, population health promotion, and the creation of supportive community environments linked to the health care system. Seven areas of focus are emphasized in the model, including 1) self-management support that fosters development of personal skills needed to manage chronic disease; 2) decision support that assists health care providers and community-based programs in gathering and using data to improve quality of care and promote strategies for maintaining good health; 3) delivery system redesign that encourages the health care system to expand beyond clinical, treatment-oriented services to support individuals and communities in a more holistic way; 4) expanded use of information systems to improve quality of clinical care, as well as support prevention and community-based efforts; 5) development and implementation of policies to improve population health; 6) creation of supportive environments to promote optimal health in social and community settings; and 7) involvement of community groups in establishing priorities and taking action to identify and to remove barriers in healthy living.

Collectively, the work conducted during the CDASH project period will result in a healthier Illinois that delivers healthier students to schools and early care and education centers,
healthier workers to businesses and employers, and a healthier population to the health care system. The CDASH program activities will make it easier for Illinoisans to take charge of their health.

Currently, efforts provided by the Department to address diabetes in Illinois are solely funded by the CDC. There are no sources of funding directed to the Department by the General Assembly for diabetes programs and activities.
III. Description of the level of coordination that exists between the Department and other entities on activities, programs, and messaging on managing, treating, or preventing all forms of diabetes and its complications.

The Department is leveraging the activities of several federal grant programs for CDASH and diabetes prevention and control. These programs include WISEWOMAN, Maternal and Child Health Services Block Grant, Preventive Health and Health Services Block Grant, Child Care and Development Block Grant, Health Information Technology for Economic and Clinical Health Act (HITECH), Medicaid, and Safe Routes to Schools, and collaborating with the Million Hearts and Healthier US Schools Challenge campaigns.

To implement CDASH, the Department has built upon existing collaborations with many partners, including the Illinois Network of Child Care Resource and Referral Agencies (INCCARRA), Illinois Primary Health Care Association (IPHCA), Illinois State Board of Education (ISBE), Illinois Public Health Institute (IPHI), Illinois Hospital Association (IHA), the University of Illinois Extension, Illinois Action for Healthy Children, the Active Transportation Alliance, the Illinois Head Start Association, the Illinois Department of Human Services (DHS), the Illinois Department of Health Care and Family Services (HFS), the American Diabetes Association, the American Association of Diabetes Educators, Stanford University Patient Education Center, the Illinois Pharmacists Association, and six local health departments in suburban Cook, DuPage, Kane, Lake, Kankakee and Will counties.

The heart of Illinois’ public health system includes the Department and 97 local health departments. Local health departments cover 100 of Illinois’ 102 counties and 99.8 percent of the state’s population. Part of the strategy in the use of CDASH funds is to strengthen the capacity of local health departments to serve as the community’s first resource for training, technical assistance, and consultation on strategies to prevent and control chronic diseases.

Illinois has 879 school districts. The ISBE’s Learning Standards and Early Learning and Development Standards provide a policy framework for improving education, including health promotion and health education, in Illinois’ schools. The Department will work in partnership with ISBE and local schools to target communities to improve health education, healthy environments and worksite wellness by using the Coordinated School Health (CSH) model.

Illinois has nearly 200 hospitals. The Department will expand its existing partnership with the Illinois Hospital Association to examine nutrition standards in Illinois hospitals, sodium
reduction in community settings and collaborate on the development of certified DSME in hospital settings.

Illinois’ Medicaid program is undergoing a significant change. Three years ago, Illinois enacted legislation to require 50 percent of Illinois’ Medicaid beneficiaries be served through managed care arrangements by January 1, 2015 in order to control costs. As Illinois Medicaid changes from a fee-for-service to a capitated payment structure, reimbursement for discrete services (such as DSME) will be replaced by the analysis of plan performance data to ensure Medicaid recipients are receiving high-quality patient care. The Department is working with HFS, Illinois’ Medicaid agency, on managed care contracting and performance monitoring regarding patients with chronic conditions.

Illinois also is engaged in the development of a statewide health care information exchange (funded through the federal Health Information Technology for Economic and Clinical Health Act, or HITECH, Act of 2009) and was awarded funds for the development of the health insurance marketplace through the Affordable Care Act. The Department and other partners are working with the Office of the Governor on both of these projects to ensure evidence-based strategies for the treatment of diabetes and other chronic diseases are addressed by marketplace health insurance plans and to ensure appropriate performance data are used to improve the quality of clinical care.

Responsibility for Illinois’ Maternal and Child Health Services Block Grant and several related programs, including the School Health Program, transferred July 1, 2013 from DHS to the Department. The School Health Program includes continuing education for school nurses, grants to implement the CSH model and a network of school-based or school-linked health centers.

The Department receives funds from CDC for several chronic disease programs and also was a previous Community Transformation Grant recipient. The strategies the Department is implementing in the CDASH program build upon, coordinate and leverage these federal resources. The Department is using the CDASH funds to target a six-county area in Illinois to concentrate school health, hospital, worksite and self-management education efforts. These six counties represent 41 percent of the state’s population and were not previously served through the Department’s or other community transformation grants. The Department will continue its collaboration with the Active Transportation Alliance (ATA) to provide training, technical assistance and other resources on Complete Streets and Safe
Routes to Schools. The local health departments in the CDASH target area will participate in training and work in local communities to implement these models.

The Department is conducting health system interventions in two ways for CDASH. First, at the state level, the Department is advocating for and monitoring reporting of National Quality Forum (NQF) measure 018 (regarding hypertension management) and measure 059 (regarding diabetes management) by eligible professionals who have met Stage 2 of Meaningful Use reporting requirements and who are transmitting data to Illinois’ Health Information Exchange (HIE). Illinois’ HIE is in development by the Governor’s Office of Health Information Technology (OHIT) under the guidance of the Illinois Health Information Exchange Authority, which has been established by state law. The Department will advocate through the authority for reporting of NQF measures 018 and 059 (and related measures) to assess the performance of Medicaid and private managed care plans.

Second, the Department will facilitate analysis and reporting of these performance measures through the “Public Health Node,” which the Department developed to support reporting of public health meaningful use data. The node is a structure for receiving, standardizing, analyzing and reporting Stage 1 Meaningful Use indicators. The node uses the open-source PopHealth software (approved by the Office of the National Coordinator) for public health surveillance and to analyze data and to develop performance dashboards for interested providers. The node is being incorporated into the HIE this year. Responsibility for development and use of the node rests with the Department’s Division of Patient Safety and Quality (DPSQ).

The DPSQ also is working with the CDASH program on the Healthy Hearts campaign. DPSQ staff use the PopHealth to help several federally-qualified health centers (FQHCs) in the previous We Choose Health target area to analyze data regarding hypertension management and then work with these FQHCs and their local health departments to develop clinical and community strategies to address risk behavior and to reduce the incidence of uncontrolled hypertension in the target area. For the CDASH Program, the Department will expand Healthy Hearts to work with FQHCs and local health departments in the target area, and broaden the focus to include diabetes and team-based care.

The Department will continue working at the state and community levels to increase access to DSME. At the state level, the Department will work with health insurance carriers (Medicaid and private health insurance plans sold through the Illinois Insurance Marketplace) to include
DSME as part of the standards of care for patients with diabetes and monitor the quality of care through reports from Illinois’ Health Information Exchange.

The Department will use a couple of strategies at the community level, including funding six local health departments in the target area to assess diabetes self-management programs in their counties to determine availability, services provided, geographic locations, capacity, utilization patients, reimbursement and coverage policies, referring practices, facilitators and barriers. In addition, the Department will leverage its partnership with IHA and local health departments to provide support and technical assistance to hospitals, FQHCs and clinics to assist them in establishing DSME programs.

The Department will establish a new collaboration with the Illinois Pharmacists Association to expand Medication Therapy Management (MTM) for patients with hypertension and diabetes. The Department will work with the association to develop and distribute to pharmacists materials for medication adherence and patient self-management plans. The Department will advocate for coverage of MTM through Medicaid and commercial insurance. Applying the Enhanced Chronic Disease Model, local health departments will collaborate with local and chain pharmacies to increase the use of MTM programs in high risk, vulnerable populations.
IV. Development or revision of a detailed action plan for battling diabetes with a range of actionable items for consideration by the General Assembly. The plan shall identify proposed action steps to reduce the impact of diabetes, pre-diabetes and related diabetes complications. The plan shall also identify expected outcomes of the action steps proposed for the 2 years following the submission of the report while also establishing benchmarks for controlling and preventing relevant forms of diabetes.

The Illinois State Diabetes Commission was an essential partner in developing the Illinois State Diabetes Plan. As required by statute, the commission scheduled and held public hearings to gather information on issues pertaining to the prevention, treatment and control of diabetes. In addition, the commission collaborated with the Department’s CDASH Program to ensure maximum reach and to promote education related to the nature and extent, underlying causes, and prevention and control of diabetes.

The commission members worked with the Department’s Diabetes Prevention and Control Program and CDASH staff to identify workgroup focus areas that helped in setting up strategic actions goals for reducing the burden of diabetes through the Illinois Diabetes State Plan. The state plan establishes a five-year roadmap for addressing diabetes prevention and control. The workgroups, which included commissioners, convened and addressed actions needed on an individual, group and systems level to make progress on diabetes prevention and control efforts. Other input for the workgroups came from the Department’s Diabetes Prevention and Control staff, Department chronic disease programs, grantees, CDC, ITQL, other private and public partnerships to the Department, and diabetes caucus and coalition members. The workgroup areas targeted to assist in creating the state plan were: Data, Surveillance and Evaluation; Clinical and Patient Care; and Preventative Health and Community Awareness.

The Illinois Diabetes State Plan addresses a comprehensive set of policy and program recommendations that will have an impact on improving the quality of life for Illinois residents, particularly the most at-risk for and vulnerable to diabetes. The plan is intended to provide state and local agencies, health care providers, organizations, funding agencies, policy and decision makers, and consumer’s, direction and support for creating a system of prevention that proactively promotes a comprehensive and integrated approach to reducing the morbidity and mortality of diabetes. The plan is a call to action, urging everyone to take a role in reducing the burden of diabetes in Illinois. Achieving the goals will take:

- Action of many partners applying different and creative solutions to change environments, systems, communities and individual behaviors.
• Active involvement by public and private partners in communities to assure priority areas in diabetes are addressed.

• Statewide groups working to achieve policy changes at the state and national level that support strategies and actions plans noted in the plan.

• Individual residents taking action to change their environments and lifestyle behaviors.

• Review of the goals, strategies and action plan.

• Partnering with the Illinois State Diabetes Commission or working with the Illinois Department of Public Health CDASH and Diabetes Prevention and Control programs in preventing and controlling diabetes.

• Partnering with other organizations and local health departments to share goals and strategies for preventing and controlling diabetes.

The Diabetes State Plan evaluation will involve two components: 1) assessment of how the Department, local health entities and stakeholders utilize the plan; and, 2) assessment of goals and objectives outlined in the plan.

In November 2014, the Illinois Diabetes State Plan was disseminated to the Illinois State Diabetes Commission and partners involved in the plan’s development. The distribution list included a broad range of state and local chronic disease professionals representing academic, government, public health, non-profit, business and advocacy organizations that represent people affected by diabetes and related risk factors.

An online survey was developed by the Department’s epidemiology and surveillance team and will be sent to state and local partners to assess the use and effectiveness of the plan. The Department’s CDASH Program staff will collect and analyze results and provide feedback to partners. Findings, including barriers and lessons learned, will be used to adjust program efforts and to ensure continuous quality improvement. Accomplishments will be shared through Department communications, state and local success stories, and will be reported during regularly scheduled diabetes commission meetings.
The finalized goals, strategies and action steps will be evaluated based on identified criteria to assess level of accomplishment and impact. The epidemiology and surveillance team will conduct data analysis and report findings to the Department’s CDASH Program, diabetes commission and partners.

The Illinois Diabetes State Plan is attached with this report to the Illinois General Assembly and can be found on the Department’s website at:
V. The development of a detailed budget blueprint identifying needs, costs and resources required to implement the plan identified in the Illinois Diabetes State Plan. The blueprint shall include a budget range for all options presented in the plan for consideration by the General Assembly.

According to the CDC, chronic disease public health practitioners must make measurable contributions to the prevention and control of chronic disease and, by doing so, improve quality of life, increase life expectancy, improve the health of future generations, increase productivity and help control health care spending.

It is increasingly recognized that individual health depends on societal health and healthy communities. In addition to having strong medical care systems, healthy communities promote and protect health across the lifespan, across a variety of sectors and through a range of policies, systems and environmental supports that put health in the people’s hands and give Americans even greater opportunity to take charge of their health.

Additional funding for diabetes prevention, education and control would be used to implement and enhance the following activities in diabetes high burden areas in the state:

A. Improve and expand diabetes surveillance and monitoring throughout the state to assess the burden of diabetes and guide policy development and evaluation activities to inform, to prioritize, to deliver and to monitor diabetes interventions at state and community levels.

Estimated budget needs for this activity = $150,000

The estimated budget amount will fund one full-time epidemiologist and surveillance team staff to be dedicated to expanding diabetes surveillance and evaluation activities. The additional staff person will address the necessity of collecting and analyzing diabetes data and information in order to develop and to deploy effective interventions, to identify and to address gaps in program delivery, and to monitor and evaluate progress in achieving program goals.

The data and information collected will be used routinely to inform decision makers and the public regarding the burden of diabetes and the associated risk factors, public health impact, effectiveness of preventive interventions and program delivery. Communication efforts will be data driven and focus on the presentation of data findings to stakeholders, policy and decision makers, partners, funders and the public.
Strategy 1: Enhance the capacity of statewide surveillance to improve the collection, quality and scope of population-based diabetes-related data.

Strategy 2: Expand surveillance to enhance collection and analysis of data across the life span for those at higher risk for diabetes.

Strategy 3: Develop and distribute diabetes surveillance, epidemiology and evaluation reports on a consistent basis.

Strategy 4: Develop data collection activities for analyzing new data sources to monitor prediabetes.

B. Collaborate with communities to increase the number of evidence-based policies, systems and environmental change strategies to promote healthy lifestyles and to improve diabetes management in schools, worksites and communities.

**Estimated budget needs for this activity = $700,000**

This will address needed improvements in social and physical environments that make healthy behaviors easier and more convenient. A healthy society delivers healthier students to schools, healthier workers to businesses and employers and a healthier population to the health care system. These types of interventions support and reinforce healthy choices and healthy behaviors and make it easier for people to manage their health. They have broad reach, sustained health impact and are the best public health approaches. The estimated budget will fund 7-10 local health departments (LHDs) in diabetes high prevalent counties to collaborate with communities, schools and early childcare education centers to facilitate and to support educational opportunities, resources and awareness materials on pre-diabetes and diabetes prevention and control. The LHDs also will provide resources and support to communities, to schools and to early childcare providers on joint use agreements, safe routes, complete streets and active transportation that will help establish healthy environments. The LHDs will promote the establishment, improvement and accessibility and use of outdoor spaces, including streets, parks, recreation areas, trails and other public places that are safe, tobacco-free, appropriate and available for physical activity and play, and have healthy food policies. In addition, the LHDs will promote the availability, accessibility and affordability of healthful eating by promoting the use of community gardens and farmers’
markets, increasing the availability of fresh produce at convenience stores and locating grocery stores and markets that offer fruits and vegetables in underserved communities.

Strategy 1: Collaborate with partners to assess local needs and implement interventions (e.g., public education efforts, active transportation and environmental change policies) that are culturally appropriate and support healthy lifestyles and diabetes self-management skills.

Strategy 2: Increase the number of environmental approaches (policy, system and environmental) addressing diabetes, promoting healthy lifestyles and reinforcing healthful behaviors in Illinois worksites.

Strategy 3: Collaborate with communities, schools, early childcare providers and food service institutions to implement and evaluate policies and interventions to help prevent type 2 diabetes and to ensure safe and quality diabetes care across the life span.

C. Ensure health systems and providers promote and provide accessible preventive services so persons with diabetes and those at risk will receive appropriate screening to promote early detection of disease and complications, self-management education, and ongoing management to reduce risk of disease and complications.

Estimated budget needs for this activity = $300,000

This will address improving the effective delivery and use of clinical and other preventive services in order to prevent disease, to detect disease early, and to reduce or eliminate risk factors and mitigate or manage complications. Health systems interventions improve the clinical environment to more effectively deliver quality preventive services and help people more effectively use and benefit from those services. The result: some chronic diseases and conditions will be avoided completely and others will be detected early, or managed better, to avert complications and progression and improve health outcomes. Health system and quality improvement changes that include electronic health records with features to prompt clinicians and deliver feedback on performance can encourage providers and health plans to focus on preventive services. Effective outreach to consumers and reducing barriers to accessing these services is key, as coverage alone will not ensure use of preventive services.

The estimated budget will allow the Department to expand upon new partnerships for sharing diabetes research, resources and strategies with professionals, providers, health and community organizations and other collaborative partners. The Department also will be able to enhance use of technology advancements for improving coordination of care and quality
improvement within health systems. The Department will have funds to be able to provide access to supportive educational messaging for diabetes prevention and control, healthy lifestyle behaviors and self-management programs. The Department also will identify and utilize communication strategies to inform partners of initiatives to increase diabetes prevention and control activities and share progress and outcome data.

Strategy 1: Improve the delivery of comprehensive diabetes prevention and control through the Department’s Diabetes Prevention and Control Program resources, and other culturally-appropriate and evidence-based tools to health systems, payers, health professionals and community partners.

Strategy 2: Promote health professional education opportunities to enhance lifestyle modification and risk reduction, behavior change and disease management.

Strategy 3: Enhance partnerships and communication with providers, health and community organizations, payers and other relevant partners to support standards of care of diabetes.

D. Ensure those with or at high risk for diabetes have access to quality community resources to best manage their conditions or to reduce disease risk.

**Estimated budget needs for this activity = $800,000**

This will address ensuring communities support and clinics provide referrals of patients to programs that improve management of chronic conditions. Community-clinical linkages help ensure people with or at high risk of chronic diseases have access to community resources and support to prevent, to delay or to manage chronic conditions once they occur. These supports include interventions, such as clinical referral, community delivery and third-party payment for effective programs that increase the likelihood people with heart disease, diabetes or pre-diabetes and arthritis will be able to “follow the doctor’s orders” and take charge of their health. This includes improving their quality of life, averting or delaying onset or progression of disease, avoiding complications (including during pregnancy) and reducing the need for additional health care.

The estimated budget will allow the Department to increase community educational opportunities to support diabetes self-management skills. The Department will be able to provide technical assistance and support, planning, implementation and evaluation of strategies and interventions that can be adapted to meet local community needs in diabetes high prevalence areas. The Department will be able to fund partnerships to increase referrals to the NDEP and Chronic Disease Self-Management and Diabetes Self-Management Programs through the Illinois Tobacco Quitline. The Department will expand reach of American Diabetes
Association (ADA) recognized, American Association of Diabetes Educators (AADE) accredited and or Stanford licensed diabetes self-management education programs. These programs will be strategically placed in diabetes high prevalent areas in the state. The Department also will be able to provide technical assistance to organizations throughout the state, including providers/health care settings, community-based organizations, local health departments, faith-based organizations and worksites looking to establish diabetes self-management education (DSME) programs and obtain recognition/accreditation/licensure for their program. In addition, the Department will identify and support new and/or enhanced models of DSME reimbursement to facilitate health care coordination and to reduce disparities in cost and quality of care for individuals with third party providers. Finally, the Department will continue to collaborate with ADA and AADE to research funding opportunities to fund future DSME locations within diabetes high prevalence areas.

Strategy 1: Enhance clinical-community awareness of availability of evidence-based interventions and process of referring patients to self-management education classes.

Strategy 2: Ensure reliability, accuracy and cultural relevance of clinical-community access to patient education resources and information.

Strategy 3: Increase the number of evidence-based interventions offered to at-risk populations in diabetes high prevalence areas.

Strategy 4: Enhance the ability of state and local providers to establish a reimbursement mechanism for implementation of evidence-based interventions.

U.S. Centers for Disease Control and Prevention, Chronic Disease Prevention and Health Promotion. Chronic Disease Cost Calculator Version 2:  
http://www.cdc.gov/chronicdisease/resources/calculator/index.htm

State Public Health Actions to Prevent and Control Diabetes, Heart Disease, Obesity and Associated Risk Factors and Promote School Health, U.S. Centers for Disease Control and Prevention, CDC RFA-DP13-1305

Illinois Department of Health Care and Family Services, Medicaid Program, 2013 Medicaid Enrollment

Illinois Department of Public Health, Hospital Discharge Dataset

Illinois Department of Public Health, Vital Statistics

Barr VJ, et al. The Expanded Chronic Care Model: An Integration of Concepts and Strategies from Population Health Promotion and the Chronic Care Model. Hospital Quarterly. 2003. Vol. 7(1); 73-82.

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