

JOINT STATE GOVERNMENT COMMISSION

General Assembly of the Commonwealth of Pennsylvania

DIABETES PROGRAMS IN PENNSYLVANIA

March 2015



*Serving the General Assembly of the
Commonwealth of Pennsylvania Since 1937*

JOINT STATE GOVERNMENT COMMISSION

Room 108 Finance Building
613 North Street
Harrisburg, PA 17120-0018

Telephone: 717-787-4397
Fax: 717-783-9380
E-mail: jntst02@legis.state.pa.us
Website: <http://jsg.legis.state.pa.us>

The Joint State Government Commission was created in 1937 as the primary and central non-partisan, bicameral research and policy development agency for the General Assembly of Pennsylvania.¹

A fourteen-member Executive Committee comprised of the leadership of both the House of Representatives and the Senate oversees the Commission. The seven Executive Committee members from the House of Representatives are the Speaker, the Majority and Minority Leaders, the Majority and Minority Whips, and the Majority and Minority Caucus Chairs. The seven Executive Committee members from the Senate are the President Pro Tempore, the Majority and Minority Leaders, the Majority and Minority Whips, and the Majority and Minority Caucus Chairs. By statute, the Executive Committee selects a chairman of the Commission from among the members of the General Assembly. Historically, the Executive Committee has also selected a Vice-Chair or Treasurer, or both, for the Commission.

The studies conducted by the Commission are authorized by statute or by a simple or joint resolution. In general, the Commission has the power to conduct investigations, study issues, and gather information as directed by the General Assembly. The Commission provides in-depth research on a variety of topics, crafts recommendations to improve public policy and statutory law, and works closely with legislators and their staff.

A Commission study may involve the appointment of a legislative task force, composed of a specified number of legislators from the House of Representatives or the Senate, or both, as set forth in the enabling statute or resolution. In addition to following the progress of a particular study, the principal role of a task force is to determine whether to authorize the publication of any report resulting from the study and the introduction of any proposed legislation contained in the report. However, task force authorization does not necessarily reflect endorsement of all the findings and recommendations contained in a report.

Some studies involve an appointed advisory committee of professionals or interested parties from across the Commonwealth with expertise in a particular topic; others are managed exclusively by Commission staff with the informal involvement of representatives of those entities that can provide insight and information regarding the particular topic. When a study involves an advisory committee, the Commission seeks consensus among the members.² Although an advisory committee member may represent a particular department, agency, association, or group, such representation does not necessarily reflect the endorsement of the

¹ Act of July 1, 1937 (P.L.2460, No.459) (46 P.S. § 65), amended by the act of June 26, 1939 (P.L.1084, No.380); the act of March 8, 1943 (P.L.13, No.4); the act of May 15, 1956 (1955 P.L.1605, No.535); the act of December 8, 1959 (P.L.1740, No.646); and the act of November 20, 1969 (P.L.301, No.128).

² Consensus does not necessarily reflect unanimity among the advisory committee members on each individual policy or legislative recommendation. However, it does, at a minimum, reflect the views of a substantial majority of the advisory committee, gained after lengthy review and discussion.

department, agency, association, or group of all the findings and recommendations contained in a study report.

Over the years, nearly one thousand individuals from across the Commonwealth have served as members of the Commission's numerous advisory committees or have assisted the Commission with its studies. Members of advisory committees bring a wide range of knowledge and experience to deliberations involving a particular study. Individuals from countless backgrounds have contributed to the work of the Commission, such as attorneys, judges, professors and other educators, state and local officials, physicians and other health care professionals, business and community leaders, service providers, administrators and other professionals, law enforcement personnel, and concerned citizens. In addition, members of advisory committees donate their time to serve the public good; they are not compensated for their service as members. Consequently, the Commonwealth of Pennsylvania receives the financial benefit of such volunteerism, along with the expertise in developing statutory language and public policy recommendations to improve the law in Pennsylvania.

The Commission periodically reports its findings and recommendations, along with any proposed legislation, to the General Assembly. Certain studies have specific timelines for the publication of a report, as in the case of a discrete or timely topic; other studies, given their complex or considerable nature, are ongoing and involve the publication of periodic reports. Completion of a study, or a particular aspect of an ongoing study, generally results in the publication of a report setting forth background material, policy recommendations, and proposed legislation. However, the release of a report by the Commission does not necessarily reflect the endorsement by the members of the Executive Committee, or the Chair or Vice-Chair of the Commission, of all the findings, recommendations, or conclusions contained in the report. A report containing proposed legislation may also contain official comments, which may be used in determining the intent of the General Assembly.³

Since its inception, the Commission has published more than 350 reports on a sweeping range of topics, including administrative law and procedure; agriculture; athletics and sports; banks and banking; commerce and trade; the commercial code; crimes and offenses; decedents, estates, and fiduciaries; detectives and private police; domestic relations; education; elections; eminent domain; environmental resources; escheats; fish; forests, waters, and state parks; game; health and safety; historical sites and museums; insolvency and assignments; insurance; the judiciary and judicial procedure; labor; law and justice; the legislature; liquor; mechanics' liens; mental health; military affairs; mines and mining; municipalities; prisons and parole; procurement; state-licensed professions and occupations; public utilities; public welfare; real and personal property; state government; taxation and fiscal affairs; transportation; vehicles; and workers' compensation.

Following the completion of a report, subsequent action on the part of the Commission may be required, and, as necessary, the Commission will draft legislation and statutory amendments, update research, track legislation through the legislative process, attend hearings, and answer questions from legislators, legislative staff, interest groups, and constituents.

³ 1 Pa.C.S. § 1939 (“The comments or report of the commission . . . which drafted a statute may be consulted in the construction or application of the original provisions of the statute if such comments or report were published or otherwise generally available prior to the consideration of the statute by the General Assembly”).



General Assembly of the Commonwealth of Pennsylvania

JOINT STATE GOVERNMENT COMMISSION

Room 108 – Finance Building
Harrisburg, Pa 17120

717-787-4397
Fax 717-783-9380

March 2015

REP. FLORINDO J. FABRIZIO
Chairman

SEN. JOHN C. RAFFERTY, JR.
Vice Chairman

To the Members of the General Assembly of Pennsylvania:

EXECUTIVE COMMITTEE

Senate Members:

JOSEPH B. SCARNATI, III
President Pro Tempore

JAKE CORMAN
Majority Leader

JAY COSTA
Minority Leader

JOHN R. GORDNER
Majority Whip

ANTHONY H. WILLIAMS
Minority Whip

BOB MENSCH
Chair, Majority Caucus

WAYNE D. FONTANA
Chair, Minority Caucus

House Members:

MICHAEL C. TURZAI
Speaker

DAVE REED
Majority Leader

FRANK J. DERMODY
Minority Leader

BRYAN CUTLER
Majority Whip

MICHAEL K. HANNA
Minority Whip

SANDRA J. MAJOR
Chair, Majority Caucus

DAN B. FRANKEL
Chair, Minority Caucus

Administrative Staff:

GLENN J. PASEWICZ
Executive Director

STEPHEN F. REHRER
Counsel

This is the first of a series of reports by the Joint State Government Commission in response to the mandate of 2014 House Resolution 936 (Pr.'s No. 4098), which provides for an ongoing study of the public health problem posed by diabetes in Pennsylvania. The Commission's task is to describe, evaluate, and make recommendations to improve the Commonwealth's response. The incidence of diabetes increases with advancing age, especially after age 65. Because the average age of Pennsylvania's citizenry is increasing, it is almost certain that its incidence of diabetes will increase for the foreseeable future.

Public health initiatives can assist the Commonwealth's residents to reduce the incidence of diabetes and to minimize its baleful effects. Educating the public about diabetes is a vital part of the strategy; people must be aware of the measures they can take to avoid the disease and to take effective measures if they do fall victim to it. Similarly, public health authorities must be aware of which measures are most effective so that resources can be directed to optimize their impact.

We hope these reports will assist the Commonwealth in mounting a vigorous and effective response to a serious and growing public health problem.

Respectfully submitted,

Glenn J. Pasewicz
Executive Director

CONTENTS

Executive Summary	1
Diabetes Programs in Pennsylvania	3
Diabetes Mellitus	5
<i>Health and Economic Effects of Diabetes</i>	6
Diabetes Programs	17
<i>Department of Health</i>	17
<i>Pennsylvania Health Care Cost Containment Council</i>	22
<i>Other State Agencies</i>	23
<i>University of Pittsburgh—Diabetes Prevention Support Center (DPSC)</i>	24
Appendix A: 2014 House Resolution No. 936	27

EXECUTIVE SUMMARY

The report under 2014 House Resolution 936 to be issued in March 2015 is responsive to the following portion of the resolution:

RESOLVED, That the Joint State Government Commission provide the initial report on the estimated number of individuals with diabetes, pre-diabetes or related diabetes who are served by each department or agency and any additional information the commission deems appropriate to the General Assembly by March 1, 2015.

As background, the report includes a description of Type 1 diabetes, Type 2 diabetes, and gestational diabetes. The report emphasizes that the prevalence of diabetes is almost certain to increase as the average age of Pennsylvania's population increases. The following statistics indicate the magnitude of the challenge posed by this condition:

- 1.2 million people in Pennsylvania are living with diabetes, and almost 0.9 million have prediabetes or borderline diabetes.
- Diabetes doubles the death rate of those who have it. It kills about nine people in Pennsylvania every day, or 3,184 in 2010. It is the seventh leading cause of death nationwide and in Pennsylvania.
- The prevalence of diabetes in Pennsylvania has nearly doubled since 1995—from 57 per 1,000 in that year to 103 per thousand in 2010.
- In 2014, there were about 25,000 hospital admissions in Pennsylvania or of Pennsylvania residents for diabetes and 347,000 admissions of people with diabetes.

The lion's share of the responsibility for addressing this condition is with the Department of Health. The Department works primarily through health care providers rather than individual patients. The following are its major programs under the general designation Diabetes Prevention and Control Program (DPCP):

- The Juvenile Diabetes Cure Research Tax Check-Off Program applies funds from the income tax check-off to fund research into Type 1 diabetes.
- Diabetes Prevention Program (DPP) supports regional or local lifestyle change intervention programs to help persons at risk for developing diabetes to avoid becoming victims of it. An especially well-developed program of this kind is provided by the Diabetes Prevention Support Center of the University of Pittsburgh.

- Diabetes Self-Management Education (DSME) funds accredited programs to assist persons living with diabetes to manage the condition and its complications.
- Increasing diagnoses and referrals through Health Information Technology, focusing on the use of electronic health records.

The Pennsylvania Health Care Cost Containment Council has collected a wealth of information about diabetes, including a report on hospitalizations arising from ten potentially preventable conditions, including four that relate to diabetes: long-term complications, short-term complications uncontrolled diabetes, and lower extremity amputations on diabetes patients.

The Department of Aging assisted over 83,000 persons with diabetes to defray prescription medication costs through its PACE and PACENET programs. The OPTIONS program assisted eligible residents with a wide array of home- and community based services.

The Department of Human Services assisted over 48,500 Medicaid recipients with diabetes through the Medical Assistance program.

DIABETES PROGRAMS IN PENNSYLVANIA

This is the first of a series of reports by the Joint State Government Commission (Commission) in response to the mandate of 2014 House Resolution No. 936 (HR 936). (The resolution is included in this report as Appendix A.) This resolution provides for an ongoing study of the public health problem posed by diabetes in Pennsylvania, and directs the Commission to describe, evaluate, and make recommendations for improving the Commonwealth's response. This report will describe the relevant programs of the agencies charged with implementing public health policy and with assisting persons with diabetes.⁴ We hope the reports issued pursuant to HR 936 will assist the Commonwealth in mounting a vigorous and effective response to a serious and growing public health problem, while respecting privacy and other rights of Pennsylvania residents.

Risk factors for diabetes include some that are beyond the individual's control, such as genetic vulnerability and age. The incidence of diabetes increases with advancing age. Because the average age of Pennsylvania's citizenry is increasing, it is almost certain that the incidence of diabetes will increase for the foreseeable future.

Other risk factors are controllable. Diabetes is strongly associated with unhealthy diet, obesity, and lack of exercise. Improvement in these areas may not only prevent but can often reverse the damage caused by the disease. While there is currently no cure, effective treatments can also slow the progression of diabetes and enable many of its victims to lead long and healthy lives. These treatments include insulin injection, drug therapy, and lifestyle changes such as healthier diet, more exercise, careful monitoring of blood sugar levels and prompt medical intervention in response to complications, such as blurred vision and sores on the feet.

Public health initiatives can assist the Commonwealth's residents to reduce the incidence of diabetes and to minimize its baleful effects. Educating the public about diabetes is a vital part of the strategy, so that people can be aware of the measures they can take to avoid the disease and to respond effectively if they do fall victim to it.

⁴ This report focuses on the described on page 4, lines 8-14 of HR 916. If new information regarding programs and the number of persons assisted by them is uncovered by Commission staff, it will be included in the next report under this resolution.

DIABETES MELLITUS

Diabetes (whose full scientific name is diabetes mellitus) is a group of diseases marked by high levels of blood glucose resulting from defects in insulin production, insulin action or both.⁵ Diabetes can lead to serious complications and premature death, but people with diabetes can take steps to control the disease and lower the risk of complications.

Types of diabetes

Type 1 diabetes was previously called insulin-dependent diabetes mellitus or juvenile-onset diabetes. Type 1 diabetes develops when the body's immune system destroys pancreatic beta cells, the only cells in the body that make the hormone insulin that regulates blood glucose. To survive, people with type 1 diabetes must have insulin delivered by injection or a pump. This form of diabetes usually strikes children and young adults, although disease onset can occur at any age. In adults, type 1 diabetes accounts for five to ten percent of all diagnosed cases of diabetes. Risk factors for type 1 diabetes may be autoimmune, genetic, or environmental. There is no known way to prevent type 1 diabetes. Several clinical trials for preventing type 1 diabetes are currently in progress or are being planned.

Type 2 diabetes was previously called non-insulin-dependent diabetes mellitus or adult-onset diabetes. In adults, type 2 diabetes accounts for about 90 to 95 percent of all diagnosed cases of diabetes. It usually begins as insulin resistance, a disorder in which the cells do not use insulin properly. As the need for insulin rises, the pancreas gradually loses its ability to produce it. Type 2 diabetes is associated with older age, obesity, family history of diabetes, history of gestational diabetes, physical inactivity, and race or ethnicity. African-Americans, Hispanic or Latino Americans, American Indians and some Asian Americans and Native Hawaiians or other Pacific Islanders are at particularly high risk for type 2 diabetes and its complications. Type 2 diabetes in children and adolescents, although still rare, is being diagnosed more frequently among American Indians, African-Americans, Hispanic or Latino Americans, Asians, and Pacific Islanders.

Gestational diabetes is a form of glucose intolerance diagnosed during pregnancy. Gestational diabetes occurs more frequently among African-Americans, Hispanic or Latino Americans, and American Indians. It is also more common among obese women and women with a family history of diabetes. During pregnancy, gestational diabetes requires treatment to normalize maternal blood glucose levels to avoid complications in the infant. Immediately after pregnancy, five to ten percent of women with gestational diabetes are found to have diabetes, usually type 2. Women who have had gestational diabetes have a 40 to 60 percent chance of developing diabetes in the next five to 10 years.

⁵ This part is adapted from Pennsylvania Department of Health, Bureau of Health Promotion and Risk Reduction, *Chronic Disease in Pennsylvania 2011*, 65-80, <http://www.health.state.pa.us/pdf/ChronicDiseaseBurdenReport.pdf>. It also includes observations by Tomas J. Aguilar, Director of PADOH's Bureau of Health Promotion and Risk Reduction.

Other types of diabetes result from specific genetic conditions (such as maturity-onset diabetes of youth), surgery, medications, infections, pancreatic disease and other illnesses. Such types of diabetes account for one to five percent of all diagnosed cases.

Health and Economic Effects of Diabetes

National. Diabetes appeared as the seventh leading cause of death in the U.S. in 2007, but it may rank even higher, as it is likely to be underreported as a cause of death. The risk of death among people with diabetes is about twice that of people without diabetes of a similar age.

In the U.S., about 1.9 million new cases of diabetes are diagnosed each year in people age 20 and older each year.⁶ There were an estimated 25.8 million children and adults in the United States—8.3 percent of the population—with diabetes in 2010. Of those, 18.8 million were diagnosed and seven million people were undiagnosed. The prevalence of diabetes in people age 20 and older is higher in men than in women (13 million or 11.8 percent for men vs. 12.6 million or 10.8 percent for women).

The national age-adjusted diabetes mortality rate decreased from 27.5 per 100,000 population in 2000 to 21.3 per 100,000 population in 2008. Female diabetes mortality rates consistently decreased every year between 2000 and 2008. The overall male diabetes mortality rate decreased as well, but with slight fluctuations between 2000 and 2008. The mortality rate differences between males and females increased between 2000 and 2007, with a difference of 18.5 percent in 2000 to 55.5 percent in 2007. The difference between males and females narrowed in 2008 when compared to 2007.

National survey data indicate 7.1 percent of non-Hispanic whites, 8.4 percent of Asian Americans, 12.6 percent of non-Hispanic blacks and 11.8 percent of Hispanics age 20 or older had been diagnosed with diabetes between 2004 and 2006 after adjusting for population age differences.

Adults with diabetes have heart disease death rates about two to four times higher than adults without diabetes. The risk for stroke is also about two to four times higher among people with diabetes than those without diabetes.

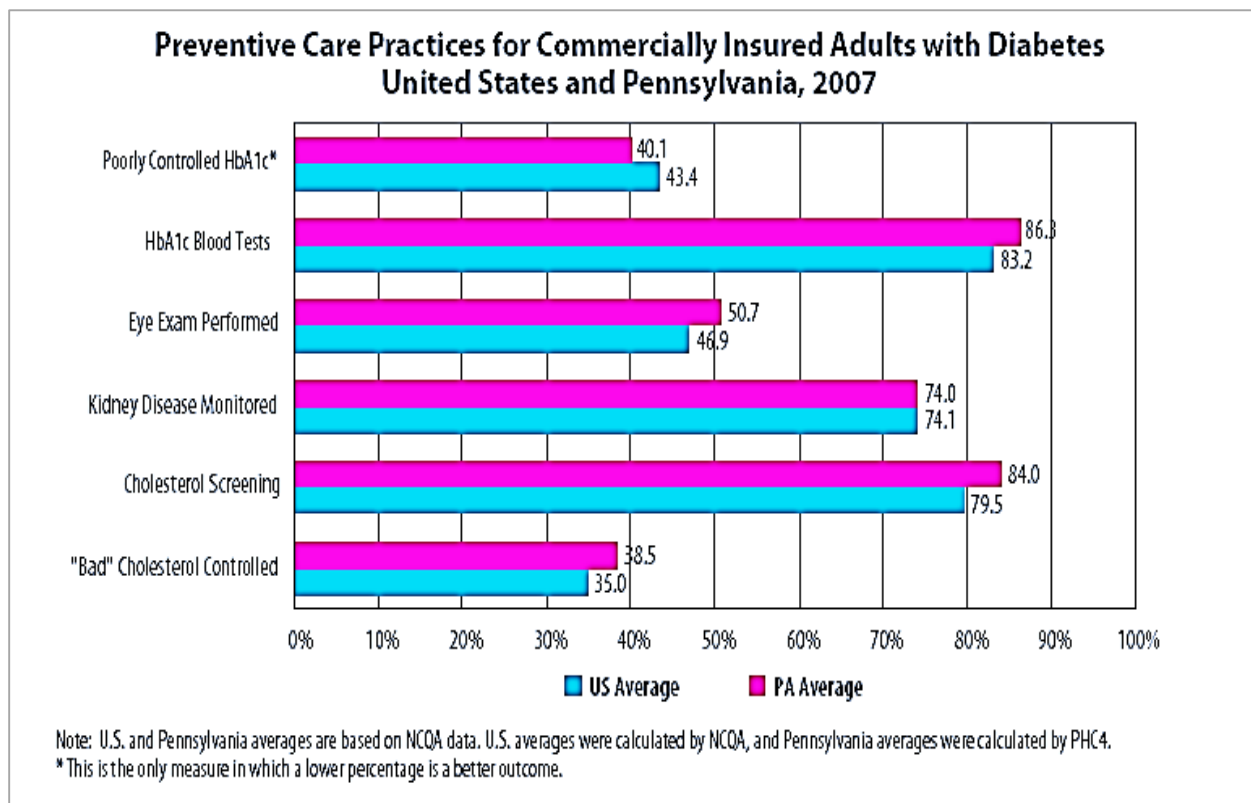
Diabetes is the leading cause of new cases of blindness among adults 20–74 years of age. Diabetic retinopathy causes 12,000 to 24,000 new cases of blindness in the U.S. each year. Total costs of diagnosed diabetes in the U.S. in 2007 are about \$116 billion in direct medical costs and \$58 billion in indirect costs (disability, work loss, and premature mortality)—a total of \$174 billion. After adjusting for population, age and sex differences, average annual medical expenditures among people with diagnosed diabetes were 2.3 times higher than what expenditures would be in the absence of diabetes.

⁶ Statistics in this section are from Centers for Disease Control, Diabetes Fact Sheet, 2011 and Pennsylvania Department of Health, “2013 Pennsylvania Diabetes Fact Sheet.”

For persons with diabetes, self-management education or training is a key step in improving health outcomes and quality of life. Education focuses on self-care behaviors, such as healthy eating, being active, and monitoring blood sugar. It is a collaborative process in which diabetes educators help people with or at risk for diabetes gain the knowledge and problem-solving and coping skills needed to successfully self-manage the disease and its related conditions.

Pennsylvania. According to data from the Pennsylvania Health Care Cost Containment Council (PHC4) for FY 2014, there were 24,826 admissions to Pennsylvania hospitals where diabetes was the principal reason for the hospital stay. Approximately 96 percent of these hospitalizations were for Pennsylvania residents. The FY 2014 data also shows that there were 340,356 hospital admissions where diabetes was a secondary diagnosis; that is, diabetes was not the principal reason the patient was hospitalized, but the patient had diabetes. Approximately 95 percent of these hospitalizations were for Pennsylvania residents.⁷ Thus about 347,000 Pennsylvania citizens were hospitalized in Pennsylvania where diabetes was either the primary or a secondary diagnosis.

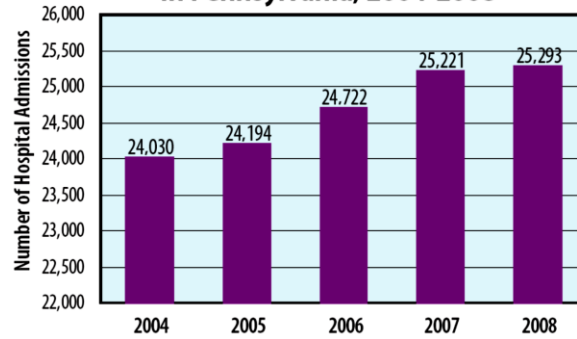
PHC4 has compiled a wealth of information regarding the effects of diabetes in Pennsylvania, as shown in the following charts and tables.



SOURCE: Pennsylvania Health Care Cost Containment Council, “Chronic Health Conditions in Pennsylvania” (June 2010), 11.

⁷ E-mail from Flossie Wolf, Pennsylvania Health Care Cost Containment Council to Commission staff, February 5, 2015.

Hospital Admissions* for Diabetes in Pennsylvania, 2004-2008



* Includes Pennsylvania and out-of-state residents.

Diabetes Hospitalizations in Pennsylvania, 2008

	Number	Percent	Rate*	Average Length of Stay	Total Days
Total	24,456	100.0%	1.96	5.0	121,845
By Age Group					
<1	12	<0.1%	0.08	10.3	124
1-17	1,294	5.3%	0.50	2.4	3,151
18-44	5,894	24.1%	1.35	3.7	21,922
45-64	8,619	35.2%	2.52	5.4	46,499
65-84	7,186	29.4%	4.49	5.9	42,141
85+	1,451	5.9%	4.68	5.5	8,008
By Gender					
Male	12,747	52.1%	2.10	5.1	65,549
Female	11,709	47.9%	1.83	4.8	56,296
By Race/Ethnicity					
White (non-Hispanic)	15,943	65.2%	1.57	5.0	80,257
Black (non-Hispanic)	6,356	26.0%	4.97	4.9	30,975
Hispanic [†]	1,120	4.6%	1.89	4.7	5,231
Other	1,037	4.2%	2.35	5.2	5,382

* Per 1,000 residents. Hospitalization rates take into account the proportional differences among segments of the population, such as age, gender and race/ethnicity. The rates for a specific demographic only include residents for that demographic.

[†] Internal PHC4 analysis suggests that Hispanic ethnicity may be slightly underreported.

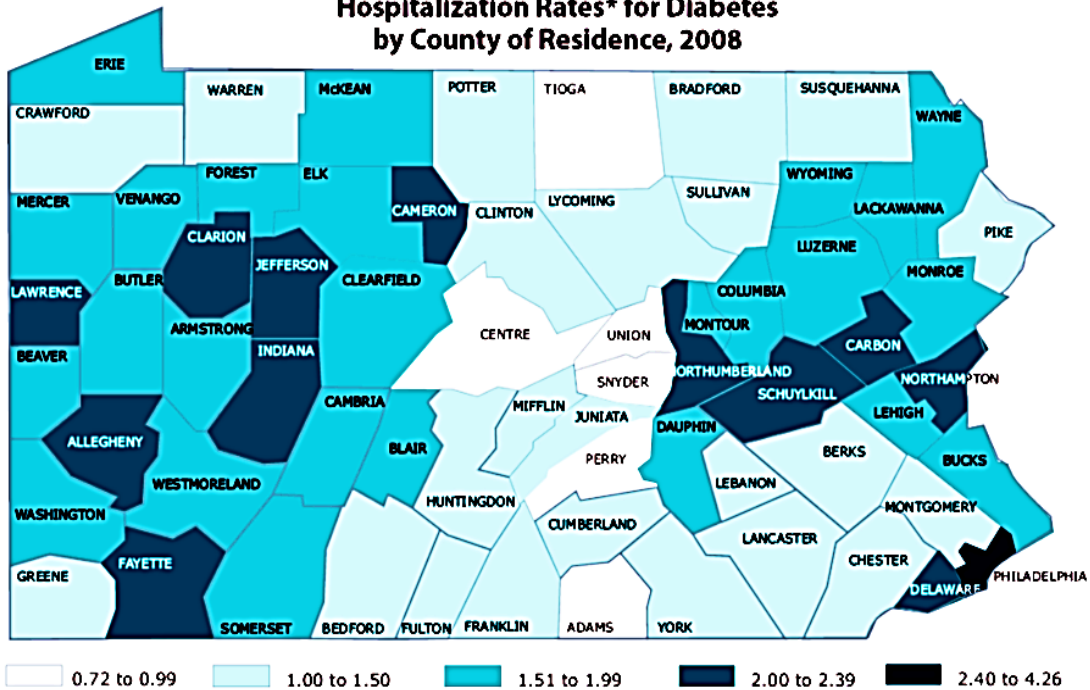
SOURCE: Pennsylvania Health Care Cost Containment Council, "Chronic Health Conditions in Pennsylvania" (June 2010), 12.

Diabetes Hospitalization Rates* Pennsylvania and United States

	2004		2007		2008
	PA	US	PA	US	PA
Total	1.88	1.75	1.96	1.77	1.96
By Age Group					
<1	0.04	NA	0.07	NA	0.08
1-17	0.47	0.45	0.50	0.40	0.50
18-44	1.23	1.22	1.30	1.33	1.35
45-64	2.45	2.54	2.52	2.50	2.52
65-84	4.65	4.57	4.74	4.29	4.49
85+	4.44	4.32	4.56	4.24	4.68
By Gender					
Male	1.99	1.80	2.11	1.87	2.10
Female	1.78	1.69	1.83	1.67	1.83

* Per 1,000 residents. Hospitalization rates take into account the proportional differences among segments of the population, such as age, gender and race/ethnicity. The rates for a specific demographic only include residents for that demographic.
NA - U.S. rate is not available for this age group.

Hospitalization Rates* for Diabetes by County of Residence, 2008



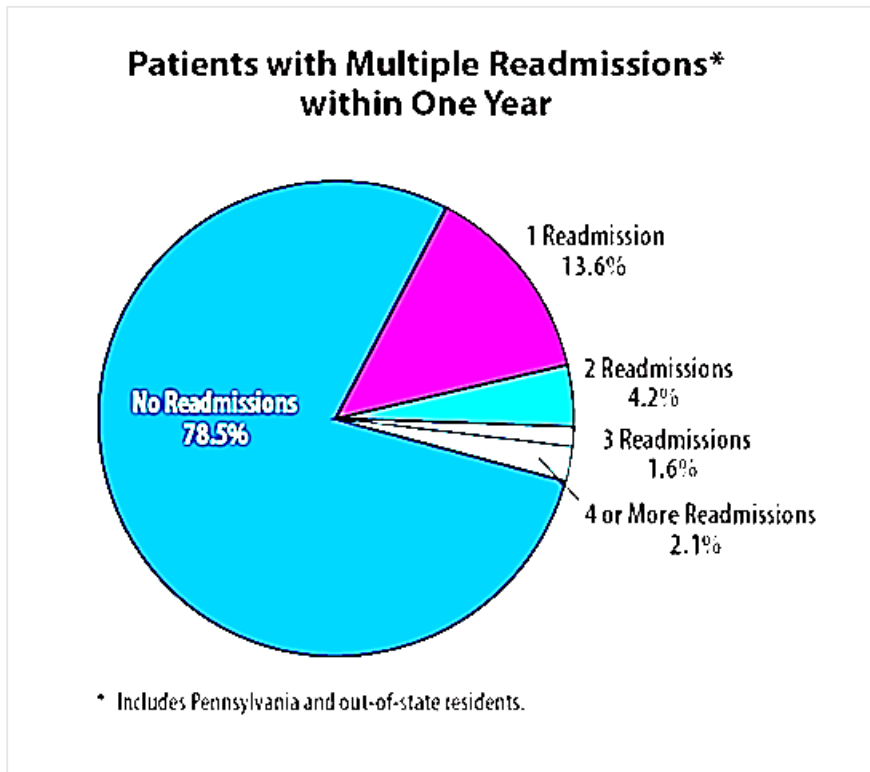
* Per 1,000 residents. Rates are adjusted for age and sex differences among county populations. Rates for counties with small populations are very sensitive to small changes in the number of hospitalizations; that is, higher rates may be reflective of minor fluctuations in the number of hospitalizations.

SOURCE: Pennsylvania Health Care Cost Containment Council, "Chronic Health Conditions in Pennsylvania" (June 2010), 13 and 15.

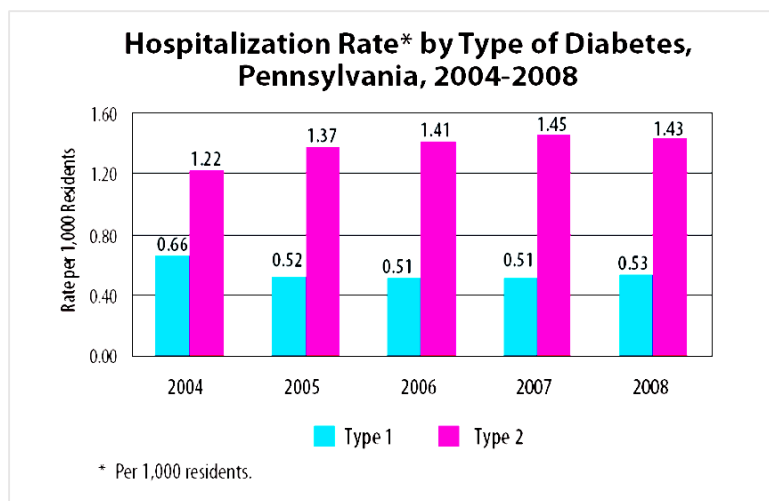
Readmissions* for Diabetes to a Pennsylvania Hospital within One Year

Readmissions within...	Number	Percent	Average Length of Stay	Total Days
0-7 days	1,075	13.3%	5.4	5,763
8-30 days	1,720	21.3%	5.3	9,047
31-60 days	1,363	16.9%	5.4	7,342
61-90 days	922	11.4%	5.2	4,837
91-120 days	723	9.0%	5.2	3,724
121-180 days	899	11.1%	5.0	4,526
181-365 days	1,368	17.0%	5.0	6,817
Total	8,070	100.0%	5.2	42,056

* Includes Pennsylvania and out-of-state residents.



SOURCE: Pennsylvania Health Care Cost Containment Council, “Chronic Health Conditions in Pennsylvania” (June 2010), 16.



Diabetes Hospitalizations by Type of Diabetes, Pennsylvania, 2008

	Type 1 Diabetes		Type 2 Diabetes	
	Number	Rate*	Number	Rate*
Total	6,613	0.53	17,807	1.43
By Age Group				
< 1	9	0.06	2	0.01
1-17	1,181	0.45	101	0.04
18-44	3,559	0.82	2,329	0.53
45-64	1,441	0.42	7,170	2.10
65-84	369	0.23	6,810	4.26
85+	54	0.17	1,395	4.50
By Gender				
Male	3,243	0.54	9,487	1.57
Female	3,370	0.53	8,320	1.30
By Race/Ethnicity				
White (non-Hispanic)	4,424	0.44	11,494	1.13
Black (non-Hispanic)	1,608	1.26	4,740	3.71
Hispanic†	336	0.57	781	1.31
Other	245	0.56	792	1.80

* Per 1,000 residents. Hospitalization rates take into account the proportional differences among segments of the population, such as age, gender and race/ethnicity. The rates for a specific demographic only include residents for that demographic.

† Internal PHC4 analysis suggests that Hispanic ethnicity may be slightly underreported.

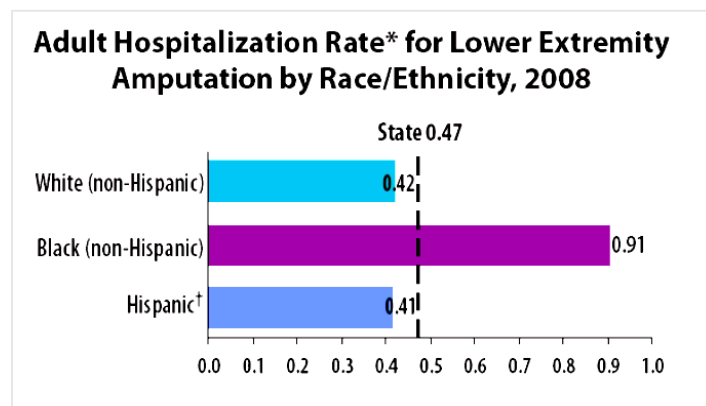
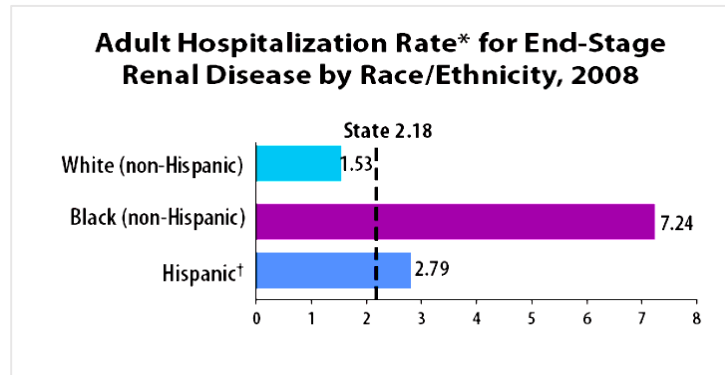
SOURCE: Pennsylvania Health Care Cost Containment Council, “Chronic Health Conditions in Pennsylvania” (June 2010), 17.

Adult Hospitalizations for End-Stage Renal Disease, Pennsylvania, 2008

	Number	Rate*
Total	21,095	2.18
By Age Group		
18-44	1,891	0.43
45-64	8,278	2.43
65-84	9,987	6.24
85+	939	3.03
By Race/Ethnicity		
White (non-Hispanic)	12,389	1.53
Black (non-Hispanic)	6,635	7.24
Hispanic†	1,034	2.79
Other	1,037	3.46

Adult Hospitalizations for Lower Extremity Amputation, Pennsylvania, 2008

	Number	Rate*
Total	4,558	0.47
By Age Group		
18-44	315	0.07
45-64	1,875	0.55
65-84	2,035	1.27
85+	333	1.07
By Race/Ethnicity		
White (non-Hispanic)	3,400	0.42
Black (non-Hispanic)	830	0.91
Hispanic†	153	0.41
Other	175	0.58



SOURCE: Pennsylvania Health Care Cost Containment Council, “Chronic Health Conditions in Pennsylvania” (June 2010), 18.

Hospitalizations arising from four conditions related to diabetes are considered potentially preventable: uncontrolled diabetes, diabetes short-term complications, diabetes long-term complications, and lower extremity amputations among patients with diabetes. Data about these conditions are summarized in Tables 1 - 5.

Table 1				
Number of Potentially Preventable Hospitalizations and Length of Stay, 2010				
Diabetes Related Conditions	Hospitalizations		Average Length of Stay (in days)	Total Days
	<i>Number</i>	<i>Percent</i>		
Diabetes Long-Term Complications	12,866	55.7 %	5.7	73,775
Diabetes Short-Term Complications	6,379	27.6	3.9	24,615
Uncontrolled Diabetes	2,016	8.7	3.2	6,484
Lower-Extremity Amputation Among Patients with Diabetes	1,838	8.0	11.5	21,072
Total	23,099	--	5.4	125,946

Source: PHC4, "Potentially Preventable Hospitalizations in Pennsylvania" (June 2012), 5.

Table 2	
Rate of Potentially Preventable Hospitalizations, 2010 per 10,000 PA Residents	
Angina without Procedure	1.7
Lower-Extremity Amputation Among Patients with Diabetes	1.9
Uncontrolled Diabetes	2.0
Hypertension	6.0
Diabetes Short-Term Complications	6.4
Asthma in Younger Adults	7.5
Diabetes Long-Term Complications	13.0
Dehydration	14.1
Urinary Tract Infection	21.8
Bacterial Pneumonia	32.5
Heart Failure	46.3
COPD or Asthma in Older Adults	61.2

Source: PHC4, "Potentially Preventable Hospitalizations in Pennsylvania" (June 2012), 6.

Table 3									
Potentially Preventable Hospitalizations, 2010									
Medicare Fee-for-Service and Medicaid Fee-for-Service Payment									
Diabetes Related Conditions	Number of Potentially Preventable Hospitalizations	Paid for by Medicare Fee-for-Service				Paid for by Medicaid Fee-for-Service			
		<i>Number</i>	<i>Percent</i>	<i>Average Payment</i>	<i>Total Payment</i>	<i>Number</i>	<i>Percent</i>	<i>Average Payment</i>	<i>Total Payment</i>
Diabetes Long-Term Complications	12,866	4,778	37.1%	\$9,003	\$43,016,772	543	4.2%	\$10,150	\$5,511,617
Diabetes Short-Term Complications	6,379	1,058	16.6	\$6,719	\$7,108,437	751	11.8	\$5,285	\$3,968,758
Uncontrolled Diabetes	2,016	552	27.4	\$4,943	\$2,728,455	132	6.5	\$4,292	\$566,532
Lower-Extremity Amputation Among Patients with Diabetes	1,838	768	41.8	\$20,392	\$15,661,307	109	5.9	\$22,002	\$2,398,269
Total	23,099	7,156	--	\$9,574	\$68,514,961	1535	--	\$8,107	\$12,445,176

Source: PHC4, "Potentially Preventable Hospitalizations in Pennsylvania" (June 2012), 7.

Table 4		
PA and US Potentially Preventable Hospitalization Rates, 2008 per 10,000 Residents		
Diabetes Related Conditions	PA¹	US
Diabetes Long-Term Complications	13.5	12.9
Diabetes Short-Term Complications	6.1	6.2
Uncontrolled Diabetes	2.1	2.3
Lower-Extremity Amputation Among Patients with Diabetes	1.8	1.8
¹ PA rates were adjusted to account for age and sex differences between PA and US populations.		

Source: PHC4, "Potentially Preventable Hospitalizations in Pennsylvania" (June 2012), 9.

Table 5		
Potentially Preventable Hospitalization Rates, 2001 and 2010 per 10,000 PA Residents - by Condition		
Diabetes Related Conditions	2001	2010
Diabetes Long-Term Complications	13.2	13.0
Diabetes Short-Term Complications	5.2	6.4
Uncontrolled Diabetes	2.5	2.0
Lower-Extremity Amputation, Among Patients with Diabetes	2.7	1.9
Note: All changes in rates between 2001 and 2010 were statistically significant, except Diabetes Long-Term Complications.		

Source: PHC4, "Potentially Preventable Hospitalizations in Pennsylvania" (June 2012), 10.

A total of 3,184 Pennsylvanians—almost nine per day—died from diabetes mellitus in 2010, making it the seventh leading cause of death. Between 899,000 and 999,000 Pennsylvania adults over age 18 (9-10 percent of that population) are estimated to have been diagnosed with diabetes. The number of hospital admissions for which diabetes was the principle diagnosis rose by 10.5 percent, from 21,842 in 2000 to 24,143 in 2009. The number of hospital admissions for diabetes for children ages 1-17 was 1,305 in 2009. The prevalence of diagnosed diabetes Pennsylvania adults has risen sharply: from 57 per 1,000 in 1995 to 103 per 1,000 in 2010.

The prevalence of diabetes rises markedly with increasing age. The proportion of Pennsylvania's population 65 and older is growing rapidly—from 15.5 in 2010 to a projected 22.6 in 2030.⁸ As the proportion of older Pennsylvanians rises, it can be expected that the burden of diabetes will increase as well.

In addition to the age factor, lack of physical activity and diets high in sugar and carbohydrates are becoming more prevalent throughout the population in Pennsylvania and elsewhere in the U.S. Type 2 diabetes is becoming more common at lower ages. Because behaviors that put people at high risk for developing diabetes are becoming more common, race and ethnicity are becoming less predictive of diabetes than they were in the past. Diabetes is an increasing peril for all segments of the population.⁹

⁸ Pennsylvania Economy League, Issues PA, "Pennsylvania's Future Demographics: Warning Signs for Policymakers (August 1, 2005) <http://issuespa.org/content/pennsylvania%E2%80%99s-future-demographics-warning-signs-policymakers>.

⁹ Interview by Commission staff with Tomas J. Aguilar, Department of Health, Bureau Director, Health Promotion and Risk Reduction.

DIABETES PROGRAMS

Department of Health

The Pennsylvania Department of Health is the lead agency in Commonwealth government for policies and programs that relate to chronic diseases as well as all other matters relating to public health under its mandate to “protect the health of the people of the Commonwealth, and to determine and employ the most efficient and practical means for the prevention and suppression of disease.”¹⁰

With respect to diabetes, the Department’s efforts are mainly directed at Type 2 diabetes, except for its administration of the tax check-off program, which funds programs directed at Type 2 diabetes.¹¹ The Department works almost exclusively through the health care system rather than with individual patients because this strategy is more cost-effective. The Department distributes federal grants to state programs, regional health networks, and other organizations whose practice is in accord with federal Centers for Disease Control (CDC) guidelines.

Diabetes Prevention and Control Program (DPCP)

This program represents the bulk of the Department’s efforts with respect to diabetes.

Juvenile Diabetes Cure Research Tax Check-Off Program

The Juvenile Diabetes Cure Research Tax Check-Off Program was established pursuant to Act 133 of 2004 (P.L.935).¹² The Act created a state income tax check-off option for individuals to contribute a portion of their state tax refund to be donated directly to the Department to support research for type 1 diabetes. The Department publishes an annual report¹³ to the Pennsylvania General Assembly, which provides an update on activities and contributions of the DPCP, as well as guidelines for distribution of funds collected.

¹⁰ The Administrative Code of 1929 (P.L. 177, No.175), § 2102(a); 1905 Act No. 218, P.L.312, § 8(a).

¹¹ The description of the Department’s programs is based upon conversations with and materials provided to Commission staff by Department staff under the direction of Martin Raniowski, Deputy Secretary for Health Planning and Assessment, and Tomas J. Aguilar, Bureau Director, Health Promotion and Risk Reduction.

¹² This legislation added § 315.7 to the Tax Reform Code of 1971.

¹³ Pennsylvania Department of Health, “Juvenile Diabetes Cure Research Tax Check-Off Program Annual Report” (January 1, 2013—December 31, 2013)

http://www.portal.state.pa.us/portal/server.pt/document/1426417/2013_juvenile_diabetes_cure_research_tax_check-off_program_annual_report_pdf.

Under this program, for the period from January 1, 2015 through December 31, 2016, the Department has a contract in place with Pennsylvania State University to conduct a research project to identify the role of microRNA-34a in inhibiting the generation and function of diabetogenic B cells and the development of type 1 diabetes.

1. Cost and source of funding: Tax Check-off Funds: \$50,000
2. Grantee: Pennsylvania State University
3. Population addressed: People with type 1 diabetes in Pennsylvania (60,000-120,000)

The Department has a contract in place with Pennsylvania Association for the Blind to provide outreach and education for persons identified as being at high risk for diabetic eye disease for the period July 1, 2014 through June 30, 2015.

1. Cost and source of funding: Legislative Special: \$50,000
2. Partners: National Eye Institute, schools, health care systems
3. Grantee: Pennsylvania Association for the Blind
4. Population addressed: People with high risk for diabetic eye disease

LiveHealthyPA Grant

This grant is provided by the CDC's National Center for Chronic Disease Prevention and Health Promotion, entitled the "Grant to Prevent and Control Diabetes, Heart Disease, Obesity and Associated Risk Factors and Promote School Health" also known as the 1305 Grant (which refers to the grant's RFA number¹⁴). The grant promotes a coordinated approach of strategies that focus on modifiable risk factors and multiple chronic conditions. Recognizing that each state's role in chronic disease prevention is more important than ever, the Commonwealth is being funded to address diabetes, heart disease, obesity, and associated risk factors that contribute to the leading causes of premature death and disability in the United States.

Diabetes Self-Management Education (DSME)

In collaboration with its partners, the Department works to strengthen community-clinical linkages to increase the promotion of, referral to and utilization of AADE-accredited¹⁵ and/or ADA-recognized diabetes self-management education. DSME is a collaborative process through which people with diabetes gain the knowledge and skills needed to modify their behavior and successfully self-manage the disease and its related conditions. This process incorporates the needs, goals, and life experiences of the person with diabetes and is guided by evidence-based standards.

¹⁴ See <http://www.grants.gov/web/grants/view-opportunity.html?oppId=221573>.

¹⁵ AADE is the American Association of Diabetes Educators.

The Department 1) assesses DSME capacity in Pennsylvania; 2) promotes DSME to people with diabetes, employers, payers, managed care organizations, and providers to increase DSME referrals and utilizations; 3) is establishing a statewide referral system; and 4) expanding the number of AADE-accredited and ADA-recognized DSME sites in Pennsylvania in high-need areas.

1. Cost and source of funding:
 - a. Federal – 1305 Grant: \$100,611
 - b. Preventive Health & Health Services Block Grant: \$100,000
2. Partners: Department of Human Services, Medicaid Managed Care Organizations, Health Systems Grantees or contractors: The Health Promotion Council (HPC)¹⁶
3. Population addressed: People living with diabetes in Pennsylvania, estimated to be 1,200,000.

Increasing Diagnoses and Referrals through Health Information Technology

Utilizing electronic health record (EHR) systems, the Department is working with health systems on the quality improvement processes to implementing policies and practices to refer persons with diabetes to DSME, and those with prediabetes or at high risk for type 2 diabetes to a CDC-recognized lifestyle change program. Health systems will receive hands-on technical assistance to set up their EHRs with clinical decision support (CDS) for prediabetes screening and diagnosis (hybrid ADA-USPSTF¹⁷ criteria), and referral to a CDC-recognized lifestyle change program.

1. Cost and source of funding:
 - a. Federal – 1305 Grant: \$158,550
 - b. Preventive Health & Health Services Block Grant: \$100,000
2. Partners: Health Systems
3. Grantees or Contractors: The Health Promotion Council (HPC) and Quality Insights of Pennsylvania.¹⁸
4. Population Addressed: People with diabetes or prediabetes and people living with diabetes. In Pennsylvania, an estimated 7% (896,000) have ever been told by a health professional that they have prediabetes or borderline diabetes and an estimated 1,200,000 people have diabetes.

¹⁶ The Health Promotion Council of Southeastern Pennsylvania is a nonprofit organization that addresses chronic disease prevention and management. Its webpage is at <http://www.hpcpa.org/>.

¹⁷ United Preventive Services Task Force, an independent panel of experts in primary care and prevention that systematically reviews the evidence of effectiveness and develops recommendations for clinical preventive services. It is funded and appointed by the U.S. Department of Health and Human Services Agency for Healthcare Research and Quality (AHRQ).

¹⁸ Quality Insights of Pennsylvania is a nonprofit company that addresses health care quality improvement. Its webpage is at <http://www.qipa.org/Home.aspx>.

Closing the Referral Loop

The Department, through its grantees and partners, is facilitating bi-directional referrals between community resources and health systems, including DSME and CDC-recognized lifestyle change programs. This closes the referral communication gap, between the referring health care provide and community-based service utilizing DIRECT¹⁹ licensing.

1. Cost and source of funding: Federal – 1305 Grant: \$158,550
2. Partners: Health Systems, Community-based organizations, and Quality Insights of Pennsylvania
3. Grantees or contractors: The Health Promotion Council (HPC)
4. Population addressed: People with diabetes or prediabetes

Pennsylvania Alliance to Improve Community-Clinical Partnership

State funds are allocated to plan and execute strategic data-driven actions through a network of stakeholders to build support for community-clinical linkages, specifically DSME and CDC-recognized lifestyle change programs. Stakeholders from each community health district will be identified and confirmed to serve on the statewide network to build support for these linkages. A comprehensive plan to build support, addressing access, referrals and insurance coverage for CDC-recognized lifestyle change programs and DSME will be developed and shared via a statewide network.

1. Cost and source of funding: State Diabetes allocation: \$50,000
2. Partners: Department of Human Services, Medicaid Managed Care Organizations, Pennsylvania Employee Benefits Trust Fund, business coalitions, health care systems, health insurers, and community-based organizations
3. Grantees or contractors: Health Promotion Council.
4. Population Addressed: People with diabetes or prediabetes.

Diabetes Prevention Program (DPP)

The Diabetes Prevention Program (DPP) is an evidence-based structured lifestyle change intervention program for delaying or preventing type 2 diabetes among people at high risk. Participants with prediabetes meet in groups with a trained lifestyle coach once a week for 16 weeks and then once a month for 6 months to learn ways to incorporate healthier eating, moderate physical activity, and problem-solving and coping skills into their daily lives.

Research has shown that weight loss of 5 to 7 percent of body weight achieved by reducing calories and increasing physical activity reduces the risk of developing type 2 diabetes by 58 percent in people at high risk for the disease, and for people over 60 years old, the program reduces

¹⁹ DIRECT is a software application that supports a form of secure e-mail. It provides the standards and services necessary to push content from a sender to a receiver.

risk by 71 percent. A follow-up study found, after ten years, that those who had participated in the earlier lifestyle change intervention had a 34 percent lower rate of type 2 diabetes.²⁰

The Department’s goal is to grow the CDC-recognized DPP network in the following high-need regions by June 30, 2015:

SW	Adagio Health ²¹ centers in Fayette and Beaver counties, and at Conemaugh Hospital in Cambria County
SC	Four sites, all YMCAs, serving three counties in the South-central area (Dauphin, Franklin, and Blair)
SE	Schuylkill Health and a community center in Shenandoah in Schuylkill County, and Rising Sun Health Center in Philadelphia
NE	Blue Mountain Health System in Carbon County and YMCA in Carbondale, Lackawanna County

1. Cost and source of funding: Federal - Preventive Health & Health Services Block Grant: \$915,000
2. Partners: Listed above
3. Contractors or grantees: Adagio Health, American Lung Association, Health Promotion Council, Burn Foundation²² and Public Health Management Corporation²³
4. Population addressed: People with prediabetes or at high risk of developing type 2 diabetes. In Pennsylvania, an estimated 7% have ever been told by a health professional that have prediabetes or borderline diabetes.

Future DPP Capacity. In order to continue growing the DPP, state diabetes funds were allocated to train four DPP master trainers, before June, 2015. These DPP master trainers will each commit to providing two free DPP Lifestyle Coach Trainings in Pennsylvania each state fiscal year, based on demand. This will allow interested organization and health systems to receive free training to certify staff to provide DPP classes.

1. Cost and source of funding: State diabetes allocation: \$50,000
2. Partners: Adagio Health, American Lung Association, Health Promotion Council, the Burn Foundation and Public Health Management Corporation

²⁰ Diabetes Prevention Program Research Group, “Reduction in the Incidence of Type 2 Diabetes with Lifestyle Intervention or Metformin” *New England Journal of Medicine* 346: 393-403 (February 7, 2002), <http://www.nejm.org/doi/full/10.1056/NEJMoa012512>; Centers for Disease Control and Prevention, “Resources: Diabetes Prevention Program Research Study Overview” (updated December 10, 2014), <http://www.cdc.gov/diabetes/prevention/resources.htm>.

²¹ Adagio Health, based in Pittsburgh, delivers care in 23 counties in Western Pennsylvania. Its webpage is at <http://www.adagiohealth.org/>.

²² The Burn Foundation is a community based organization serving the Delaware Valley. Its webpage is at <http://www.burnfoundation.org/index.cfm>.

²³ The Public Health Management Corporation is a nonprofit public health institute based in Philadelphia. Its website is at <http://www.phmc.org/site/index.php>.

3. Grantees or contractors: Health Promotion Council
4. Population addressed: People with prediabetes or at high risk of developing type 2 diabetes.

Insurance coverage for DPP. The Department is working with the Office of Administration (OA) with the goal of having PEBTF provide insurance coverage for CDC-recognized lifestyle change programs to beneficiaries. The Department is also working with the Department of Human Services (DHS) Office of Medical Assistance Programs (OMAP) and Medicaid Managed Care Organizations (MCO) to encourage coverage for Medicaid beneficiaries.

1. Partners: OA; DHS-OMAP; Medicaid MCOs
2. Population Addressed: People with prediabetes or at high risk of developing type 2 diabetes.

The funding allocated for the Diabetes Prevention and Control Program is as follows:

Fiscal Year	State Budget Allocation	Federal Grant Award
08/09	\$420,000	\$508,883
09/10	\$200,000	\$522,169
10/11	\$190,000	\$522,169
11/12	\$100,000	\$469,952
12/13	\$100,000	\$522,169
13/14	\$100,000	\$130,542
14/15	\$100,000	Blended ²⁴

Pennsylvania Health Care Cost Containment Council

This agency, commonly referred to as PHC4, is an independent state agency charged with collecting analyzing, and reporting information that can be used to improve the quality and restrain the cost of health care in the Commonwealth.²⁵ The agency has issued several reports dealing with diabetes.

“Diabetes Hospitalization Report” (November 2011).²⁶ This report includes data from 2000 through 2009 on hospitalizations for diabetes. The number of such hospital admissions in 2009 was 24,143, which was a 10.5 percent increase from 2000, but was the lowest number since 2005. The following data is included:

- Number of hospital days per admission and total hospitalization days
- Hospital admission rates per 10,000 residents
- Number of days of hospitalization and average days per stay

²⁴ Funds from this source are used for the following Department programs as well as diabetes: Heart Disease and Stroke; Nutrition, Physical Activity, and Obesity; and School Health.

²⁵ The enabling legislation for PHC4 is Act 89 of 1986 (P.L.408).

²⁶ <http://www.phc4.org/reports/diabetes/09/docs/diabetes2009report.pdf>.

- Hospital admission rates by age, compared to U.S., by type (1 or 2), race or ethnicity, county
- Multiple hospitalizations
- Hospital admissions by payer, including Medicare and Medicaid Fee-for-Service (FFS)

Chronic Health Conditions in Pennsylvania (June 2010).²⁷ This report includes data and information on diabetes and three other chronic diseases (viz., asthma, chronic obstructive pulmonary disease (COPD), and heart failure). The diabetes section (pp. 9—20) includes a description of the condition, its types and pre-diabetes, a statistical comparison of diabetes in Pennsylvania and the U.S., facts on overweight and obesity, preventive care practices, data on hospital admissions similar to those in the Hospitalization Report, long term complications (viz., end-stage renal disease and lower extremity amputation). Data charts from this report are presented above at pages 5-10.

“Potentially Preventable Hospitalizations in Pennsylvania” (June 2012). “Potentially preventable hospitalizations” (PPH) are defined as inpatient stays that might have been avoided with timely and effective outpatient care and disease management as determined by criteria developed by the Agency for Healthcare Research and Quality (AHRQ). The report deals with twelve such conditions, four of which are associated with diabetes: diabetes long-term complications, diabetes short-term complications, uncontrolled diabetes, and lower extremity amputations among patients with diabetes. Data from this report is presented above at pages 11 and 12.

Other State Agencies

Department of Aging

The OPTIONS program offers home and community-based services to eligible consumers aged 60 years or older to assist them in maintaining independence with the highest level of functioning in the community and delay the need for more costly care. The Options program support over 45,000 older adults annually. Services include:

- Adult Day Services
- Care Management
- Consumer Reimbursement:
- Emergent Services:
- In-Home Meals
- Personal Emergency Response System (PERS)
- Personal Care Services
- Home Health
- Home Modifications
- Home Support
- Medical Equipment, Supplies, Assistive/Adaptive Devices
- Transportation

²⁷ <http://www.phc4.org/reports/chroniccare/10/docs/chroniccare2010report.pdf>.

The Pharmaceutical Assistance Contract for the Elderly (PACE) Program and PACE Needs Enhancement Tier (PACENET) programs assist qualified older adults age 65 years or older in paying for their prescription medications. PACE pays the cost of prescriptions drugs and insulin supplies after a co-pay. PACENET pays the cost of prescription drugs and insulin supplies after a claimant meets the premium requirement and a co-payment. The PACEPlus Medicare Program pays Medicare premiums for Part D for Pace and PACENET cardholders. PACENET cardholders repay the Part D premiums for the program. The PACE and PACENET programs support over 300,000 older adults annually.

In fiscal year 2013-2014 The Department of Aging provided services to a total of 83,323 individuals with diabetes, 58,436 of whom received pharmaceutical assistance through the PACE and PACENET programs. The remaining 24,887 received services through the OPTIONS program.

Department of Human Services

The major involvement of PDHS with persons who are identified as diabetic involves the Medical Assistance program. In calendar year 2012, there were 48,515 Medicaid recipients identified with diabetes.²⁸ These recipients were “non-dual eligible,” meaning they were eligible for Medicaid only and not both Medicare and Medicaid. There were 9,365 inpatient admissions in 2012 for adults with diabetes.²⁹

University of Pittsburgh—Diabetes Prevention Support Center (DPSC)

The mission of the DPSC of the University of Pittsburgh is to prevent or delay type 2 diabetes and improve cardiovascular health by providing education, training, and program support services to health professionals as they implement diabetes prevention services within diverse communities.³⁰ The Center’s most important project is a group-based, behavioral lifestyle intervention called the Group Lifestyle Balance™ (GLB) program, which is modeled closely on the original Diabetes Prevention Program (DPP) individual lifestyle intervention. The DPP lifestyle intervention was shown to prevent the development of type 2 diabetes and reduce risk factors for cardiovascular disease and is showcased by the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) as one of its premier studies. The program has been shown to be effective in reducing weight, increasing physical activity, and improving multiple risk factors for diabetes and cardiovascular disease such as glycohemoglobin A1c, blood pressure, and waist circumference.

²⁸ Medical Assistance is provided under Article IV(f) of the Public Welfare Code. The Public Welfare Code is Act 21 of 1967 (P.L.31); Article IV(f) was added by Act 273 of 1968 (P.L.904).

²⁹ Department of Human Services internal report by the Office of Medical Assistance Programs generated from OMAP claims data. E-mail from Department of Human Services staff to Commission staff, February 19, 2015.

³⁰ This section is based on the description of the DPSC sent to Commission staff by Dr. Mary Kaye Kramer by e-mail, Jan. 30, 2015.

The University of Pittsburgh has been at the forefront of diabetes prevention since the development of the lifestyle intervention used in the DPP. The DPSC is housed in the Department of Epidemiology at the Graduate School of Public Health. Dr. Mary Kaye Kramer serves as the director of the Center.

A two-day training workshop for health care professionals provides a comprehensive overview of the GLB program and its implementation. More than 50 training workshops have been held to date, and approximately 2,000 health professionals have completed training. The GLB training workshops cover the background for diabetes and chronic disease prevention, the Diabetes Prevention Program, and current translation efforts.

The DPSC also provides support to trained GLB providers as they deliver the program in their local settings. More than 150 GLB programs are in operation across the U.S. and internationally. Support for these programs is provided by the DPSC faculty and through the DPSC website (www.diabetesprevention.pitt.edu). The Physical Activity Resource Center for Public Health (www.parcph.org), provides the supplemental materials needed for a successful prevention intervention program. DPSC has collaborated with research investigators across the U.S. to provide assistance and guidance in the adaptation of the GLB materials for their research needs.

The GLB program is designed for overweight individuals age 18 and older. Individuals who take part in the program are asked to monitor weight, food intake, and physical activity levels and are given feedback on their progress. The program includes a behavioral focus on the principles for making healthy food choices and meal planning, instructions to combine calorie and fat monitoring from the beginning of the intervention, and use of the pedometer to help increase physical activity. The goals of GLB are to achieve and maintain a 7% weight loss, and to safely and progressively increase to 150 minutes per week of moderately intense physical activity similar to a brisk walk.

In addition to written materials, a DVD version of the GLB program is available. The GLB-DVD covers the initial twelve core sessions of the program, with the sessions portrayed by professional actors. The GLB-DVD series also provides educational information about pre-diabetes, diabetes, and metabolic syndrome. A series of four transition sessions are provided for continuation of the program after the initial sessions. The transition sessions reinforce core session learning and introduce the cognitive and behavioral strategies critical for long-term weight management.

The Center focuses primarily on training health professionals to provide the intervention in the community. Therefore, it counts the numbers trained, but not specifically numbers of persons who have taken part in programs delivered by trained providers. The Center has trained 300-400 health professionals in Pennsylvania, who have gone on to provide programs throughout the state. Research studies and community service over the past several years has reached almost a thousand people in the Pittsburgh area alone.³¹

³¹ E-mail from Dr. Mary Kaye Kramer to Commission staff, February 16, 2015.

Current projects

The DPSC is currently working on two exciting online projects: 1) a GLB Health Professional Online Training program (HPOT) and 2) an online Participant Program (OPP). The development of the HPOT was funded by the University of Pittsburgh Provost Copyright Development fund. The launch of the program is planned for the upcoming year. Online programs have the potential to provide health professionals and patients with more flexibility and to greatly expand the reach of the program. By increasing training and program delivery reach, DPSC may be able to increase the number of GLB licensing agreements with the University of Pittsburgh, and thus provide financial support for the DPSC.

THE GENERAL ASSEMBLY OF PENNSYLVANIA

HOUSE RESOLUTION

No. 936 Session of 2014

INTRODUCED BY OBERLANDER, LONGIETTI, BAKER, BOBACK, V. BROWN, CALTAGIRONE, CAUSER, COHEN, D. COSTA, DONATUCCI, FLECK, GIBBONS, GINGRICH, GODSHALL, GRELL, GROVE, HARHART, HEFFLEY, KAUFFMAN, KILLION, KIRKLAND, KOTIK, KULA, LUCAS, MAJOR, MENTZER, MILLARD, MURT, MUSTIO, O'BRIEN, READSHAW, SONNEY, SWANGER, TALLMAN, THOMAS, TOBASH, WHITE, YOUNGBLOOD, SCHLEGEL, CULVER, JAMES, BENNINGHOFF, BRIGGS, PICKETT, WATSON, McCARTER, PYLE AND QUINN, JULY 1, 2014

AS REPORTED FROM COMMITTEE ON HEALTH, HOUSE OF REPRESENTATIVES, AS AMENDED, SEPTEMBER 17, 2014

A RESOLUTION

1 Directing the Joint State Government Commission, in
2 collaboration with certain other State departments and
3 agencies, to develop a report on diabetes and to issue the
4 report to the House of Representatives.
5 WHEREAS, More than 990,000 adults in this Commonwealth have
6 been diagnosed with diabetes; and
7 WHEREAS, An estimated 517,000 Pennsylvanians are undiagnosed;
8 and
9 WHEREAS, An estimated 3.27 million Pennsylvanians are at risk
10 of developing diabetes; and
11 WHEREAS, Diabetes and its complications are the seventh
12 leading cause of death in this Commonwealth; and
13 WHEREAS, Diabetes will cost Pennsylvanians an estimated ~~\$1.7~~ <--
14 \$14.7 billion in 2015 and an estimated \$18.4 billion by the year <--
15 2025; and

1 WHEREAS, Statistics show that with appropriate management and
2 early identification, costs related to diabetes can be
3 significantly reduced; therefore be it

4 RESOLVED, That the House of Representatives direct the Joint
5 State Government Commission to submit a report on diabetes that
6 identifies goals and benchmarks and includes plans to reduce the
7 incidence of diabetes, improve diabetes care and control
8 complications associated with diabetes; and be it further

9 RESOLVED, That the Joint State Government Commission develop
10 the report on diabetes in collaboration with all of the
11 following:

- 12 (1) The Department of Health.
- 13 (2) The Department of Public Welfare.
- 14 (3) The Department of Education.
- 15 (4) The State Employees' Retirement System.
- 16 (5) The Health Care Containment Council.
- 17 (6) Any additional State departments or agencies the
18 commission deems appropriate to develop, research and prepare
19 the report;

20 and be it further

21 RESOLVED, That the Joint State Government Commission assess
22 the financial impact and reach diabetes has on the residents of
23 this Commonwealth and the State departments and agencies
24 collaborating on the report, and that the assessment include all
25 of the following:

- 26 (1) The number of individuals with diabetes impacted or
27 covered by the State department or agency.
- 28 (2) The number of individuals with diabetes and family
29 members impacted by prevention and diabetes control programs
30 implemented by the State department or agency.

1 (3) The financial toll or impact diabetes and its
2 complications placed on State department or agency programs.

3 (4) The financial toll or impact diabetes and its
4 complications placed on the State department or agency
5 programs in comparison to other chronic diseases and
6 conditions;

7 and be it further

8 RESOLVED, That the Joint State Government Commission conduct
9 an assessment of the benefits of implemented programs and
10 activities aimed at controlling diabetes and preventing the
11 disease, and that the assessment include the amount and source
12 for any funding from the Federal Government and the General
13 Assembly for programs and activities aimed at reaching those
14 with diabetes; and be it further

15 RESOLVED, That the Joint State Government Commission provide
16 a description of the level of coordination existing between
17 State departments and agencies on activities, programmatic
18 activities and messaging on managing, treating or preventing all
19 forms of diabetes and its complications; and be it further

20 RESOLVED, That the Joint State Government Commission provide
21 detailed plans and recommendations for the control and
22 prevention of diabetes for consideration by the General
23 Assembly, and that the plans and recommendations do all of the
24 following:

25 (1) Identify proposed action steps to reduce the impact
26 of diabetes, pre-diabetes and related diabetes complications.

27 (2) Identify expected outcomes of the action steps
28 proposed in the following biennium.

29 (3) Establish benchmarks for controlling and preventing
30 relevant forms of diabetes; and be it further

1 RESOLVED, That the Joint State Government Commission develop
2 a detailed budget blueprint identifying needs, costs and
3 resources required to implement the plans and recommendations of
4 each department or agency, and that the blueprint include a
5 budget range for all options presented in the recommendations
6 identified by each department or agency for consideration by the
7 General Assembly; and be it further

8 RESOLVED, That the Joint State Government Commission provide
9 the initial report on the estimated number of individuals with
10 diabetes, pre-diabetes or related diabetes ~~within~~ WHO ARE SERVED <--
11 BY each department or agency and any additional information the
12 commission deems appropriate to the General Assembly by March 1,
13 2015; and be it further

14 RESOLVED, That the Joint State Government Commission submit a
15 ~~final~~ COMPREHENSIVE report on the items listed in this <--
16 resolution to the Diabetes Caucus of the House of
17 Representatives and the Human Services Committee AND THE HEALTH <--
18 COMMITTEE of the House of Representatives by September 15, 2015,
19 and by September 15 of each odd-numbered year thereafter
20 following the release of the initial report.