

RHODE ISLAND DIABETES STATE PLAN

2010-2015





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July 2010

Dear Rhode Islanders:

I am pleased to present to you the Diabetes State Plan for the State of Rhode Island. This document provides a detailed plan of goals and actions to reduce the burden of diabetes in Rhode Island over the next five years. Diabetes is a chronic disease with no known cure. However, it can be managed to improve health outcomes. Over the past five decades there has been an increase in the prevalence of diagnosed diabetes and it is projected to continue to rise. Without effective prevention and control of diabetes, this disease has the potential to overwhelm our healthcare system. In response to the growing health burden of diabetes, we must work to prevent diabetes, find a cure, and improve the quality of care of people with diabetes to prevent devastating complications. Diabetes does not affect all groups equally. This plan includes the development of specific objectives and interventions for addressing health disparities among such groups as racial and ethnic minorities and the disabled.

An Integrated Chronic Care Health System Approach was used as a framework for the development of this plan to ensure inclusion and collaboration among all systems that interact to prevent and control diabetes. Agencies and organizations from various disciplines are critical to the plan's success. No single agency, organization, or system alone can meet the challenges posed by diabetes.

The Rhode Island Diabetes State Plan is the result of a collaborative process involving a large and diverse group of community partners in collaboration with the Rhode Island Department of Health (HEALTH). HEALTH provides this document in hopes that community agencies and organizations will continue to partner with us in our efforts to achieve the data-driven goals and objectives that were developed to reduce the burden of diabetes on the residents of our state.

Sincerely,

A handwritten signature in black ink, appearing to be "D. Gifford", written over a light blue circular background.

David R. Gifford, MD, MPH
Director of Health



Rhode Island Hospital
A Lifespan Partner

June 25, 2010

Dear Rhode Islanders:

On behalf of the Rhode Island Diabetes Council, I give full support to this Diabetes State Plan for Rhode Island. The document is the culmination of many of hours of thoughtful work by a broad network of partners from community and health organizations throughout the state.

All of these individuals and groups share a commitment to the prevention, improved management, and ultimately the elimination of diabetes. We are eager to see the plan implemented, with the goal of furthering evidence-based interventions and best practices in the chronic care community and health system.

The Rhode Island Diabetes Council is proud to partner with HEALTH to achieve the objectives of this plan.

Yours sincerely,

A handwritten signature in black ink that reads "Robert J. Smith". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Robert J. Smith, MD

Chair
Rhode Island Diabetes Council

I. EXECUTIVE SUMMARY

This *Rhode Island (RI) Diabetes State Plan* was facilitated by the RI Diabetes Prevention and Control Program (RI-DPCP) at the RI Department of Health. The purpose is to help diabetes stakeholders in RI provide a coordinated approach to the goal of reducing the burden of diabetes in the state over the next five years, with a particular focus on reducing disparities related to diabetes. The plan was developed with input from five multi-disciplinary groups of stakeholders in RI with over 60 participants. The groups used RI-specific data to identify goals, objectives, and action steps to lead the state toward the mission of reducing the burden of diabetes in RI.

DIABETES IS COMMON– At this time, an estimated 12% of the population in RI is living with diabetes and another 40% of adults 40-74 years old, may have pre-diabetes. Diabetes has been increasing for the past five decades and is projected to continue to rise. The priorities identified for RI in order to reduce prevalence are to: a) decrease the number of people who develop diabetes by increasing physical activity and improving nutrition, b) increase the number of people who are aware of their risk for diabetes through screening and education, and c) increase the availability of data and use of data by stakeholders for data-driven decision making to prevent and control diabetes in RI.



DIABETES IS SERIOUS– Diabetes can lead to serious complications such as heart disease and stroke, blindness, kidney disease, and lower-limb amputations. These complications affect socio-economically disadvantaged populations at greater rates than wealthier populations, creating marked health disparities. The identified priorities to reduce complications are to: a) increase support for diabetes control among state leaders and policy makers, b) create a social and physical environment that promotes healthy eating and active living, and c) reduce health disparities related to complications of diabetes.

DIABETES IS COSTLY– Diabetes costs the RI healthcare system approximately 722 million dollars, or 11% of healthcare expenditures each year. The priorities to reduce cost are to: a) reduce the financial burden of diabetes for individuals, communities, employers, the healthcare system, and the state, and b) improve access to and quality of referrals for diabetes prevention, control, and care services.

DIABETES IS CONTROLLABLE– Although not easy, through adequate education, support, and resources, persons with diabetes and their families can learn techniques such as maintaining a consistent blood sugar level, and making lifestyle modifications in order to reduce complications of diabetes. The priorities to

control diabetes in RI are to: a) increase the number of people living with diabetes who receive diabetes education and counseling, b) increase the level of patient “activation” including skills, confidence, and self-efficacy, c) increase participation in best practice support programs that offer complementary health promotion opportunities, d) ensure the best quality of care to all people living with diabetes, and finally e) provide culturally and linguistically appropriate care to all Rhode Islanders regardless of their racial, ethnic, linguistic, educational, and socio-economic status.

DIABETES IS PREVENTABLE– Finally, type 2 diabetes can be preventable in many cases. Rhode Islanders who are obese are three to four times more likely than residents who are not obese to have diabetes; and currently 61% of people diagnosed with diabetes report being either obese or overweight. The priorities for diabetes prevention are to a) support current initiatives aimed at promotion of health and well-being, and b) increase collaboration and coordination of efforts between organizations working toward the mutual goal of increasing healthy lifestyle choices that affect diabetes prevention and control in RI.

Each one of these identified priorities has specific, measurable objectives listed with associated activities, a lead agency, and a data source for tracking and evaluation. The priorities are data-driven, the proposed strategies are evidence-based, and the approach is

one of integration. Moving forward, cooperation and collaboration are essential elements. Together, we can reverse the trend, and control diabetes in RI.



For more information contact:

RI Department of Health | www.health.ri.gov

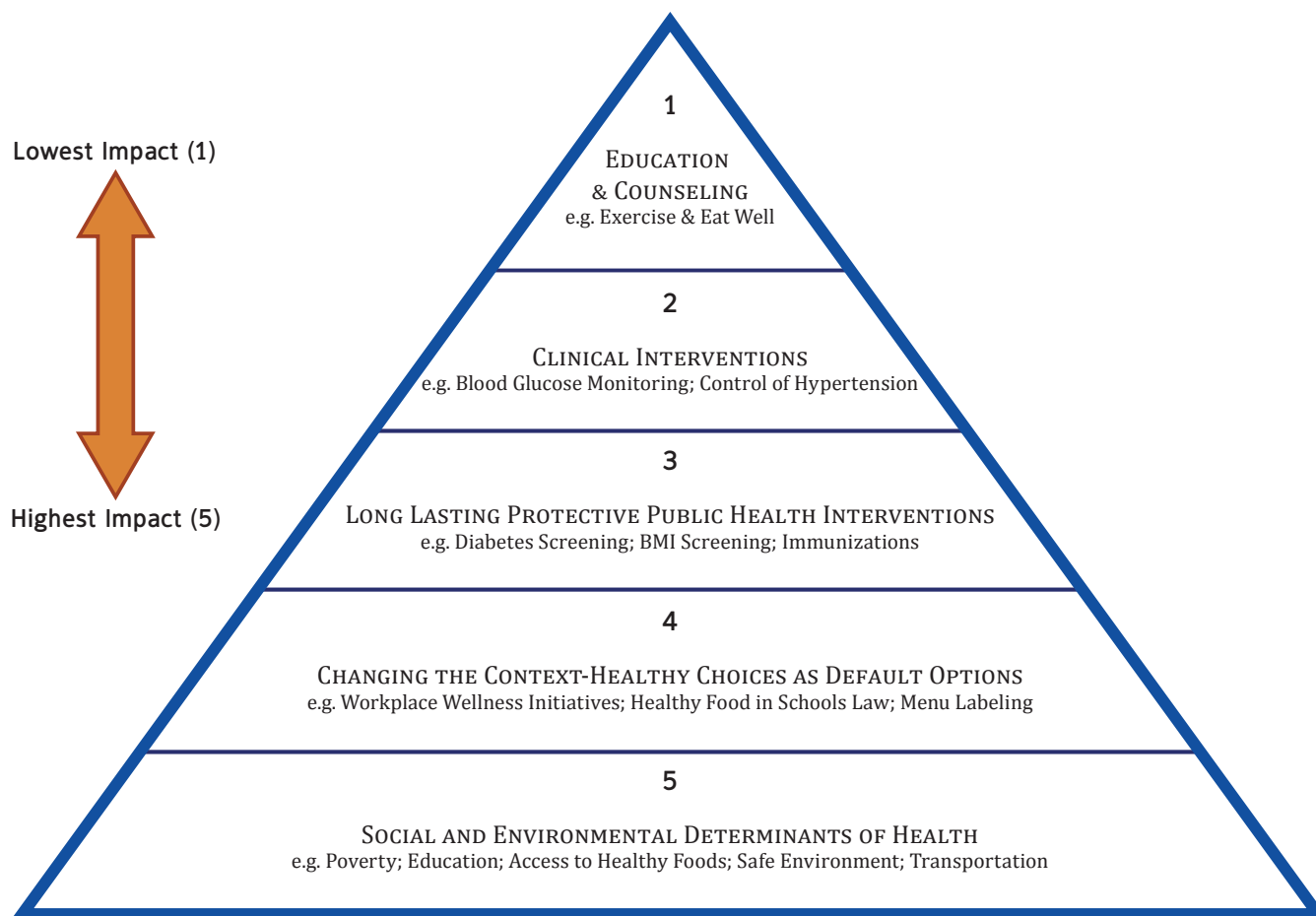
II. STATE PLAN PROCESS

PURPOSE OF THIS PLAN

This *Rhode Island Diabetes State Plan* was facilitated by the RI Diabetes Prevention and Control Program (RI-DPCP) at the RI Department of Health. The purpose of the *RI Diabetes State Plan* is to help diabetes stakeholders in RI provide a coordinated approach to reducing the burden of diabetes in the state over the next five years, with a particular focus on reducing disparities related to diabetes. The plan was developed with input from multi-disciplinary groups of stakeholders such as representatives from primary care providers, diabetes educators, endocrinologists, healthcare plans, public

health programs, patient advocacy groups and community-based organizations. The groups had over 60 participants and were broken down into five work-groups: Communication, Community, Health System, Workforce and Surveillance/Evaluation. The groups were convened to identify strengths, weaknesses and gaps in diabetes control in the state of RI. The work started with a close examination of the data and the burden of diabetes in RI, through the *Diabetes: The State of RI* burden document, and used these data as the foundation for selecting the priorities listed below in

EQUITY PYRAMID



This pyramid is adapted from Thomas Frieden, MD, MPH presentation at the Weight of the Nation conference, Washington D.C., July 27, 2009

this state plan. The groups identified goals, measurable and specific objectives, and action steps to lead the state toward the mission of reducing the burden of diabetes in RI.



THE STATE PLAN FRAMEWORK

This plan, and the work of the RI Department of Health, is focused on the Health Impact Pyramid framework for public health action which was developed by Dr. Thomas Frieden, the Director of the Centers for Disease Control and Prevention (CDC). The Health Impact Pyramid or the RI-adopted “Equity Pyramid” describes the impact of different types of public health interventions and provides a framework to improve population-level health. Interventions focusing on the lower levels of the pyramid tend to be more effective in reaching broader segments of society and require less individual effort. As you go up the pyramid the interventions impact the individual, but have less of an impact across the population. This plan is based on the “Equity Pyramid” framework and the Socio-Ecological model – which sees the individual as contextualized within their relationships, community, and society. Interventions at each and every level are required to achieve optimal and sustained public health improvements.

CHRONIC ILLNESS CARE IN RI

RI has been identified as a leader nationally in its commitment to improving the chronic care delivery system.

A wide range of stakeholders have been working in RI to make improvements in the chronic care delivery system through changes based on the Chronic Care Model, developed by Dr. Ed Wagner and the MacColl Institute and Improving Chronic Illness Care (ICIC). This model suggests that providers who care for chronically ill patients can be better supported with provision of guidelines, specialty expertise and information systems. Through better care delivery, overall healthcare costs can be covered, and patients can lead better, healthier lives. All of this is possible by transforming what is currently a reactive healthcare system into one that keeps its patients as healthy as possible through planning, proven strategies and management.

DIABETES CONTROL & PREVENTION IN RI

The RI Diabetes Prevention & Control Program (RI-DPCP) was established in 1978 as one of the first federally funded diabetes programs in the United States. Receiving funds from the Centers for Disease Control and Prevention, the RI-DPCP has demonstrated significant success in building statewide capacity for diabetes prevention and control. Since that time the program has worked to expand its programmatic activities statewide. RI-DPCP has focused on the integration of health systems activities related to diabetes prevention and control, to expand its approach to include diabetes-related diseases and conditions such as cardiovascular diseases and to institutionalize successful initiatives. Over time, this integration has led to the development of the Integrated Chronic Care Health Systems Approach.

The Integrated Chronic Care Health Systems Approach consists of five interconnected systems vital to meeting the goals and objectives of the *RI Diabetes State Plan*. The goals and objectives within the *Diabetes State Plan* fall within one of the five systems. Although each system has its unique qualities and components, all are reliant on each other in order to function most efficiently and effectively. Each of these components is

essential to reducing the burden of chronic diseases of a population. The five systems are described below:

1. **THE SURVEILLANCE AND EVALUATION SYSTEM** includes several population-based and intervention-specific databases to obtain a comprehensive assessment of the burden of diabetes. This allows for the examination of risk factors and co-morbidities to identify high risk populations, to evaluate interventions, and identify gaps and needs.
2. **THE HEALTH COMMUNICATION SYSTEM** provides information to the public, including patients and providers, within each of the five systems based on national standards of care. This information is shared through the media, internet connections, and venues such as community-based organizations, schools, and worksites.
3. **THE ENVIRONMENTAL HEALTH SYSTEM** reflects the social determinants of health such as policies related to the health of the built environment (e.g. schools, worksites, homes) where people spend the majority of their time and the outdoor environment.
4. **THE HEALTHCARE SYSTEM** includes evidence-based interventions, such as the work completed by the Rhode Island Chronic Care Collaborative (RICCC) and workforce development among healthcare providers.

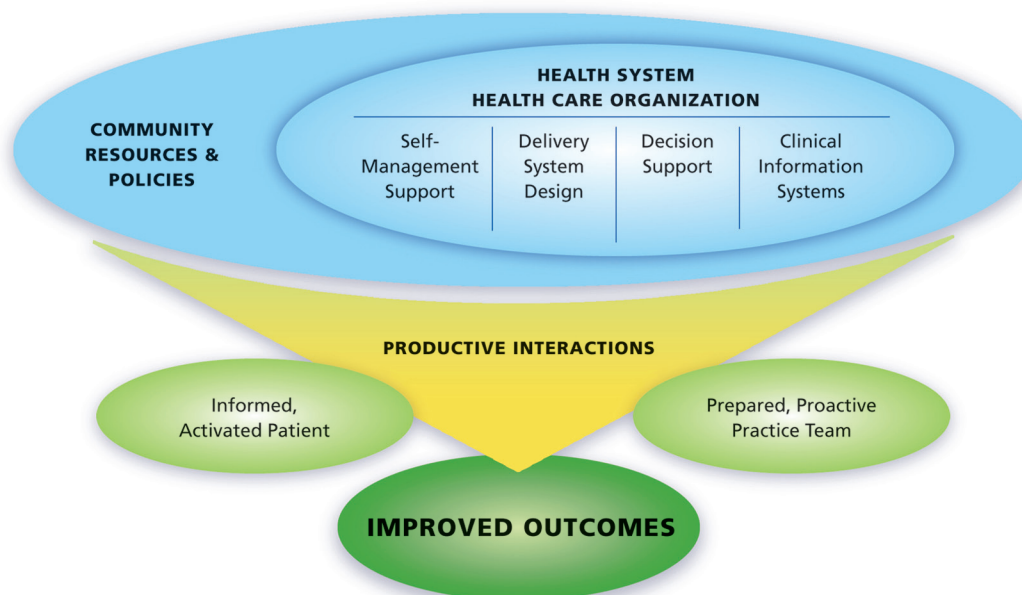
5. **THE COMMUNITY SYSTEM** encompasses evidence-based interventions in worksites, community-based organizations, and schools, as well as the provision of resources in the community for patient self-management.

The The RI Diabetes Prevention and Control Program (RI-DPCP) works through the Rhode Island Diabetes Council (RI DC), an advisory group of diabetes stakeholders in the state and the RI network of stakeholders and partners.

The direction of new efforts is to adopt an integrated, comprehensive approach to health and well-being in RI, rather than the disease/condition specific approach currently in use. The Chronic Care Collaborative and Chronic Disease Workforce are efforts at increasing the integration of chronic illness care and increasing the coordination across disciplines.

Through a focus on the identified priorities in this plan—and by focusing on the goals and objectives within—this plan will lead the way toward the mission of preventing diabetes and diabetes-related complications in RI.

CARE MODEL



DIABETES INTEGRATED CHRONIC CARE HEALTH SYSTEM APPROACH



III. VISION AND MISSION OF THE STATEWIDE DIABETES HEALTH SYSTEM

The Statewide Diabetes Health System is comprised of the Rhode Island Diabetes Council, RI Diabetes Prevention and Control Program, stakeholders and partners in the state, such as the Diabetes Multicultural Coalition, RI Chronic Care Collaborative and Chronic Disease Workforce. This network of partners coordinates efforts and shares expertise in the areas of healthcare, communications, health disparities, advocacy, education, surveillance, evaluation, policy development and workforce development.

VISION

A Rhode Island where all people with diabetes or at risk for diabetes live healthy lives.

MISSION

The mission of the Statewide Diabetes Health System (SDHS) is to address physical, social, psychological and environmental barriers that impact diabetes and diabetes-related complications in RI.



IV. WHAT IS DIABETES?¹

Diabetes Mellitus, or diabetes, is actually a group of diseases, all of which are marked by high levels of blood sugar (also called blood glucose). The disease arises from problems in how the body makes or uses insulin - which is a hormone that helps the body break down (metabolize) glucose in food, so that it can be used by our cells for energy. Type 1 diabetes refers to the body's inability to produce the hormone insulin. With type 2 diabetes, the more common type, the body does not make or use insulin efficiently (also called insulin resistance). Without enough insulin, the glucose stays and accumulates in the blood. Over time these high levels of blood glucose can cause serious health problems.

Diabetes is a chronic disease with no known cure. However, it can be managed to improve health outcomes. Some cases of diabetes can also be prevented by reducing known risk factors.

TYPES OF DIABETES

TYPE 1 DIABETES develops when the body can no longer 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 more commonly occurs in children and young adults, although disease onset can occur at any age. In adults, type 1 diabetes accounts for 5 to 10% 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; although, research on prevention is underway.

TYPE 2 DIABETES usually begins when cells do not use insulin properly. The pancreas gradually loses its ability to produce insulin as the need rises. In adults, type 2 diabetes accounts for about 90 to 95% of all diagnosed cases of diabetes. Risk factors to develop

type 2 diabetes include older age, obesity, family history of diabetes, history of gestational diabetes, pre-diabetes, physical inactivity, and race/ethnicity. Type 2 diabetes in children and adolescents, although still rare, is being diagnosed more frequently.

GESTATIONAL DIABETES is a form of glucose intolerance diagnosed during pregnancy. During pregnancy, gestational diabetes requires treatment to normalize maternal blood glucose levels to avoid related complications for the infant. Immediately after pregnancy, 5 to 10% of women with gestational diabetes are found to have diabetes, usually type 2 diabetes. Women who have had gestational diabetes have a 40 to 60% chance of developing diabetes in the next five to ten years.

OTHER TYPES of diabetes result from specific genetic conditions (such as maturity-onset diabetes of youth), surgery, medications, infections, pancreatic disease, and other illnesses.

WHY BE CONCERNED ABOUT DIABETES?

Diabetes can have serious consequences. Over time diabetes can damage your eyes, kidneys and nervous system. It can also cause heart disease and stroke, dental disease and complications of pregnancy. Damage to feet can arise; in severe cases necessitating amputation. Damage to the retina can cause visual impairment or blindness. The risk for death among people with diabetes is about twice that of people of similar age without diabetes. Diabetes is also very costly, both to individuals and to society. Proper management can reduce the risks of these outcomes. The health and economic costs of diabetes in RI, and successes in prevention and management are estimated in this report.

V. DIABETES IS COMMON

DIABETES IN RI

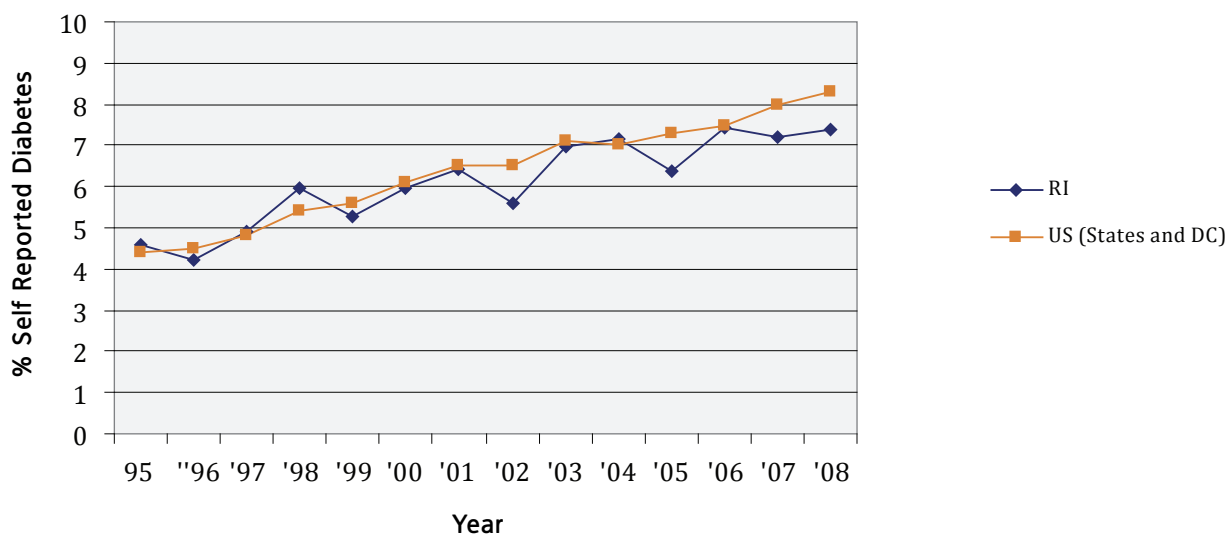
Diabetes is common, serious, and costly, but it is also controllable and preventable. Appropriate interventions can prevent and/or delay the onset of diabetes. Over the past five decades there has been a four to eight fold increase in the prevalence of diagnosed diabetes and it is projected to continue rising. Currently, an estimated 7.4% of RI adults have been diagnosed with diabetes.² Given that approximately one third of people with diabetes are undiagnosed, an estimated 12% of the population of RI is living with diabetes.³

The risk for diabetes increases with age and with the prevalence of overweight, obesity, and sedentary lifestyle. The prevalence of obesity has risen to more than twice what it was just two decades ago (from 10% in 1991 to 22% in 2007). The number of overweight adults has also risen, to the point that a RI adult is more likely to be overweight than normal weight. These rates continue to grow, despite knowledge of the increasing

prevalence of obesity, its adverse health effects, and subsequent public health efforts to reduce its impact.

There is also a large number of individuals with pre-diabetes, a condition where individuals have blood glucose levels higher than normal, but not high enough to be classified as diabetes. In fact it is estimated that nationally 40.1% of adults in the United States aged 40-74 have pre-diabetes. This pre-diabetic condition raises the risk of type 2 diabetes, heart disease, and stroke. By applying the national estimates of pre-diabetes to the RI population, it is estimated that 200,000 RI adults aged 40-74 have pre-diabetes, yet it is estimated that only 25,000 know they have pre-diabetes.⁴ Although widespread, the good news is that intensive exercise and diet modification can prevent the onset of clinical diabetes in persons diagnosed with pre-diabetes.

PREVALENCE OF SELF-REPORTED DIABETES BY YEAR: RI AND US



Data Source: National and RI Behavioral Risk Factor Surveillance Data 1995-2008

DIABETES AMONG CHILDREN

Besides adults with diabetes, approximately 0.2% of the U.S. population under the age of 20 had diagnosed diabetes in 2007.⁵ The rate of new cases among youth was 19 per 100,000 each year for type 1 diabetes and 5.3 per 100,000 for type 2 diabetes. Approximately 530 Rhode Islanders under the age of 20 have either type 1 or type 2 diabetes.⁶ While the prevalence of diabetes among children remains low, there is evidence that the rates of both type 1 diabetes and type 2 diabetes are on the rise in children.⁷

Between 1988 and 2008, the national prevalence of obesity has more than doubled for children aged 6 to 11 and has more than tripled for youth aged 12 to 19.⁸ Currently, at least one in four RI children is overweight or obese, putting them at higher risk for developing type 2 diabetes.⁹ There are no modifiable risk factors that can be identified to reduce a child’s chance of developing type 1 diabetes and the cause remains unknown.

GESTATIONAL DIABETES

Gestational diabetes mellitus (GDM) is a form of glucose intolerance diagnosed during pregnancy. GDM impacts 7% of pregnancies yielding over 200,000 cases per year

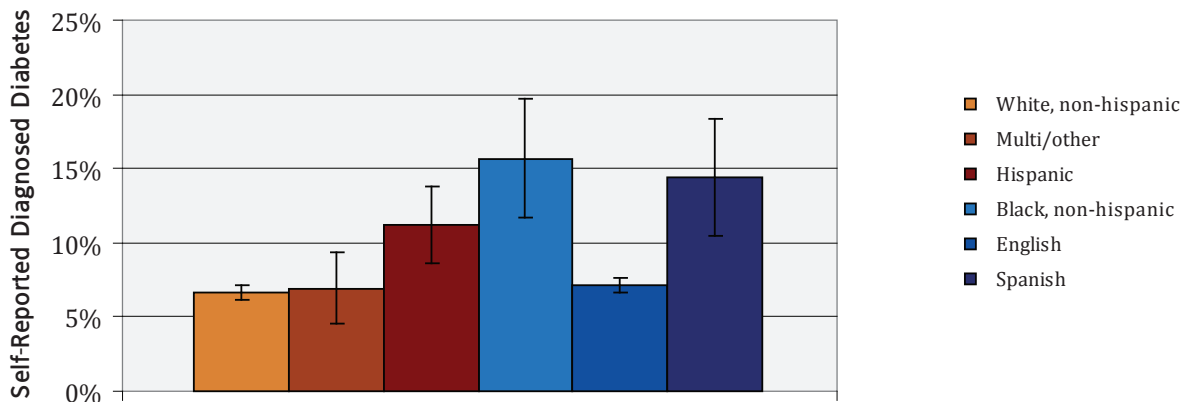
in the United States.¹⁰ Groups who are at increased risk include women who are obese and those with a family history of diabetes. GDM usually resolves itself following pregnancy. However, 5 to 10% of women who acquire GDM during pregnancy have been found to have type 2 diabetes even after delivery. Also, those women who have had GDM have a 40-60% chance of developing diabetes in the five to ten years following pregnancy.¹⁰

Children of mothers with GDM history are at greater risk for obesity and diabetes as compared to children of mothers without a history of GDM.^{11,12} Risk of developing gestational diabetes can be significantly lowered via maintenance of a healthy weight and increased physical activity over the life course.

RACIAL & ETHNIC HEALTH DISPARITIES

Several interrelated factors influence the present and future burden of diabetes, including genetics, socio-economic status, race, ethnicity, as well as cultural and community traditions.¹³ Low income populations have been reported to have a diabetes prevalence of up to two times higher when compared to wealthier populations.¹⁴

AGE-ADJUSTED PREVALENCE OF DIABETES BY RACE/ETHNICITY AND LANGUAGE



Data Source: 2006/2007/2008 RI BRFSS



Diabetes affects some racial and ethnic groups disproportionately, where both prevalence of diabetes and the risk of associated complications are greater.¹⁵ The prevalence in RI of diagnosed diabetes is highest among Black/African American adults (15.7%) and Hispanic adults (13%); compared to Non-Hispanic White adults (6.7%). Gestational diabetes, and type 2 diabetes in youth under 18, are more prevalent among populations that are African American, Hispanic/Latina and American Indian/Alaskan Native.¹⁶ Non-Hispanic White youth, however, have the highest rate of new cases of type 1 diabetes.¹⁷

RI PRIORITIES

Because diabetes is among the most prevalent, costly, and preventable of all health problems, controlling diabetes must be a top public health priority.¹⁸ To eliminate health disparities among different segments of the population, priority was placed on the use of data to better identify high-risk populations with the greatest burden of diabetes, and the social determinants of health that impact the burden of diabetes. The priorities identified for RI are listed below as goals with measurable objectives that lead toward the accomplishment of those goals. The first priority is prevention. Control of diabetes begins with leading a healthy lifestyle (avoiding tobacco use, being physically active and eating well) in order to reduce individual risk. The RI Department of Health's Initiative for a

Healthy Weight "*Eat Smart, Move More: Plan for Action*" is working to change the social, political and physical environments to support healthy and active living. One of the main priorities identified for reduction of diabetes in this plan is to support the *Eat Smart, Move More* efforts to reduce individual risk. In order to increase general nutrition and physical activity across the population in RI, the objective listed below is to increase participation in best practice community nutrition and physical activity programs. The second priority is to increase the number of people who are aware of their risk for diabetes. It is important for people to know their individual risk, and for diabetes and pre-diabetes to be identified early. Sometimes early identification can reverse the disease process with lifestyle modification. Currently about 56% of adults over age 18 report having had a blood sugar test in the past three years.¹⁹ Increased screening, and reducing barriers to screening, is another priority identified for the state in order to increase the number of people aware of their risk for diabetes and offer people with "pre-diabetes" counseling, education, and opportunities for lifestyle change. Finally, the third main priority for RI in this area is to increase the use of data by decision makers and stakeholders for evidence-based decision making to prevent and control diabetes. The use of data, stratified by population group, is essential in order to ensure efficient use of resources and the promotion of evidence-based interventions. These priorities, identified by the stakeholder workgroups are listed below.



V. DIABETES IS COMMON: GOALS AND OBJECTIVES

- **GOAL 1: DECREASE THE NUMBER OF PEOPLE WHO DEVELOP DIABETES IN RI THROUGH INCREASES IN PHYSICAL ACTIVITY AND QUALITY OF DIET.**

OBJECTIVE A): (IHW)* Between January 1, 2009 and December 30, 2015, increase participation in selected best-practice and promising-practice community nutrition and physical activity programs. (DATA SOURCE: IHW)

ACTIVITIES:

- Actively support this objective and others of the RI Department of Health’s Initiative for a Healthy Weight *Eat Smart, Move More: Plan for Action 2010-2015* (ESMM). (<http://www.health.ri.gov/publications/actionplans/2010InitiativeForHealthyWeight.pdf>)

Lead Agency: Eat Smart, Move More – Initiative for a Healthy Weight.

- **GOAL 2: INCREASE THE NUMBER OF PEOPLE WHO ARE AWARE OF THEIR RISK FOR DIABETES.**

OBJECTIVE A): By 2015, increase the percentage of adults in RI who report having had a diabetes screening test done in the past 3 years by at least 5%. (DATA SOURCE: RI BRFSS)

ACTIVITIES:

- Provide patient education tools that educate on the importance of diabetes screening.
- Disseminate *American Diabetes Association (ADA) Guidelines* to providers for diabetes screening recommendations.
- Provide new tools and resources on the meaning of diabetes screening results, pre-diabetes, and prevention - especially those from ADA.
- Promote access to healthcare coverage and access to primary care.
- Provide alternative sites for screening such as workplace, and community settings.

Lead Agency: RI Diabetes Prevention & Control Program (RI-DPCP)

OBJECTIVE B): Increase the number of encounters for people with pre-diabetes and with gestational diabetes receiving diabetes education, each by at least 10% each year. (DATA SOURCE: Diabetes Outpatient Educators)

ACTIVITIES:

- All RI Chronic Care Collaborative (RICCC) sites will include assessment questions and interventions of pre-diabetes in registries.
- Create tools to give patients tailored information regarding their status and risks.
- Create patient and provider educational materials to provide clear and specific information about their condition.
- Collaborate with the Greater Providence YMCA’s Diabetes Prevention Program, a group-based lifestyle intervention designed for people at high risk of developing type 2 diabetes.

* The *Eat Smart, Move More: A Plan for Action* (ESMM) was developed for state and local policy makers, organization leaders, and community advocates to guide the way towards coordinated efforts to reduce and prevent overweight and obesity in RI. The action plan identifies RI’s priority objectives, and offers strategies that should be used by policy makers, organizations, and professionals to make healthy eating and active living easier for all Rhode Islanders.

This *RI Diabetes State Plan* has been written in coordination with that existing plan and all relevant primary prevention objectives, identified as “IHW” are from the ESMM action plan. All stakeholders working to prevent and control diabetes are urged to actively support the priority objectives of ESMM. This has been identified as the way to provide a coordinated effort to decrease overweight and obesity among children and adults in RI, and decrease the risk for diabetes.

- Collaborate with the Minority Health Promotion Centers for dissemination of information.
- Disseminate information to OB/GYN providers in the state about availability of Certified Diabetes Outpatient Educators (CDOE) and referral information for their patients with gestational diabetes to easily access services.

Lead Agency: RI-DPCP

■ **GOAL 3: INCREASE THE USE OF DATA BY STAKEHOLDERS (SUCH AS POLICY MAKERS, INSURERS, EMPLOYERS, MEDICAL PROVIDERS, THE GENERAL PUBLIC, MEDICAID) TO DRIVE ACTIONABLE PRIORITIES TO PREVENT AND CONTROL DIABETES.**

OBJECTIVE A): Develop a State Diabetes Health System (SDHS) Communications Strategy by December 2011 aimed at increasing awareness of and support for diabetes prevention and control programs and ensuring wide-spread availability of chronic disease data, thereby increasing opportunity for the use of data by stakeholders (DATA SOURCE: RI-DPCP)

ACTIVITIES:

- Collaborate with other chronic care teams to present data around cost of and risk for chronic disease and co-morbidities.
- Evaluate use of data through strategic planning follow-up quality improvement plan.
- Ensure HEALTH teams and stakeholders are aware of diabetes-related data—what, where, and how to access data.
- Develop GIS maps to present to policy makers to help illustrate the impact of diabetes.
- Share specific information about the policy makers’ local constituent aggregate health status with legislators and policy makers including diabetes rates, risks, and costs.
- Organize high profile activities to promote awareness of diabetes and risk for diabetes.

OBJECTIVE B): Analyze outcomes of the RI Chronic Care Collaborative (RICCC) intervention by population group (age, gender, race, ethnicity and insurance type) by 2012, and annually thereafter to improve and target interventions designed to decrease disparities. (DATA SOURCE: RI-DPCP)

ACTIVITIES:

- Develop memorandum of understanding between RICCC and RI-DPCP and provide de-identified individual level data in order to identify and understand disparities.
- Draft and disseminate evaluation findings and analysis to stakeholders and partners for comment and feedback.
- Quantify trend of outcomes over time to predict training and technical assistance needs and opportunities for improvement.

Lead Agency: Chronic Care and Disease Management Team, HEALTH



VI. DIABETES IS SERIOUS

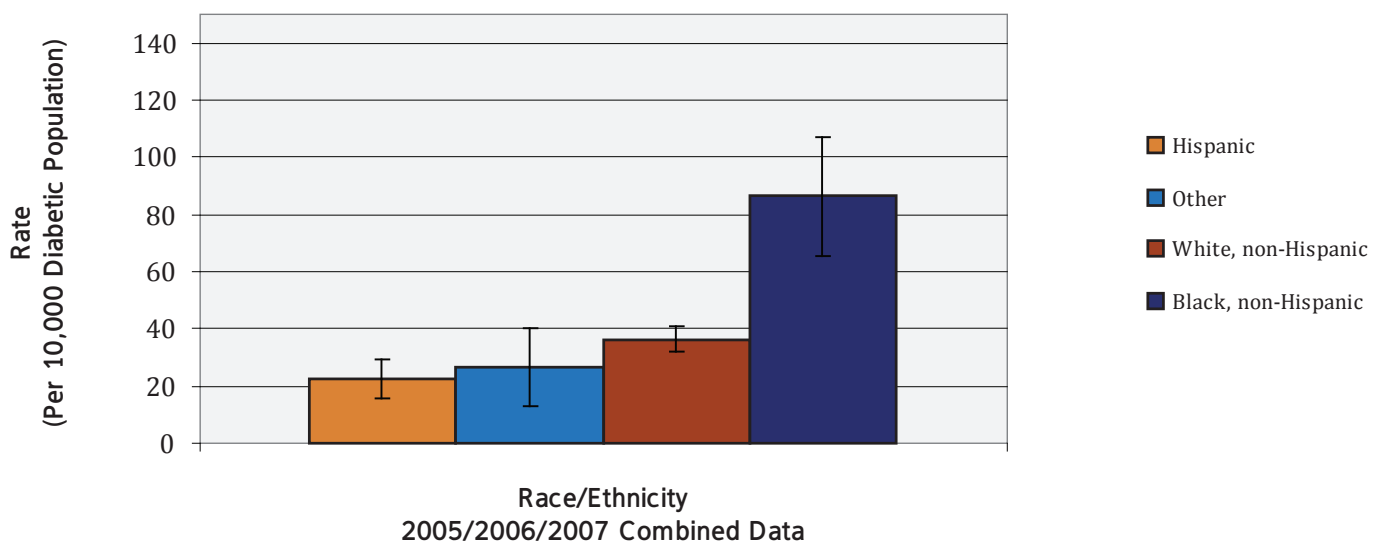
WHAT HEALTH CONDITIONS ARISE FROM DIABETES? (MORBIDITY)

Diabetes can lead to serious complications, such as heart disease and stroke, blindness, kidney damage, and lower-limb amputations. In fact, people with diabetes have over five times greater risk for a heart attack, four times greater risk of stroke, and two times higher risk for hypertension. People with diabetes are more susceptible to many other illnesses, and once they acquire these illnesses, often have a poorer prognosis. Many of these complications can result in people with diabetes becoming disabled. In RI, 42% of adults with diabetes are disabled compared to 19% of adults without diabetes. Fortunately, people living with diabetes can lower the occurrence of these and other diabetes complications by controlling blood glucose, blood pressure and blood lipids.

In the U.S., diabetes is the leading cause of Non-Traumatic Lower Extremity Amputations (NTLEA) and blindness among working-aged adults.²⁰ Although the overall RI rate of NTLEA is lower than the national average, Black, Non-Hispanics with diabetes in RI had rates more than two times higher than White, Non-Hispanics with diabetes in RI.

Diabetes is the leading cause of preventable blindness and vision loss in adults. The risk of developing eye conditions such as glaucoma, retinal disease, and cataracts, is much higher for individuals with diabetes. As there are no early symptoms suggesting that there may be a problem, the key to diabetic vision loss or blindness is to prevent it through early detection and treatment.

AGE-ADJUSTED HOSPITAL DISCHARGE RATES FOR NON-TRAUMATIC LOWER EXTREMITY AMPUTATIONS AND DIABETES AS ANY LISTED DIAGNOSIS PER 10,000 DIABETIC POPULATION IN RI, AGE 18+



Data Source: Amputation counts are from RI Hospital Discharge Data. Adults with diabetes denominators are from RI BRFSS data.

Cardiovascular disease (CVD) is a major complication of diabetes and the leading cause of early death among people with diabetes—about 65% of people with diabetes die from heart disease and stroke. High blood sugar levels in adults with diabetes increase the risk for heart attack, stroke, angina, and coronary artery disease. People with type 2 diabetes also have high rates of high blood pressure, lipid problems, and obesity, which contribute to their high rates of CVD. Smoking doubles the risk of CVD in people with diabetes.²¹

Diabetes is also the most common cause of kidney failure, accounting for nearly 44% of new cases.²² Since the number of people with diabetes is growing, the number of people with kidney failure caused by diabetes is also growing. High blood pressure (hypertension) is a major factor in the development of kidney problems in people with diabetes. Both a family history of hypertension and the presence of hypertension appear to increase the risk of developing kidney disease. Hypertension also accelerates the progress of kidney disease when it already exists. When people with diabetes experience kidney failure, dialysis or a kidney transplant is often required.

HOW MANY DEATHS ARE ASSOCIATED WITH DIABETES? (MORTALITY)

Over the past decade, diabetes has remained the 6th leading cause of death in the United States (primarily



from diabetes-associated cardiovascular disease) while in RI it is the 8th leading cause of death.²³ There were 7,360 diabetes-related deaths in RI during the period 1995-2005.²⁴ Persons with diabetes experience death rates two to four times greater than non-diabetic persons of the same age, especially from cardiovascular disease.²⁵

RI PRIORITIES

As a serious health concern at both the individual and societal level, reducing the impact of diabetes requires multi-level support. The first priority identified for RI is to increase support for diabetes control by policy makers and decision makers in the state. One proposal listed below is to establish an annual “policy agenda” related to diabetes control in order to provide a coordinated approach to systems level change. The second priority is to collaborate with *Eat Smart, Move More: A Plan for Action*, in order to promote a social and physical environment that supports healthy eating and active living. It is important for the social and physical environment itself to support the education and health promotion messages individuals receive - both for primary and secondary prevention. Currently, many low income neighborhoods have few grocery stores that sell fresh fruits and vegetables, for instance, and may have limited safe spaces for exercise - making this even more challenging for people living in those neighborhoods. It may be easier to purchase cigarettes



and beer than apples or celery in some areas. With a focus on the “core cities” and low income neighborhoods, a top priority is working to increase walkability and healthy food availability in these core areas. Finally, because of the significant health disparities in the rates of diabetes complications by race and ethnicity, the third priority for diabetes control in this area is to directly address and reduce these disparities. Complications can be prevented or delayed through careful control of blood glucose levels, blood pressure and LDL cholesterol. Provision of culturally appropriate and readily accessible resources and services for racial and ethnic minorities, with the goal of health equity, is a top priority to decrease the disparities related to these serious complications.



VI. DIABETES IS SERIOUS: GOALS AND OBJECTIVES

■ GOAL 1: INCREASE SUPPORT FOR DIABETES PREVENTION AND CONTROL AMONG STATE LEADERS AND POLICY MAKERS.

OBJECTIVE A): By 2015, increase the number of decision makers (such as legislators, employers, healthcare administration, etc.) on the Rhode Island Diabetes Council. (DATA SOURCE: RI-DPCP)

ACTIVITIES:

- Communicate with decision makers about the importance of diabetes control.
- Promote participation in the SDHS by decision makers.
- Support and acknowledge participation of decision makers with public recognition.

Lead Agency: RI-DPCP

OBJECTIVE B): Identify diabetes policy agenda by December 31 annually. (DATA SOURCE: RI-DPCP)

ACTIVITIES:

- RI Diabetes Council will determine policy agenda with assistance from American Heart Association (AHA) & ADA.
- Utilize diabetes awareness month and advocacy day for public awareness.
- Promote policy agenda through public awareness events and campaign.
- Utilize personal stories, the “face of diabetes” to express impact of disease.
- Offer training to RI Community Health Workers Association and other community partners.
- Reach out to providers and community partners to make them aware of Diabetes Council and RI-DPCP activities and resources.

Lead Agency: AHA, ADA



■ GOAL 2: CREATE A SOCIAL AND PHYSICAL ENVIRONMENT IN RI THAT SUPPORTS HEALTHY EATING AND ACTIVE LIVING.

OBJECTIVE A): (IHW) By December 30, 2015, 6 core city neighborhoods will make at least two documented improvements in community walkability, safety, access to recreation, and access to healthy foods. (DATA SOURCE: IHW)

ACTIVITIES:

- Actively support this objective and others of the RI Department of Health’s Initiative for a Healthy Weight *Eat Smart, Move More: A Plan for Action 2010-2015*. (<http://www.health.ri.gov/publications/actionplans/2010InitiativeForHealthWeight.pdf>)

Lead Agency: Eat Smart, Move More – Initiative for a Healthy Weight.

■ **GOAL 3: REDUCE HEALTH DISPARITIES RELATED TO COMPLICATIONS OF DIABETES – INCLUDING AMPUTATIONS, VISUAL IMPAIRMENT, CARDIOVASCULAR AND KIDNEY DISEASE ACROSS ALL POPULATIONS IN RI.**

OBJECTIVE A): Increase the number of Rhode Islanders representing racial and ethnic minorities with diabetes enrolled in the Living Well RI, Team Works, Multi-Cultural Diabetes Program, and Certified Diabetes Outpatient Educators (CDOE)/Cardiovascular Disease Diabetes Outpatient Educators (CVD DOE) by at least 10% each year. (DATA SOURCE: RI-DPCP)

ACTIVITIES:

- Collaborate with Minority Health Promotion Centers and the Community Health Centers to disseminate information to at risk populations about the evidence-based support programs available in the state.
- Target promotional materials to include images of and specific culturally appropriate messages for racial and ethnic minorities.
- Increase presence of support programs and CDOEs/CVD DOEs in locations that disproportionately serve racial and ethnic minorities.
- Increase opportunities for low literacy and limited English proficiency populations to access diabetes education and prevention information.

Lead Agency: RI-DPCP

OBJECTIVE B): Attain equity in diabetes care quality process measures across demographic population groups using HEDIS measures of: % with at least 2 A1C, % with foot exam, % with dilated eye exam in past 12 months by December 30, 2015. (DATA SOURCE: BRFSS)

ACTIVITIES:

- Expand the use of the Chronic Care Model with emphasis on support for racial and ethnic minorities.
- Support expansion of and replication of successful PCMH models across the state.
- Include race data in analyses of RICCC data.
- Ensure widespread distribution of RICCC sites to include facilities and practices serving the most underserved and at risk populations.
- Increase support for nurse care managers and the team approach to healthcare.

Lead Agency: QPRI, RICCC, CSI



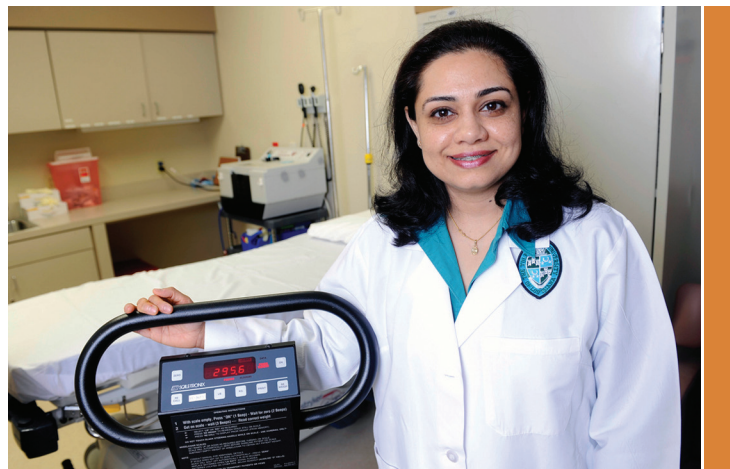
VII. DIABETES IS COSTLY

WHAT ARE THE COSTS FROM DIABETES?

Diabetes is costly in both human and economic terms. As diabetes rates continue to increase so do the costs associated with diagnosis, management and treatment of associated complications. People with diabetes have medical expenditures four times higher than they would if they did not have diabetes. The economic cost of diabetes is estimated to be 11% of the U.S. health-care expenditures.²⁶ In RI, the total annual healthcare expenditure for adults with diabetes was estimated at \$722 million for 2007 and expected to grow.²⁷ Diabetes has the potential to overwhelm our healthcare system without effective prevention and control.

RI PRIORITIES

With close control of blood sugar and co-morbidities, however, the cost and impact of diabetes can be minimized. In RI, the first identified priority listed below is to reduce the financial burden of diabetes for individuals, communities, employers, the healthcare system, and the state. One of the ways to do this is through support for diabetes education, case management, and self-management. By expanding on the success and evidence of the Chronic Care Collaborative and the Patient-Centered Medical Home (PCMH) initiatives in the state, a top priority is to continue to expand



transitions, such as from inpatient to ambulatory and from pediatric to adult primary care. One way to do this is through ensuring high quality, easily accessible information about support services and referrals through highly trafficked web and phone information services, as well as through diabetes educators. Finally, hospital readmissions are a significant financial burden on the healthcare system and often represent a painful, difficult experience for the patient and their family. In order to decrease hospital readmission rates, one of the proposals is to increase discharge education and case management assistance, to ensure timely follow up with appropriate services.



VII. DIABETES IS COSTLY: GOALS AND OBJECTIVES

■ GOAL 1: REDUCE THE FINANCIAL BURDEN OF DIABETES FOR INDIVIDUALS, COMMUNITIES, EMPLOYERS, THE HEALTHCARE SYSTEM, AND THE STATE.

OBJECTIVE A): By June 30, 2015, increase funding for CDOE diabetes education, care management, and diabetes self-management programs including services for people with pre-diabetes. (DATA SOURCE: RI-DPCP)

ACTIVITIES:

- Conduct analysis of funding structure and opportunities for increased financing to support patient activation.
- Explore ways to increase funding for Chronic Disease Workforce including alternatives to Fee for Service models.
- Explore ways to support closure of the Medicaid versus Medicare gap in reimbursement.

Lead Agency: RI-DPCP

OBJECTIVE B): Increase the percentage of provider practices participating in a Patient-Centered Medical Home (PCMH) model such as the RI Chronic Care Sustainability Initiative (RI CSI), the BC/BS RI PCMH program, and the RICCC by at least 10% each year from the 2010 baseline. (DATA SOURCE: RIQP, BCBSRI)

ACTIVITIES:

- Secure funding for training of new practices.
- Provide training to new teams for PCMH.
- Work toward aligning diabetes measures for all PCMH initiatives.

Lead Agency: Office of the Health Insurance Commissioner, RI CSI, BC/BS RI, HEALTH

OBJECTIVE C): (IHW) By December 30, 2015, 60 small- to medium-sized RI worksites (under 400 employees) will implement documented policy and environmental changes that support physical activity and healthy eating. (DATA SOURCE: IHW)

ACTIVITIES:

- Actively support this objective and others of the RI Department of Health's Initiative for a Healthy Weight *Eat Smart, Move More: A Plan for Action* 2010-2015. (<http://www.health.ri.gov/publications/actionplans/2010InitiativeForHealthyWeight.pdf>)

Lead Agency: IHW

■ GOAL 2: IMPROVE ACCESS TO AND QUALITY OF REFERRALS FOR DIABETES PREVENTION AND CONTROL, AND CARE SERVICES TO MEET THE NEEDS OF ALL RHODE ISLANDERS.

OBJECTIVE A): By December 30, 2012, include "Giving Referrals" in the CDOE and CVD DOE curricula (DATA SOURCE: RI-DPCP)

ACTIVITIES:

- Develop curriculum for "Giving Referrals".
- Provide training of trainers and incorporate into future training curricula.
- Provide continuing education for current CDOEs and CVD DOEs including this new curriculum.

- Conduct provider education to increase awareness and benefit of CDOEs and CVD DOEs.

Lead Agency: RI-DPCP

OBJECTIVE B): By 2012, increase the number of hits to the HEALTH RI-DPCP and Initiative for a Healthy Weight (IHW) websites as primary sources of resource information by 25%. (DATA SOURCE: RI-DPCP)

ACTIVITIES:

- Conduct quarterly review of RI-DPCP and IHW website links and provide updated information to web and telephone information services.
- Keep links and resources up to date.
- Increase visibility of website as a resource through communication strategy and promotion throughout the state by various media such as print, radio, advertising, and handouts.

Lead Agency: RI-DPCP

OBJECTIVE C): Lower readmission rates for people being discharged from a hospital with diabetes-related complications. (DATA SOURCE: Hospital Discharge Data)

ACTIVITIES:

- Provide information to health insurers re: cost savings associated with visiting nurse service coverage to prevent readmission.
- Use case management services to ensure follow up with primary care.
- Hold hospitals accountable for readmission rates.
- Work with primary care providers to ensure access to services in a timely manner.
- Increase support and reimbursement for discharge planning and education in the hospital.
- Develop plan to increase coordination of care services for those at risk for readmission.
- Build on the Neighborhood Health Transitions of Care and Quality Partners RI Safe Transition programs as models to replicate throughout the state.

Lead Agency: QPRI – Safe Transitions.



VIII. DIABETES IS CONTROLLABLE

Complications can seriously diminish the quality of life for individuals with diabetes. However, research shows that through education and self-management skills people with diabetes can take steps to control the disease and minimize the risks of these health complications.²⁹ Through adequate education, support, and resources, persons with diabetes and their families can learn techniques such as maintaining a consistent near normal blood sugar, increasing physical activity and maintaining a healthy weight which can reduce some potential diabetes complications. RI has set an agenda to improve the quality of life for all persons who have or are at risk for developing this disease.

CLINICAL MANAGEMENT SERVICES

Overall, RI is performing higher compared to the U.S. as a whole on clinical measures that can help those with diabetes to live a longer and healthier life with less diabetes-related complications. RI has surpassed the Healthy People 2010 (HP 2010) goals for adults with

diabetes having at least two A1C test in the past year and having an annual dilated eye exam as seen below.

Nevertheless, improvements can clearly still be made in the adherence to the American Diabetes Association (ADA) standards of care practice guidelines. *The new 2010 ADA Practice Guidelines* offer an opportunity to promote the most up-to-date evidence-based practices among providers in RI. Combined with the PCMH initiatives, and the chronic illness improvement projects, the next five years offer a unique opportunity for improvement and advancement in diabetes prevention and control.

IMMUNIZATIONS

Patients with diabetes (in particular those with end organ complications of cardiac and renal disease) are at high risk for complications, hospitalization, and death from influenza and pneumococcal disease. Vaccination against influenza has been found to be effective in reducing hospital admissions during

HEALTHY PEOPLE 2010 DIABETES PREVENTIVE CARE PRACTICES: RI COMPARED TO US

	HP2010 GOAL*	AGE-ADJUSTED RI**	US***
EVER ATTENDED DOE	60%	51.0% (46.9 – 55.1)	57.7%
ANNUAL FOOT EXAM	91%	73.4% (69.5 – 77.2)	69.4%
ANNUAL DILATED EYE EXAM	76%	77.1% (73.3 – 80.8)	66.3%
AT LEAST 2 HBA1C IN PAST YEAR	72%	76.8% (73.1 – 80.5)	69.6%
ANNUAL FLU VACCINATION	18-64: 60% 65+: 90%	62.7% (58.8 – 66.7)	51.3%
PNEUMOCOCCAL VACCINATION EVER	18-64: 60% 65+: 90%	48.4% (44.2 – 52.5)	38.9%

* <http://wonder.cdc.gov/data2010/>

** 2006/2007/2008 combined RI BRFSS

***http://www.cdc.gov/diabetes/statistics/preventive_national.htm

influenza epidemics. The effective implementation of influenza and pneumococcal immunization strategies can reduce the cost of human suffering and healthcare expenditures in people with diabetes. The goal is to immunize all patients with diabetes, particularly those with complicating factors such as cardiac or renal disease or those who are or have been recently hospitalized. The Healthy People 2010 public health goals were to administer the influenza vaccine to 90% of diabetic adults >65 years and 60% of diabetic adults <65 by the year 2010. In RI, 60% of adults 18-64 years old and 78% of adults age >65 with diabetes received the vaccine.^{30,31}

SMOKING AND DIABETES

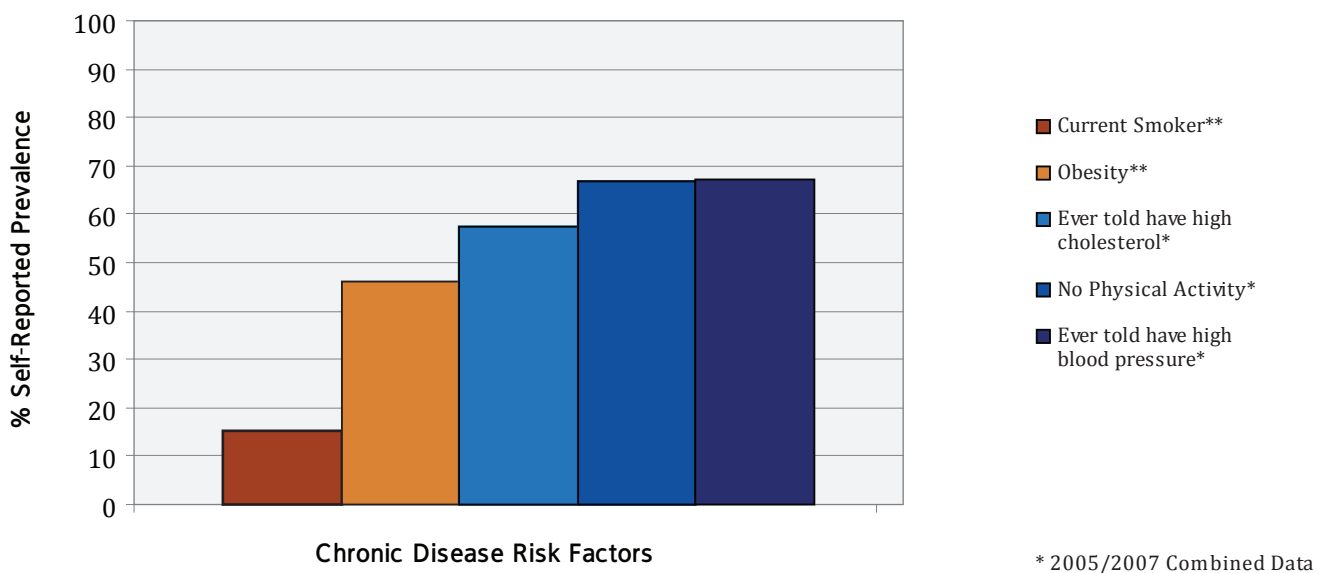
Smoking and exposure to cigarette smoke increase an individual's risk of various diabetes complications, including: heart attack, stroke, nerve damage and kidney disease. In fact, smokers who have diabetes are three times more likely to die of cardiovascular disease

than are non-smokers who have diabetes, according to the American Diabetes Association. Smokers with diabetes have worse glycemic control than non-smokers, even with optimal self-monitoring. Smoking results in increased nephropathy, retinopathy, and neuropathy in people who smoke with diabetes compared to non-smokers with diabetes.³²

Studies have shown that the health benefits for people with diabetes who stop smoking begin immediately. These benefits continue to increase with the length of time a person remains smoke-free. As far as the cardiovascular effects of smoking are concerned, ten years after quitting, a former smoker's risks resemble those of a typical non-smoker.³³

RI cigarette smoking rates are slightly lower than the national average; the youth smoking rate has dropped from 25% to 15% and the adult smoking rate from 23% to 17% (2000-2007). RI has had some major successes related to tobacco control, such as the passage of the

PREVALENCE OF CHRONIC DISEASE RISK FACTORS AMONG RI ADULTS WITH DIABETES



Accessed from: <http://www.health.ri.gov/webquery/brfss/index.html>

Smoke-free Workplace Law in 2004, that prohibits smoking in public places and workplaces in RI, and the passage of the Health Insurer Coverage of Cessation Services in 2009 that requires health insurers to offer broader coverage of smoking cessation services in the state. The RI Department of Health Tobacco Control Program offers a variety of tobacco cessation services including the online BecomeAnEX, Tobacco Treatment for the Uninsured, and 1-800-TRY-TO-STOP QuitWorks telephone resource hotline.

CONTROL OF CO-MORBIDITIES

In addition to controlling blood sugar, weight management, immunizations, and smoking cessation, managing hypertension (high blood pressure) and cholesterol are also important to protecting the health of those living with diabetes. Current recommendations include an A1C test at least twice a year, a dilated eye exam and foot exam yearly, as well as regular BP, lipid, and creatinine/albumin ratio measured. Mental health issues play a significant role; depression, for example, can affect one's ability to maintain control of diabetes and the co-morbidities.

RI PRIORITIES

Control of diabetes is complex and requires that the patients be educated, motivated, and supported in their efforts to control both their blood sugar level and related co-morbidities. The first priority identified for RI is to increase the number of people receiving diabetes education. The proposed way to do this is to increase the number of people trained as Certified Diabetes Outpatient Educators (CDOE), increase the diversity and capacity they represent, and increase referrals to diabetes education. Second, in order to support the education, a patient must be fully motivated, or "activated", and feel ready and able to implement the lifestyle modifications discussed in an education session. The next priority identified below is to increase the level of patient "activation" through

integration of motivational interviewing and the use of personalized tracking tools. Several programs are already in place in the state to support patients in making changes when they are ready. Increasing participation by people with diabetes in QuitWorks tobacco cessation counseling program, in mental health treatment when warranted, and in self-management support programs are all identified as areas needing specific work to increase access to and participation. The third priority is to ensure the best quality of care for diabetes through the widespread adoption of the *2010 ADA Practice Guidelines*. With attention to both process and outcomes, the goal is excellence in diabetes care across the state. The Clinical Preventive Service's recommendations for annual foot exam, dilated eye exam and twice yearly A1C tests are emphasized by the Patient-Centered Medical Home initiatives and the Chronic Disease Workforce initiatives. Within the RICCC, improvements in outcomes will be expected in meeting blood pressure, lipid, and A1C goals. Finally, the fourth priority in this area is to ensure the provision of culturally and linguistically appropriate care for people of diverse backgrounds and for whom English may be a second language. Although it can be hard for *anyone* to access services or navigate the complex healthcare system, it is especially difficult for people who have less education and/or have limited English language skills. Attention to this priority through compliance with National Standards on Culturally and Linguistically Appropriate Services (CLAS) and increasing access to support and management support services for people of diverse backgrounds, is a vital component of meeting the complex needs of all people with diabetes in RI.

VIII. DIABETES IS CONTROLLABLE: GOALS AND OBJECTIVES

■ GOAL 1: INCREASE DIABETES EDUCATION PROVIDED TO PEOPLE LIVING WITH DIABETES.

OBJECTIVE A): Increase the number of people trained as diabetes educators by 10% each year. (DATA SOURCE: RI-DPCP)

ACTIVITIES:

- Promote training through printed materials and internet resources.
- Ensure access to online information and registration through monthly updates to the website.
- Provide an online registration service.
- Offer increased training sessions at alternative sites and times to ensure accessibility for a wide range of participants.

Lead Agency: RI-DPCP

OBJECTIVE B): Increase the number of people trained as diabetes educators who represent racial, ethnic and linguistic minorities by 50% over the 2010 baseline, by 2015. (RI-DPCP)

ACTIVITIES:

- Create a communications plan for the promotion of CDOE and CVD DOE training among racial and linguistically diverse populations.
- Increase offering of training in locations easily accessible by diverse populations.

Lead Agency: RI-DPCP

OBJECTIVE C): By 2013, increase the number of pediatric-trained diabetes educators by 25% over the 2010 baseline. (RI-DPCP)

ACTIVITIES:

- Promote the training among pediatric staff and nurses.
- Develop a subspecialty pediatric CDOE training program.

Lead Agency: CDOE Board

■ GOAL 2: INCREASE THE LEVEL OF PATIENT “ACTIVATION” INCLUDING SKILLS, CONFIDENCE, AND SELF-EFFICACY TO SUPPORT THE ROLE OF SELF-MANAGEMENT BY PEOPLE LIVING WITH DIABETES IN RI.

OBJECTIVE A): By 2015, increase participation in Team Works, Living Well, Multicultural Diabetes Education Program Support Groups and CDOE and CVD DOE education by at least 10% each year over 2010 baseline. (RI-DPCP)

ACTIVITIES:

- Develop a communication strategy for state-wide marketing of priority evidence-based programs.
- Increase visibility of diabetes education and support services via health plan newsletters, mailings, and other means.
- Develop guidelines and protocols for referrals to evidence-based programs.
- Provide services at alternative locations, times, and in alternative languages when possible.

Lead Agency: RI-DPCP

OBJECTIVE B): By 2012, increase the number of CDOEs and CVD DOEs who have had motivational interviewing training. (DATA SOURCE: RI-DPCP)

ACTIVITIES:

- Provide regular ongoing training and education opportunities in motivational interviewing for the Chronic Disease Workforce.
- Provide opportunities for staff at all levels of care to be trained in motivational interviewing, and stages of change, to increase patient “activation”.

Lead Agency: RI-DPCP

■ **GOAL 3: INCREASE PARTICIPATION IN BEST AND PROMISING PRACTICE SUPPORT PROGRAMS THAT OFFER COMPLEMENTARY HEALTH PROMOTION OPPORTUNITIES FOR PEOPLE LIVING WITH DIABETES.**

OBJECTIVE A): By 2012, expand access to tobacco cessation services and programs through inclusion of tobacco cessation education, resources and referrals in the CDOE and CVD DOE curricula. (DATA SOURCE: RI-DPCP)

- Develop tobacco cessation curriculum by RI-DPCP in coordination with RI Department of Health Tobacco Control Program.
- Provide training of trainers and include in future certification.
- Provide continuing education for current educators.

Lead Agency: RI-DPCP, TCP

OBJECTIVE B): By 2012, increase participation in the QuitWorks RI Smoking Cessation counseling by people living with diabetes. (DATA SOURCE: TCP)

- Disseminate print and web-based referral information for QuitWorks program to providers and organizations serving people with diabetes.
- Ensure that QuitWorks is widely known in the provider community serving people with diabetes.
- Include awareness of tobacco cessation services in CDOE and CVD DOE training curricula.

Lead Agency: RI-DPCP, TCP

OBJECTIVE C): By 2011, and each year annually, increase mental health screening for people with diabetes in Patient-Centered Medical Home primary care sites. (DATA SOURCE: RICCC, RI CSI, BC/BS RI)

- Disseminate best practice mental health screening tools used in select sites.
- Include mental health screening in data collection and analysis for RICCC sites.
- Provide referral information for positive screenings.
- Increase access to mental health professionals for the underserved.

Lead Agency: RI CSI, BC/BS RI

■ **GOAL 4: ENSURE THE BEST QUALITY OF CARE TO ALL PEOPLE LIVING WITH DIABETES IN RI THROUGH COMPLIANCE WITH 2010 ADA CLINICAL GUIDELINES.**

OBJECTIVE A): Increase the number of people living with diabetes who report ever having attended diabetes education to the HP 2010 goal of 60%. (DATA SOURCE: BRFSS/RI-DPCP)

ACTIVITIES:

- Expand the use of existing community pharmacies for education and promotion of services.
- Promote diabetes education to providers, patients, and community.
- Keep website updated and disseminate printed materials.
- Development of an integrated Chronic Disease Workforce.

Lead Agency: Chronic Care and Disease Management Team, HEALTH, DOE Board

OBJECTIVE B): Increase the number of people living with diabetes receiving Clinical Preventive Service's recommendations for annual foot exam, dilated eye exam and A1C test results to meet HP 2010 goals.

(DATA SOURCE: BRFSS)

ACTIVITIES:

- Ensure dissemination of 2010 ADA Guidelines to providers across the state.
- Increase coordination of Chronic Disease Workforce
- Identify and reduce barriers to care for target populations.
- Improve access to primary care for people at risk for or living with diabetes.
- Promote expanded access to healthcare coverage.

Lead Agency: RI-DPCP, ADA, Health Plans, Quality Partners of RI (QPRI), RI Health Center Association

OBJECTIVE C): By 2015, conduct a pilot project utilizing existing community pharmacies for education and referrals. (DATA SOURCE: RI-DPCP)

ACTIVITIES:

- Identify partner for participation in pilot.
- Evaluate and disseminate findings and lessons learned.
- Identify additional funding sources to support future replication of successful initiatives.

Lead Agency: RI Pharmacy Association

OBJECTIVE D): By 2012, and each year thereafter, increase the number of RICCC, RI CSI, and BC/BS RI PCMH providers meeting BP, lipids, and A1C goals by 5%. (DATA SOURCE: RICCC, CSI, Health Plan Performance DATA)

ACTIVITIES:

- Disseminate ADA Guidelines updates annually to providers in RI.
- Provide continuing education opportunities to increase awareness of new guidelines.
- Support healthcare plans in their identification of gaps in care.
- Encourage healthcare plans to continue communication regarding recommended care, patient education, compliance and control measures and continuous quality improvement.
- Utilize EHR for data and quality improvement process.

Lead Agency: RI-DPCP, RI CSI, BC/BS RI

OBJECTIVE E): By 2012, and each year thereafter, increase the number of people living with diabetes who have had an influenza and pneumococcal vaccine to meet the age-specific HP 2010 goal. (DATA SOURCE: BRFSS)

ACTIVITIES:

- Provide print and web-based promotion materials to providers across the state.
- Ensure that providers are aware of free and reduced cost vaccine opportunities.
- Promote recommended vaccines for people with diabetes as integral quality care measure to track and continuously improve.

Lead Agency: HEALTH Adult Immunization Program

■ **GOAL 5: PROVIDE CULTURALLY AND LINGUISTICALLY APPROPRIATE CARE TO ALL RHODE ISLANDERS REGARDLESS OF THEIR RACIAL, ETHNIC, LINGUISTIC, EDUCATIONAL AND SOCIO-ECONOMIC STATUS.**

OBJECTIVE A): By 2015, increase participation in Living Well RI and Multi-Cultural Diabetes Education Program and Support Groups by people living with diabetes with limited English proficiency by at least 10%. (DATA SOURCE: RI-DPCP)

ACTIVITIES:

- Conduct patient outreach in non-traditional settings – such as full-service community schools, adult education facilities, places of worship, laundromats, DMV, beauty parlors and barbers.
- Increase bicultural/bilingual staff in Chronic Disease Workforce.
- Promote Promotoras model of community-based education and outreach.
- Promote similar community-based approaches for other non-Spanish newly immigrated populations.
- Utilize trusted settings already servicing underserved communities to promote best practice program opportunities in the state.
- Provide cultural competency training to providers and staff as needed.
- Increase diversity of the workforce.
- Disseminate resource and referral information.
- Promote a strength-based approach focused on the positives when reaching out to racial and ethnic minority populations as opposed to a deficit approach.

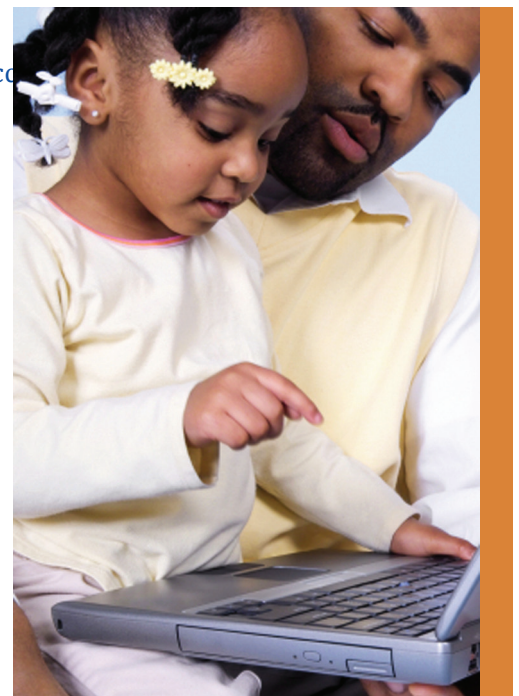
Lead Agency: RI-DPCP

OBJECTIVE B): All RICCC sites will have a written plan with policies, and accreditation mechanisms to bring them into compliance with the mandatory Culturally and Linguistically Appropriate Services (CLAS) standards by 2012. (DATA SOURCE: HDACT)

ACTIVITIES:

- Inform all RICCC sites about requirement.
- Disseminate CLAS standards to all sites.
- HDATC team will monitor progress and identify sites not in compliance with federal CLAS standards.

Lead Agency: Health Disparities and Access to Care Team (HDACT)



IX. DIABETES IS PREVENTABLE

Being overweight and having a sedentary lifestyle are key modifiable risk factors for diabetes. The risks are especially high for those who meet the criteria for being obese. Rhode Islanders who are obese are three to four times more likely than residents who are not obese to have diabetes.³⁴

There has been a statistically significant upward trend in obesity among both men and women in RI, and across the nation, from 1993 to 2007. Currently, more Rhode Islanders than ever before report being obese (22%) and overweight (39%).³⁵ This trend is only expected to rise, with 36% of kindergarteners identified as overweight or obese.

PRE-DIABETES

Adding to the burden of diabetes, is the large number of individuals with pre-diabetes, a condition where individuals have blood glucose levels higher than normal, but not high enough to be classified as diabetes. This pre-diabetic condition raises the risk of type

Persons are defined as obese if the ratio of their weight to height, called a body mass index (BMI) is 30 or greater. $BMI = \text{weight in kilograms} / \text{height in meters}$.

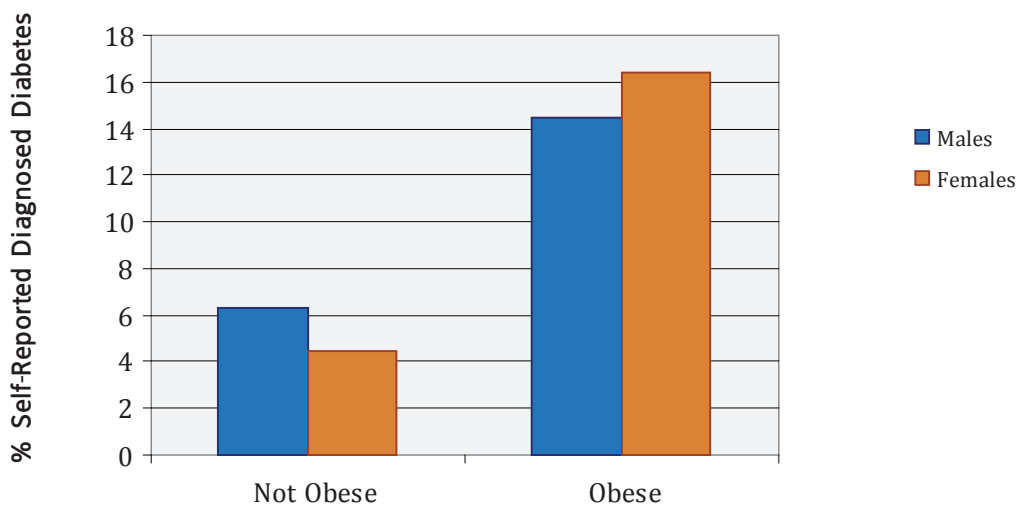
A BMI Calculator is available at: <http://www.cdc.gov/healthyweight/assessing/bmi/>

2 diabetes, heart disease, and stroke, which all intensifies the rising epidemic of diabetes. Approximately 23-25% of people with pre-diabetes will continue on to have a diagnosis of diabetes. Intervention, however, can prevent and/or delay onset of diabetes. It is estimated that 200,000 RI adults age 40-74 have pre-diabetes, yet only about 25,000 *know* they have pre-diabetes.³⁶

BENEFITS OF FITNESS AND NUTRITION

Low fruit and vegetable consumption for men, and frequent fast food consumption for women, are associated with increased obesity risk. Men and women who watch more than two hours a day of television, or who

DIAGNOSED DIABETES AMONG OBESE AND NOT OBESE RI MEN AND WOMEN



Data Source: 2006/2007/2008 RI BRFSS. Accessed from: <http://www.health.ri.gov/webquery/brfss/index.html>

are physically active less than 30 minutes a day/5 days a week, have higher obesity risk than those who turn off the TV or who are physically active. All of these risk factors are higher among those with diabetes.³⁷

Rhode Islanders have far to go to meet recommendations for fitness and nutrition. Far fewer than half of residents have adopted fitness and nutrition practices that have been found to improve health.³⁸

RI PRIORITIES

The top priority for prevention in this plan is to support the initiatives already in place to promote healthy weight in RI. The RI Department of Health's Initiative for a Healthy Weight is striving to address nutrition and physical activity through the *Eat Smart, Move More: A Plan for Action 2010-2015*. The plan was developed to guide the way toward coordinated efforts to reduce and prevent overweight and obesity in RI. The objectives and strategies in *Eat Smart, Move More* were selected for their potential public health impact, evidence of effectiveness, sustainability, feasibility, and collaborative nature. The behaviors that lead to overweight and obesity are influenced by the social, political, and physical environment – forces largely outside individual control. The best route to sustainable behavior change is to target both the individual and the outside forces that influence the individual. In this way, the environment supports behavior change



– so the healthy choice is the easy choice. *Eat Smart, Move More* includes strategies that affect all levels of impact. Diabetes stakeholders are urged to support and promote the priority initiatives identified below. The second priority for prevention of diabetes in RI listed below is to increase collaboration and coordination of efforts. A wide array of organizations, programs, and initiatives are all working to reduce the overlapping set of risk factors that lead to the development of many chronic diseases. In order to ensure judicious use of resources, and maximize efficiency, it is essential to apply an integrated approach, in which all stakeholders work to increase opportunities for collaboration.



IX. DIABETES IS PREVENTABLE: GOALS AND OBJECTIVES

- **GOAL 1: PREVENT DIABETES THROUGH THE PROMOTION OF THE HEALTH AND WELL BEING OF ALL RHODE ISLANDERS BY CHANGING SOCIAL, POLITICAL, AND PHYSICAL ENVIRONMENTS TO SUPPORT HEALTHY LIFESTYLES.**

OBJECTIVE A): By December 30, 2015, all RICCC sites will integrate obesity prevention into routine primary care. (DATA SOURCE: RICCC)

ACTIVITIES:

- Establish baseline for obesity prevention activities at RICCC sites.
- Disseminate best practice recommendations.
- Develop referral materials for specialty care.
- Establish data collection and evaluation systems for obesity prevention integration.

Lead Agency: RICCA, RICCC, RI-DPCP

OBJECTIVE B): (IHW) By December 30, 2010, all full-service and fast food restaurants with 15 or more sites nationally will provide calorie information at the point of purchase. (DATA SOURCE: IHW)

OBJECTIVE C): (IHW) By October 2012, all school districts in RI will develop and implement high quality, performance-based Physical Education (PE) curriculum aligned with RI Department of Education Physical Education Standards. (DATA SOURCE: IHW)

OBJECTIVE D): (IHW) By October 2012, all schools in RI will fully implement district- and state-adopted policies and laws ensuring that all foods and beverages available on school campuses and at school events contribute toward eating patterns that are consistent with Dietary Guidelines for Americans. (DATA SOURCE: IHW)

OBJECTIVE E): (IHW) By December 30, 2015, at least 25% of licensed childcare facilities will provide menus consistent with the Dietary Guidelines for Americans. (DATA SOURCE: IHW)

ACTIVITIES:

- Actively support this objective and others of the RI Department of Health's Initiative for a Healthy Weight *Eat Smart, Move More: A Plan for Action 2010-2015*. (<http://www.health.ri.gov/publications/actionplans/2010InitiativeForHealthyWeight.pdf>)

Lead Agency: Eat Smart, Move More – Initiative for a Healthy Weight.

- **GOAL 2: INCREASE COLLABORATION AND COORDINATION OF EFFORTS BETWEEN ORGANIZATIONS, PROGRAMS, AND INDIVIDUALS WORKING TOWARD THE MUTUAL GOAL OF INCREASING HEALTHY LIFESTYLE CHOICES THAT AFFECT DIABETES PREVENTION AND CONTROL IN RI.**



OBJECTIVE A): Health communication messages and initiatives of the RI Diabetes Council (RI DC) will be integrated with other programs that have a common mission to address risk factors for chronic disease prevention and management (DATA SOURCE: RI-DPCP).



ACTIVITIES:

- Inventory and identify opportunities for integration of messages across programs.
- Consolidate health communications efforts as appropriate to support integration.
- Establish a mechanism for communicating initiatives and sharing resources.
- Ensure participation of other related programs and initiatives on the RI DC.
- Integrate activities with Chronic Disease Workforce.

Lead Agency: RI DC

CONCLUSION

Diabetes is common, it is serious, it is costly, but it is controllable and preventable. Current priorities for diabetes control identified by stakeholders throughout the state have been set as goals. Each goal has a list of measureable objectives, associated activities, and a data source for tracking and evaluation. For each objective, a lead agency has been identified. These lead agencies cannot, however, do it alone. They need support and collaboration from partner organizations, programs, and individuals. The RI-DPCP wants to continue to add to the list of agencies and individuals who are committed to working on specific objectives. The way forward is through cooperation and collaboration. Together, we can reverse the trend, and control diabetes in RI.



X. GLOSSARY OF ACRONYMS & ABBREVIATIONS

ADA - American Diabetes Association

AHA - American Heart Association

BRFSS - Behavioral Risk Factor Surveillance System

BP - Blood Pressure

BC/BSRI - Blue Cross Blue Shield of Rhode Island

BMI - Body Mass Index

CV DOE - Cardiovascular Disease Outpatient Educator

CDC - Center for Disease Control and Prevention

CDOE - Certified Diabetes Outpatient Educators

CLAS - Culturally and Linguistically Appropriate Services

DMV - Department of Motor Vehicles

DM - Diabetes Mellitus

DOE - Diabetes Outpatient Educator

ESMM - Eat Smart, Move More Action Plan

EHR - Electronic Health Records

GDM - Gestational Diabetes Mellitus

GIS - Graphic Information System

HDACT - Health Disparities and Access to Care Team

HEDIS - Healthcare Effectiveness Data Information

HP2010 - Healthy People 2010

ICIC - Improving Chronic Illness Care

IHW - Initiative for Healthy Weight

LDL - Low Density Lipoprotein

NTLEA - Non-Traumatic Lower Extremity Amputations

OB/GYN - Obstetrics and Gynecology

PCMH - Patient Centered Medical Homes

QI - Quality Improvement

QPRI - Quality Partners of Rhode Island

RICCC - Rhode Island Chronic Care Collaborative

RI CSI - Rhode Island Chronic Care Sustainability Initiative

RIDC - Rhode Island Diabetes Council

RIDPCP - Rhode Island Diabetes Prevention and Control Program

SDHS - Statewide Diabetes Healthy System

TCP - Tobacco Control Program

YMCA - Young Men's Christian Association / The Y

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