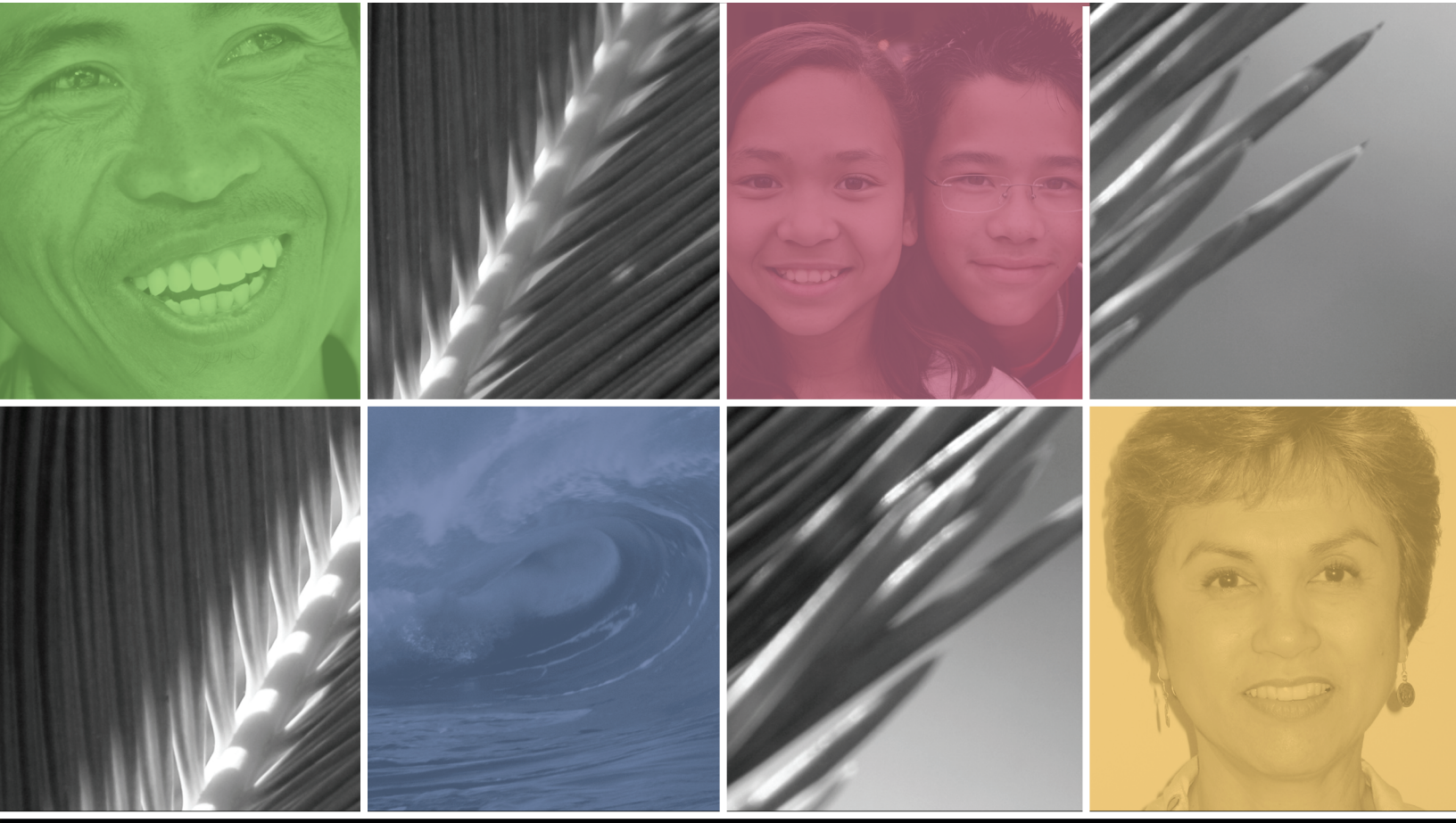


HAWAII DIABETES PLAN 2010

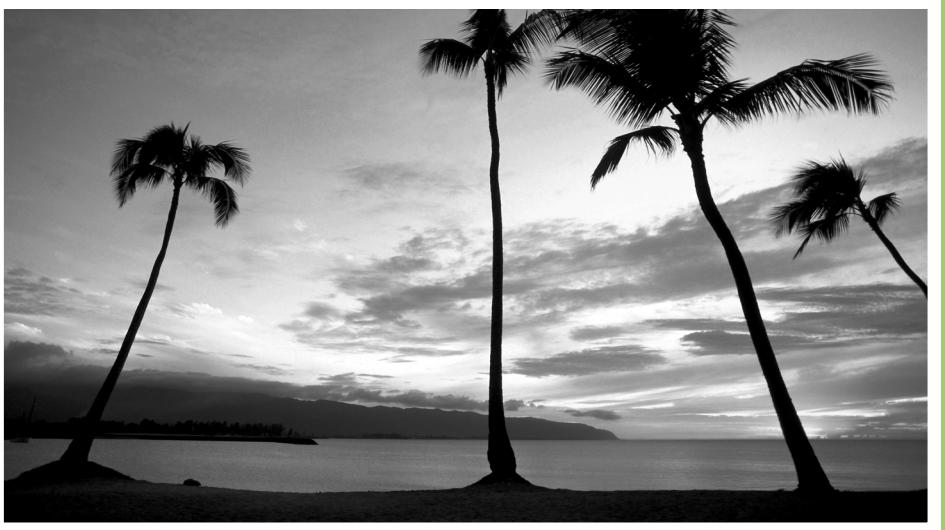
GUIDING THE COLLABORATIVE EFFORTS OF PARTNERS

Developed through the efforts of the Hawaii diabetes health system stakeholders

"WE WILL SURELY
GET TO OUR DESTINATION
IF WE JOIN HANDS."

AUNG SAN SUU KYI

Created 2005



ALOHA KAKOU,

As Director of Health for the State of Hawaii, I am pleased to introduce the *Hawaii Diabetes Plan: Guiding the Collaborative Efforts of Partners 2005 – 2010*. The document was created through the dedication and input of numerous individuals and reflects priorities identified to most effectively reduce the burden of diabetes in Hawaii.

The *Hawaii Diabetes Plan* serves as a roadmap to reduce health disparities and to improve the quality of life for people with diabetes. It delineates a comprehensive set of goals and objectives that address both the public health and health care delivery systems serving people with diabetes. This plan is a call to action, identifying strategies that will produce sustainable changes to create a more responsive, more effective health system. While the challenge of diabetes is evident, it is through the cooperation and coordination of dedicated system partners that we will achieve success in the fight against diabetes.

In Hawaii, over 110,000 people have diabetes. Diabetes is a serious, common, and costly disease, but by working together, we *can* create a healthier Hawaii. Let's join together to reduce the burden of diabetes.

Sincerely,

Chiyome Leinaala Fukino, M.D.
Director, Hawaii State Department of Health

Acknowledgements

Individuals from the following organizations contributed to the development of the Hawaii Diabetes Plan. Without their efforts during the assessment and strategic planning processes, this document would not have been possible. Many thanks to the numerous people who gave their time to produce the Hawaii Diabetes Plan.

AlohaCare
Alu Like
American Diabetes Association
American Healthways Diabetes Care Connection
American Heart Association
Brigham Young University Hawaii Health Services
Care Resource Hawaii
Castle Medical Center
Center for Independent Living West Hawaii
Centers for Medicare and Medicaid Services
Community Clinic of Maui
Deseret Mutual Benefit Administrators
Diabetes Education and Counseling Center
Five Mountains Hawaii – North Hawaii Outcomes Project
Freedom Recovery Services
Hale Kupuna O Lanai
Hamakua Health Center
Hauula Community Health Center
Hawaii Association of Diabetes Educators
Hawaii Business Health Council
Hawaii Department of Education
Hawaii Department of Health –
- Behavioral Risk Factor Surveillance System
- Community Health Division
  - Chronic Disease Management and Control Branch
    - Asthma Control Program
    - Bilingual Health Services
    - Comprehensive Cancer Control Program
    - Tobacco Prevention and Education Program
  - Public Health Nursing Branch
- Dental Health Division
- Executive Office on Aging
- Family Health Services Division
- Hawaii Immunization Program
- Healthy Hawaii Initiative
- Office of Health Equity
- Office of Health Status Monitoring
- Public Health Block Grants Management
- State Health Planning and Development Agency

Hawaii Health Information Corporation
Hawaii Lions Foundation
Hawaii Management Alliance Association
Hawaii Medical Services Association
Hawaii Primary Care Association
Hilo Medical Center
Ho`ola Lahui Hawaii
Honolulu Medical Group
Hui Malama Ola Na Oiwi
Kaiser Permanente
Kalihi-Palama Health Center
Kamehameha Schools Health, Wellness, and Family Education Program
Kau Rural Health Community Association
Kauai Medical Clinic
Ke Ola Hou O Lanai
Kohala Health Research
Kokua Kalihi Valley Health Center
Kuakini Health System
Kula Hospital
Lamalama Ka Ili
Lanai Community Hospital
Lanai Senior Center
Mahelona Memorial Hospital
Maui Medical Group
Maui Native Hawaiian Coalition
Molokai Community Health Center
Mountain-Pacific Quality Health Foundation
Na Puuwai
National Kidney Foundation of Hawaii
North Hawaii Community Hospital
Office of Hawaiian Affairs
Pacific Health Research Institute
Papa Ola Lokahi
Queen's Medical Center
Rehabilitation Hospital of the Pacific
Shoreview Pharmacy Kauai
St. Francis Medical Center
State of Hawaii Executive Office on Aging
Straub Clinic Lanai
Tripler Army Medical Center
Tutu's House
University Health Alliance
University of Hawaii at Manoa –
- Cooperative Extension Service
- John A. Burns School of Medicine, Dept of Native Hawaiian Health
- Pacific Biosciences Research Center
- School of Nursing and Dental Hygiene

Waianae Coast Comprehensive Health Center
Waikiki Health Center
Waimanalo Health Center
West Hawaii Home Health Services
Wilcox Hospital

Hawaii Diabetes Plan:
Guiding the Collaborative Efforts of Partners 2005 - 2010

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Executive Summary

Diabetes is one of the most serious, common, and costly diseases in Hawaii and across the United States. There are over 110,000 individuals in Hawaii with diabetes, and despite research which indicates that diabetes is preventable, diabetes prevalence rates continue to rise. This epidemic will continue to mount a burden on the health care system, communities, and individuals if strategies are not implemented to address the problem.

To that end, the Hawaii Diabetes Prevention and Control Program in the Hawaii Department of Health was charged with convening diabetes stakeholders to create a strategic plan to address the burden of diabetes in Hawaii. Stakeholders met first to assess the capacity of the current diabetes health system to address the burden of diabetes, then met to strategize around priorities identified through the assessment.

This plan describes a comprehensive set of goals and objectives targeted to improve both the public health and health care delivery systems serving people with diabetes. Some of these goals and objectives capture strategies already being utilized by system stakeholders, while others expand upon current strategies. The plan is designed to guide all of our efforts for the next 5 years, and each year progress related to the plan will be shared with all system stakeholders. It is important to note that all approaches used to address the objectives in the plan should include an evaluation component using measurable outcomes. Ad hoc committees of the Hawaii Diabetes Coalition and other groups addressing the objectives are encouraged to begin addressing evaluation in the planning phase.

The Hawaii Diabetes Plan is structured to align with national targets. The Healthy People 2010 Objectives, the 10 Essential Public Health Services, and the Centers for Disease Control and Prevention's National Diabetes Objectives provide the framework around which to organize Hawaii's goals and to lead to the coordination of local efforts with the national guidelines.

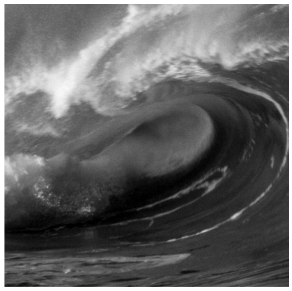
The Hawaii Diabetes Plan outlines recommendations under four general content areas. These categories are:

- Diabetes Surveillance
- Prevention and Public Awareness
- Health Care Quality
- Focused Initiatives

These categorical areas represent the priorities that system stakeholders identified during in the planning phases. These priorities do not exclude other issues from being addressed; rather they provide a roadmap to guide system stakeholders to work collaboratively toward a common end. Many of the strategies in the plan require innovative approaches, and collaboration and dedication by system stakeholders are the key to effectively reaching the goals targeted.

The Hawaii Diabetes Plan is an invitation to all stakeholders who work in the Hawaii diabetes health system to join in the effort to reduce the burden of diabetes in Hawaii. Let us work together to have a healthy Hawaii for all.

Introduction



WHAT IS DIABETES?

Diabetes mellitus is a group of chronic metabolic diseases characterized by high levels of blood glucose (blood sugar). In a person with diabetes, the normal use of food for energy is disrupted because of defects in insulin production, insulin action, or both. Insulin is a hormone which assists with the uptake of glucose into the body's cells. When insulin defects are present, the normal pathway of energy production is disrupted and high blood glucose levels result.

There are three main types of diabetes, although several types have been classified as distinct diseases.

Type 1 Diabetes

Type 1 diabetes results from the failure of the insulin-producing cells of the pancreas to produce insulin. People with type 1 diabetes must take daily injections of insulin. It is thought to be an autoimmune disorder, and it occurs most frequently in children and young adults. Its onset is sudden and diagnosis is rapid after the start of symptoms. Only about 5% to 10% of people with diabetes have type 1. Type 1 diabetes was formerly called insulin-dependent diabetes mellitus and juvenile-onset diabetes.

Type 2 Diabetes

Type 2 diabetes is the most prevalent form of the disease, occurring in about 90% to 95% of people with diabetes. In this form of diabetes, the body either does not produce enough insulin or it cannot use it properly. A person with type 2 diabetes can experience symptoms very gradually, often over years, thus delaying diagnosis and proper management. Management and control of diabetes is critical to preventing the development of complications such as eye disease or kidney disease. Type 2 was also referred to in the past as non-insulin-dependent diabetes mellitus and adult-onset diabetes.

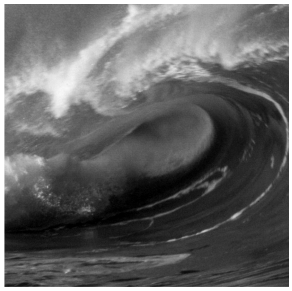
Gestational Diabetes

Gestational diabetes occurs only during pregnancy, often in women with no prior history of the disease. Gestational diabetes requires strict management, including insulin use to stabilize blood sugar levels to help prevent complications with the infant. Women with gestational diabetes are at a higher risk of developing type 2 diabetes later in life and of having future pregnancies with gestational diabetes.

Pre-Diabetes

Pre-diabetes is a term used to distinguish people who are at increased risk of developing diabetes. People with pre-diabetes have blood sugar levels which are higher than normal but not yet high enough to warrant a diagnosis of diabetes. The Centers for Disease Control and Prevention (CDC) estimate that roughly 41 million people have pre-diabetes nationwide.

Complications



The most serious aspects of diabetes are the complications that can result from uncontrolled or unmanaged diabetes. People with diabetes are at significantly increased risk of developing cardiovascular disease, kidney disease, nerve disease, blindness, amputation, and pregnancy complications.

Many diabetes-related complications can be prevented or reduced through improved self-management and/or early detection and treatment.

Successful self-management of the disease is crucial to reducing the risk of developing complications and living a longer, healthier life. Self-management includes medication, meal planning, regular physical activity, smoking cessation, and regular health care. The responsibility for management lies primarily with the individual with diabetes; however, systems which support and promote these strategies are more likely to produce better outcomes in the patient. The following are examples of diabetes complications, including national figures:

Cardiovascular disease
People with diabetes are two to four times more likely to develop cardiovascular disease due to a variety of risk factors, including high blood pressure, lipid disorders, smoking, obesity, and lack of physical activity. Cardiovascular disease is the leading cause of diabetes related death and adults with diabetes are two to four times more likely to die of heart disease and stroke, which together cause about 65% of deaths among people with diabetes. These deaths could be reduced by 30% with improved care to control blood pressure, blood glucose, and blood cholesterol levels.

Eye disease and blindness
Diabetes is the leading cause of new cases of blindness among adults aged 20 - 74. Diabetic retinopathy accounts for approximately 12,000-24,000 new cases of blindness each year. Regular eye exams and timely treatment could prevent up to 90% of diabetes-related blindness; however, only 64.2% of people with diabetes received annual dilated eye exams in 2002.

Kidney disease
Diabetes is the leading cause of end-stage renal disease (ESRD). Each year, over 40,000 people with diabetes develop kidney failure, totaling more than 100,000 people treated for ESRD. Treatment to better control blood pressure and blood glucose levels could reduce diabetes-related kidney failure by about 50%.

Amputations
Between 60% and 70% of people with diabetes have mild to severe forms of nervous system damage, contributing to lower-extremity amputation risk. Vascular diseases associated with diabetes further increases this risk. In fact, about 82,000 non-traumatic lower-extremity amputations of the leg, foot, or toe are performed annually among people with diabetes. Foot care programs that include regular examinations and patient education could prevent up to 85% of these amputations.

Pregnancy complications
About 18,000 women with preexisting diabetes and about 135,000 women with gestational diabetes give birth each year. These women and their babies have an increased risk for serious complications such as stillbirths, congenital malformations, and the need for cesarean sections. Poorly controlled diabetes prior to conception and during the first trimester is associated with major birth defects in 5%-10% of diabetic pregnancies. Moreover, 15%-20% of pregnancies in mothers with poorly controlled diabetes are spontaneously aborted. Finally, poorly controlled diabetes during the second and third trimesters of pregnancy can result in excessively large babies, posing a risk to the mother and the child. Women with gestational diabetes and their babies are also at higher risk of becoming obese and developing diabetes later in life. These risks can be reduced with screenings and diabetes care before, during, and after pregnancy.

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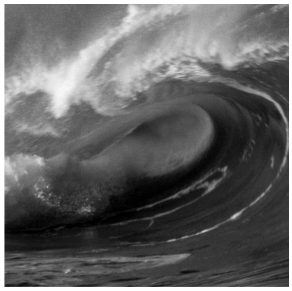
Complications *(Continued)*



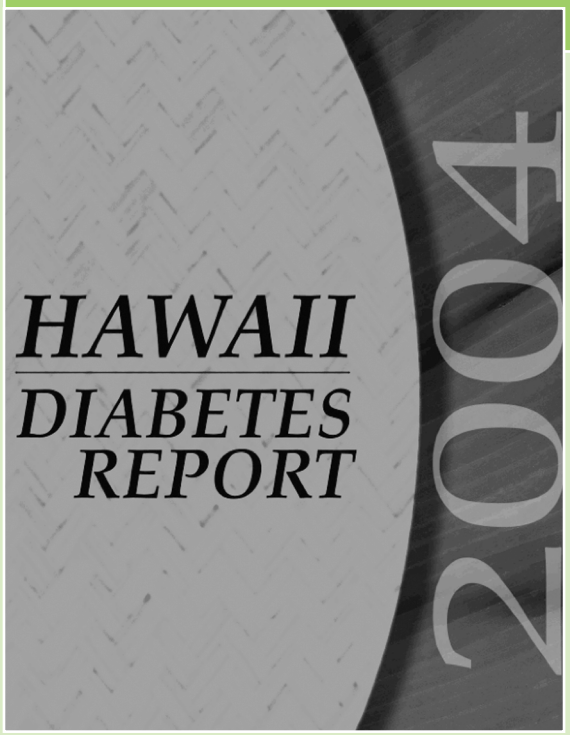
Flu- and pneumonia-related deaths
Each year, 10,000-30,000 people with diabetes die of complications from flu or pneumonia. They are roughly three times more likely to die of these complications than people without diabetes; however, only 55% of people with diabetes get an annual flu shot.

Dental Disease
Diabetes causes significant complications with oral health. Nearly one-third of people with diabetes have severe periodontal disease and the risk of developing it is almost two-fold among young people with diabetes compared to those without diabetes. Tight control of blood glucose and blood pressure and good oral hygiene can reduce the occurrence of periodontal disease.

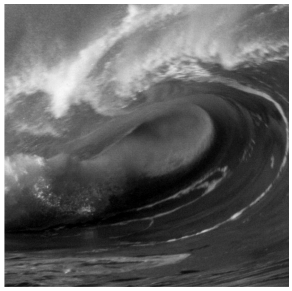
High Blood Pressure
People with diabetes have a high prevalence of hypertension. Amazingly, over 70% of people with diabetes have blood pressures of greater than 130/80 mm Hg or use prescription medication for hypertension. High blood pressure can damage organs, including the heart and blood vessels, greatly increasing the risk of stroke and heart attack. Controlling blood pressure is essential to preventing or delaying additional complications.

Other complications
Diabetes places the individual at risk for other associated complications. Uncontrolled diabetes can cause acute life-threatening events, such as diabetic ketoacidosis and coma. People with uncontrolled diabetes are also more likely to have poorer prognoses when ill.

For detailed information on the complications of diabetes in Hawaii, view the Hawaii Diabetes Report on the Hawaii Department of Health Diabetes Prevention and Control's website at http://www.hawaii.gov/health/diabetes or call 808-692-7462. ▼



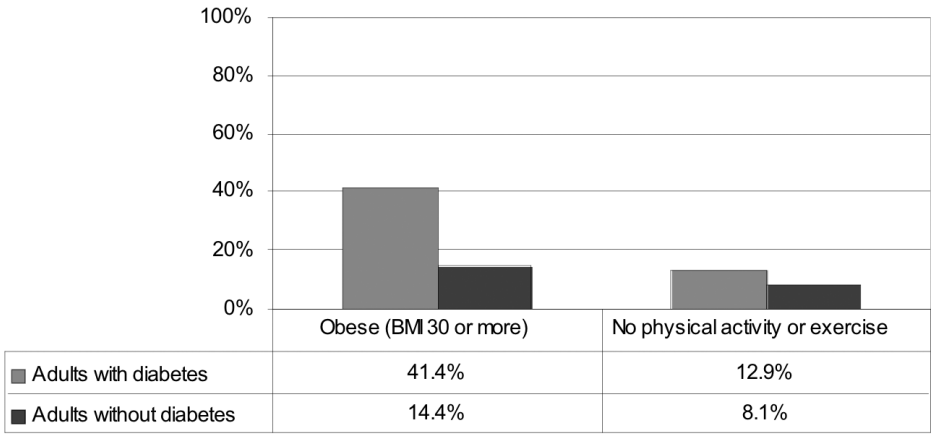
Risk Factors for Type 2 Diabetes



Risk for diabetes is determined by certain factors, including genetic, physiological, and behavioral. Certain ethnic groups have higher rates of diabetes, suggesting a genetic predisposition to the disease. Age also plays a major role in diabetes prevalence. The CDC estimates that nearly 1 in 5 adults over the age of 65 years has diabetes. Furthermore, nearly 80% of diabetes is diagnosed in overweight and obese individuals, suggesting a strong link between lifestyle behaviors and the development of diabetes.

The growing prevalence of diabetes cannot be separated from the rising prevalence of obesity and physical inactivity. According to 2003 Hawaii Behavioral Risk Factor Surveillance Survey (BRFSS) data, adults with diabetes were overweight and obese more than adults without diabetes. Adults with diabetes were also less likely to engage in regular physical activity. Both excess body fat and physical inactivity predispose to Type 2 diabetes. While not all risk factors are modifiable, those that are contribute to the high prevalence of diabetes.

Figure 1: Obesity and Physical Inactivity in Adults with and without Diabetes

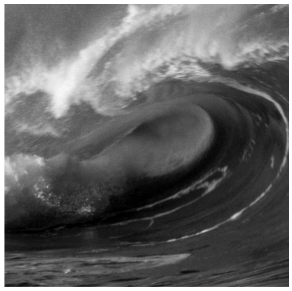


	Obese (BMI 30 or more)	No physical activity or exercise
Adults with diabetes	41.4%	12.9%
Adults without diabetes	14.4%	8.1%

Data source: Hawaii BRFSS 2003

Data analysis: Hawaii State Diabetes Prevention and Control Program

Prevention

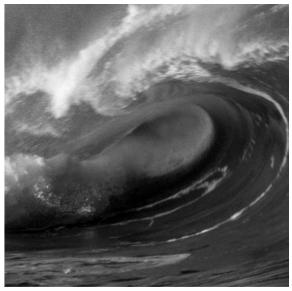


Given that we know the modifiable risk factors, diabetes can be prevented. In August 2001 results of the Diabetes Prevention Program Study, a large prevention study of people at high risk for diabetes, were published and provided encouraging evidence that diabetes is a preventable disease.

Study participants who exercised 30 minutes a day and modified their diet to lose approximately 7% of their body weight reduced their risk of developing type 2 diabetes by 58%. This reduction in risk was found across all age and ethnic groups but was most profound in people 60 years of age or older.

The challenge now for the public health system is to help translate these findings into meaningful, useful interventions. Through simple lifestyle modifications and risk factor reduction, diabetes in high-risk individuals can be prevented or delayed.

The Burden of Diabetes in Hawaii



Diabetes is a serious disease.
The Centers for Disease Control and Prevention (CDC) estimates that people with diabetes are at two times the risk for death compared to people without diabetes. In Hawaii, diabetes is the 7th leading cause of death. The diabetes death rate in Hawaii is lower than the national average; however, diabetes still accounts for a significant portion of deaths. For example, in 2002, diabetes was an underlying or contributory cause in over 11% of all deaths.

Diabetes also places the individual at a much greater risk of complications including cardiovascular disease, kidney disease, nerve disease, blindness, amputation, and pregnancy complications. These complications account for a significantly increased rate of death among people with diabetes. Diabetes is not a simple disease of blood sugar, rather it is a serious disease that has significant impact.

Diabetes is a common disease.
Diabetes has become an epidemic. The CDC estimates that in the United States, 6.3% of the population, or 18.2 million people (all ages), have diabetes. Of these 18.2 million people, almost a third (5.2 million) do not know they have diabetes. Because uncontrolled, unmanaged diabetes is associated with the development of numerous complications, it is the 5.2 million undiagnosed individuals who are particularly at risk for experiencing these associated conditions.

According to 2003 data, approximately 110,000 people in Hawaii (7.6%) have diabetes. As many as 39,000 of these people have the disease but are undiagnosed. Over the past decade, the rates of diabetes have continued to steadily rise. Adding to the concern that diabetes prevalence will continue to increase is the large number of people with pre-diabetes. As noted earlier, pre-diabetes is a term used to describe the condition of an individual with blood glucose levels that are higher than normal, but not high enough to be considered diabetes. Pre-diabetes puts an individual at very high risk of developing diabetes.

Diabetes is a costly disease.
The economic burden of diabetes is extraordinary. Direct medical expenditures for people with diabetes average nearly 2.4 times that of those without diabetes. In 2002, the estimated direct medical cost of diabetes in the United States was $91.8 billion. Using the same model, the estimated direct medical costs for Hawaii are approximately $964 million. The majority of expenditures relate to complications and excesses in general medical conditions in this population.

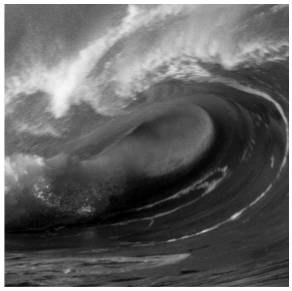
Diabetes is controllable.
Uncontrolled diabetes is associated with serious complications and premature death; however, much of this burden could be alleviated with early detection, improved delivery of care, and better diabetes self-management. Controlling diabetes is the key to reducing complications associated with the disease. Studies such as the United Kingdom Prospective Diabetes Study and the Diabetes Complications and Control Study prove that intensively managed blood glucose can significantly reduce the risk of developing complications.

HIGHLIGHTS OF HAWAII'S DIABETES BURDEN

- Native Hawaiians, Filipinos, and Japanese have higher rates of diabetes than Whites.
- Prevalence rates of diabetes are similar across all of Hawaii's counties.
- Native Hawaiians have the highest diabetes mortality rates when compared with the other major ethnic groups. Whites have the lowest diabetes mortality rates.
- Lower educational attainment is associated with higher diabetes prevalence and mortality.
- Obesity rates are significantly higher among adults with diabetes when compared with adults without diabetes.
- Adults with diabetes are less likely to be current smokers and are more likely to be former smokers when compared with adults without diabetes.
- Adults with diabetes are more likely to eat at least 5 servings of fruits/vegetables when compared with adults without diabetes.
- Adults with diabetes are more likely to receive their immunization for flu and pneumonia when compared with adults without diabetes.
- Hawaii has a higher incidence and prevalence rate of patients with end-stage renal disease (ESRD) on kidney dialysis when compared with the national average.
- Almost 60% of patients receiving kidney dialysis for ESRD have a primary diagnosis of diabetes.

Source: Hirokawa, R., Huang, T., Pobutsky, A., Nogues, M., Salvail, F., Nguyen, HD. (2004). Hawaii Diabetes Report, 2004. Hawaii State Department of Health. Honolulu, Hawaii

Why Have a Diabetes Plan?



Coordinating Efforts to Reduce the Burden of Diabetes in Hawaii

History

The Hawaii Diabetes Prevention and Control Program (DPCP) in the Hawaii State Department of Health is funded through the Centers for Disease Control and Prevention (CDC) and provides the public health leadership for diabetes in the state. A major function of the DPCP is to convene stakeholders in order to better coordinate the Hawaii diabetes health system to achieve common goals. In 2003 and 2004, the DPCP invited system partners and stakeholders to a series of meetings first to identify and prioritize needs with respect to diabetes prevention and control efforts, and secondly to develop solutions to the identified needs. The resulting document, the Hawaii Diabetes Plan, reflects the unified vision of Hawaii's diabetes system partners and provides a roadmap for reaching the identified outcomes.

Purpose of the Plan

The Hawaii Diabetes Plan is a call to action for Hawaii's diabetes stakeholders to come together to reduce the burden of diabetes across the state. Traditionally, strategic planning is used as a tool to help a system do a more effective and efficient job of reaching an objective. It involves the formal process of developing, implementing, and evaluating goals and objectives to guide the collaborative actions of the system. Additionally, it also helps establish priorities for the system given available resources and identified needs.

The Hawaii diabetes community has long worked together to address the needs of people with diabetes. The Hawaii Diabetes Plan allows for continued coordination of efforts while maximizing system resources. It serves as a guide for directing the collaborative efforts of key partners throughout the system. The goals delineated in the plan will help guide the system toward sustainable change and a reduction in the burden of diabetes in Hawaii.

Role of the Hawaii Diabetes Coalition

Achieving the goals of the Hawaii Diabetes Plan will require the dedication and collaboration of all stakeholders in diabetes. The Hawaii Diabetes Coalition is a large group of committed diabetes stakeholders working collaboratively to reduce the burden of diabetes across the Hawaii. The primary purpose of the Hawaii Diabetes Coalition is to actively promote and accomplish the goals of the plan. Organizations and individuals interested in working collaboratively to reduce the burden of diabetes are encouraged to participate.

The DPCP will guide the efforts of the Hawaii Diabetes Coalition by:

1) Convening forums to identify common interests and goals among partners and key stakeholders,
2) Facilitating partnerships between health systems, organizations, and communities, and
3) Fostering effective communication between coalition members and other relevant stakeholders.

The Hawaii Diabetes Plan is a living and dynamic document that serves as a guide to the Coalition. The Plan communicates the overall goal of reducing the burden of diabetes in Hawaii. It is a call to action, urging everyone to play a role.

The Plan

"But while improving health is clearly the main objective of a health system, it is not the only one. The objective of good health itself is really twofold: the best attainable average level – goodness – and the smallest feasible differences among individuals and groups - fairness. Goodness means a health system responding well to what people expect of it; fairness means it responds equally well to everyone, without discrimination." – **World Health Report 2000, p. xi**

Implementation of the Hawaii Diabetes Plan will ideally move us toward a health system that is both fair and good. Though to do so it is essential that the contributions of all partners of the Hawaii Diabetes Health System are coordinated – achieving a measurable decrease in the burden of diabetes will take the concerted effort of all agencies, organizations, and individuals across the state.

Diabetes is a leading public health issue in Hawaii, but diabetes and its complications are preventable. Solutions to these issues exist through the integrated efforts of statewide partners working toward a common vision. The Hawaii Diabetes Plan provides that vision and will guide Hawaii toward a healthier future.

The following section of the Plan provides the rationale for the goal areas identified by system partners and delineates key strategies for achieving those goals. Ad hoc committees convened to reach the goals will be responsible for developing definitive action steps. These activities and their outcomes will be reported at annual Hawaii Diabetes Coalition meetings, which will serve as the venue to update partners, share successes, and determine emerging diabetes priorities.

Four content areas have been identified under which system goals have been categorized. These areas are:

- Diabetes Surveillance
- Prevention and Public Awareness
- Health Care Quality
- Focused Initiatives

While these general categories define distinct programmatic opportunities, there remain cross cutting issues across the content areas. An example of this is the theme of health disparities. Addressing health disparities is a focal point in reducing the burden of diabetes. It is highlighted in the Focused Initiatives section yet it is an issue that needs to be addressed in the other content areas: Surveillance, Awareness, and Quality. Goals have therefore been categorized to best reflect the overall outcome of the work.

Hawaii Diabetes Plan 2010: content areas and goals

Content Area 1: Diabetes Surveillance
Goal 1: Define, organize and formalize the Hawaii Diabetes Surveillance System (HDSS)
Goal 2: Routinely share and use diabetes burden reports
Content Area 2: Prevention and Public Awareness
Goal 3: Advocate for the adoption of primary prevention efforts
Goal 4: Raise public awareness of diabetes
Content Area 3: Health Care Quality
Goal 5: Promote health system quality improvement programs
Goal 6: Assure the adoption of the Hawaii State Diabetes Practice Recommendations for Diabetes Mellitus
Goal 7: Assure a competent and qualified health care workforce
Content Area 4: Focused Initiatives
Goal 8: Reduce health disparities

Diabetes Surveillance

The increasing prevalence of diabetes and other chronic diseases has placed increasing demands on the health system. To effectively respond to these emerging epidemics, the health system must develop strategies that appropriately address the populations most affected by disease. Understanding the variation in disease burden within ethnic and demographic subgroups, therefore, is essential and drives the need for population surveillance and monitoring.

Surveillance is a fundamental element in diabetes prevention and control efforts. Surveillance establishes the means of addressing any public health issue by:

1) defining the extent of the problem,
2) setting priorities for interventions,
3) identifying and developing policies and programs to ameliorate the problem, and
4) evaluating the effectiveness of programs implemented to reduce the burden of diabetes.

The strategies presented in this section of the Plan attempt to coordinate the numerous entities currently collecting data on diabetes indicators into a formal Hawaii Diabetes Surveillance System. Establishing the Hawaii Diabetes Data Work Group is the first step in this process of creating a system to perform the functions of surveillance. The work group will define a standardized set of diabetes indicators to track and monitor and will be the main clearinghouse for diabetes data reporting.

Creating a surveillance system that uniformly tracks and reports on the diabetes health status of Hawaii's population will assist other health system partners in developing strategies to target populations most affected by diabetes. Translating data into practice is the most useful application of a surveillance system and will lead to focused, targeted solutions to the issues identified.

Diabetes Surveillance

GOAL 1

Define, Organize, and Formalize the Hawaii Diabetes Surveillance System (HDSS)

A) Improve coordination of the HDSS by establishing the Hawaii Diabetes Data Work Group.

1) Identify key data collection agencies.
2) Establish Hawaii Diabetes Data Work Group.
3) Establish operating principles and expectations of participating organizations.

B) Improve diabetes surveillance capacity in Hawaii to accurately assess the burden of diabetes in Hawaii.

1) Determine clinical measures and provider care processes to track and report.
2) Find consensus on a uniform set of data indicators to identified measures.
3) Assess feasibility and methods of collecting cost information for diabetes.
4) Adopt the recommendations of the Hawaii State Department of Health to standardize the collection and categorization of ethnicity data.
5) Establish a standardized procedure to collect and report diabetes data for the state.
6) Assess the feasibility of a diabetes registry in selected pilot populations.

C) Improve diabetes surveillance capacity through special projects.

1) Determine the feasibility of using diabetes-related data generated from research in defined populations for surveillance.
2) Determine the feasibility of using diabetes-related health information collected by systems through electronic medical records for surveillance.
3) Through partnership with key organizations, implement special surveillance projects that identify health disparities.

Diabetes Surveillance

GOAL 2

Routinely Share and Use Diabetes Burden Reports

A) Communicate Hawaii diabetes data to partners, stakeholders, policy makers, etc.

1) Develop a process to share findings of the Hawaii Diabetes Surveillance System.
2) Work with key partners to disseminate data reports through multiple and varied channels.

B) Translate diabetes data into action.

1) Recommend the creation of new or coordination of existing programs to address identified needs.
2) Encourage partners to utilize recommendations to focus system efforts and resources where needed.
3) Track and evaluate effect of new programs on health disparities.

Prevention and Public Awareness

Approximately 25,000 people in Hawaii have diabetes and do not know it. Known also as the "silent disease," diabetes is responsible for a host of complications including blindness, amputation, kidney disease, and heart disease. Symptoms of diabetes often are not recognized until these complications arise and the damage has already been inflicted. It is critical, therefore, that the undiagnosed population is educated on the risks, signs, and symptoms of the disease so that timely diagnosis and treatment can occur.

Among people with diagnosed diabetes, self-management is the key to preventing or delaying complications that cause the majority of morbidity and mortality. Self-management requires the ongoing, daily responsibility of medication management, routine blood glucose monitoring, stress management, physical activity, and proper nutrition. Reinforcing this message through public education efforts will emphasize the importance of such behaviors and will promote individual responsibility.

Pre-diabetes also affects a significant portion of the population in Hawaii. Targeted interventions that identify these individuals and promote sustainable lifestyle changes can have a significant impact on the numbers of people who eventually develop diabetes. Preventing diabetes is a significant way to reduce the burden of diabetes and the demands it places on the health care system.

Hawaii must attack this public health epidemic from several angles. Efforts to educate the public about the seriousness of diabetes must be undertaken if improvements are to be achieved. The system must direct resources to market the message of diabetes prevention and control. By doing so, existing efforts in the clinical health care arena will be augmented.

Prevention and Public Awareness

GOAL 3

Advocate for the Adoption of Primary Prevention Efforts

A) Promote healthy lifestyle behaviors among school-age children

1) Strengthen partnership with schools to promote the integration of curricula on physical activity and nutrition.
2) Partner with schools to establish policies that require healthy school environments, including increasing physical education opportunities and offering healthy food choices in cafeterias and vending machines.
3) Encourage and support healthcare practitioners to promote healthy lifestyle behaviors.

B) Identify pre-diabetes in high-risk patient populations

1) In partnership with the Hawaii State Diabetes Task Force reach consensus on screening recommendations for high-risk patients.
2) Adapt or develop a toolkit for providers detailing screening recommendations.
3) Provide training on recommendations through continuing education opportunities and professional conferences.
4) Evaluate policies supporting early identification and screening of high-risk patients.

C) Collaborate with other programs that focus on similar populations

1) Integrate diabetes prevention and control efforts with other plans addressing other chronic diseases and common risk factors.
2) Identify and partner with programs such as those in the worksite that address increasing physical activity and healthy diet among populations at risk for or with chronic diseases.

Prevention and Public Awareness

GOAL 4

Raise Public Awareness of Diabetes

A) Establish the Hawaii Diabetes Awareness Group (DAG).

1) Identify and convene key stakeholders targeting similar populations to coordinate educational efforts.
2) Establish operating principles of DAG and expectations of participating members.

B) Through the DAG, conduct public awareness campaigns to raise awareness of diabetes, its risk factors, complications, and prevention.

1) Work with the Hawaii Diabetes Data Work Group to use data to identify and address priority areas through targeted messages.
2) Identify key elements of a public awareness message on diabetes.
3) Create a standard, core message about diabetes and its risk factors to be included in future campaigns.
4) Encourage adoption of core message by other organizations to assure consistency of information.
5) Develop, implement, and evaluate ongoing public awareness campaigns.
6) Adapt and use National Diabetes Education Program materials and campaigns for local use as appropriate.

C) Educate local policy leaders and decision makers on the impact of diabetes on the people of Hawaii.

1) Collaborate with the Hawaii Diabetes Data Work Group to produce a Diabetes Fact Sheet, which details the burden of diabetes in Hawaii's communities, including cost and complications.
2) Disseminate Fact Sheet to community leaders and policy and decision makers.

D) Maintain an updated Diabetes Resource Guide

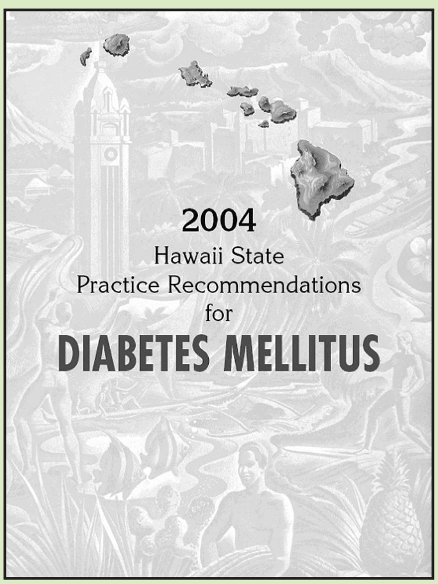
1) Establish a process for collecting information on diabetes programs and resources.
2) Work with system partners and stakeholders to compile an inventory of diabetes programs, resources, and diabetes educators across the state.
3) Publicize directory to community-based organizations, providers, and the health system.

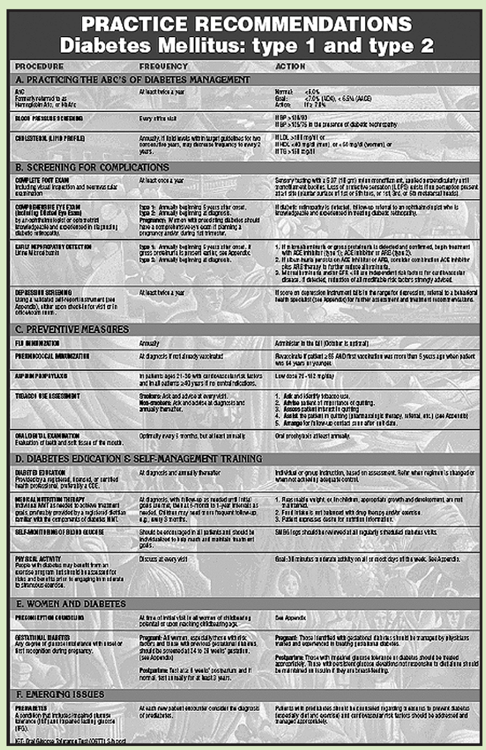
Health Care Quality

The health care delivery system in the United States is designed to treat acute needs and is not structured to deal effectively or efficiently with chronic conditions. The staggering rise in chronic disease prevalence has therefore strained the health care delivery system, resulting in episodic care for people with diabetes.

Health care providers are constantly challenged to remain current with the latest strategies and techniques in diabetes care. As new research emerges and novel technologies appear, the treatment and management of diabetes change accordingly. For people with diabetes to benefit from advances in diabetes care, it is imperative that a coordinated system for provider education and training be established. Ongoing, regular continuing educational opportunities are needed to ensure the most updated clinical information is made available to providers.

Much evidence exists to demonstrate that tighter control of blood glucose, blood pressure, and lipid levels can significantly delay or prevent the onset of diabetes complications. This control is achieved both through the efforts of the individual, i.e., self-management, and through the delivery of high quality health care. Effective interventions and treatment guidelines are well-established, yet despite the availability of practice guidelines and the well-established connection between diabetes control and the development of complications, data show that people with diabetes are not benefiting from this information. The current health care delivery system must be redesigned to address this disparity between knowledge of effective diabetes care and that which is actually delivered.





PRACTICE RECOMMENDATIONS
Diabetes Mellitus: type 1 and type 2

PROCEDURE | FREQUENCY | ACTION

A. PRACTICING THE ABC'S OF DIABETES MANAGEMENT

B. SCREENING FOR COMPLICATIONS

C. PREVENTIVE MEASURES

D. DIABETES EDUCATION & SELF-MANAGEMENT TRAINING

E. WOMEN AND DIABETES

F. EMERGING ISSUES

For details on the Hawaii State Practice Recommendations for Diabetes Mellitus, please go to the Hawaii Department of Health's Diabetes Prevention and Controls website at http://www.hawaii.gov/health/diabetes or call 808-692-7462.

Health Care Quality

GOAL 5

Promote Health System Quality Improvement Programs

A) Increase the number of health care providers participating in continuous quality improvement initiatives.

1) Partner with health care providers or community health centers to establish ongoing quality improvement initiatives.
2) Establish baseline of current provider practice behaviors.
3) Provide training and technical assistance in system quality improvements efforts.
4) Adopt continuous quality improvement efforts systematically, assuring patient input in system redesign efforts.

Health Care Quality

GOAL 6

Assure the Adoption of the Hawaii State Diabetes Practice Recommendations for Diabetes Mellitus

A) Convene the Hawaii State Diabetes Task Force biennially to update the Hawaii State Practice Recommendations for Diabetes Mellitus.

1) The Hawaii Diabetes Prevention and Control Program shall ensure representation from appropriate agencies and specialty areas, including insurers. Key professionals include but are not limited to endocrinologists, internists, registered dieticians, podiatrists, dentists, physical therapists, pharmacists, behaviorists, exercise physiologists, optometrists, ophthalmologists, registered nurses, and diabetes educators.
2) Revise guidelines to better reflect current science base.
3) Identify emerging areas in the treatment of diabetes and adopt as necessary these issues into the guidelines.

B) Assure adoption of the Practice Recommendations by insurers to establish standardized care across the health system.

1) Identify insurers operating in the state.
2) Work with insurers to assure adoption of Practice Recommendations as the basis of quality care.
3) Work with insurers to distribute patient-friendly version of Practice Recommendations.

C) Promote incorporation of Practice Recommendations into daily clinical practice.

1) Develop a curriculum for continuing education on the Practice Recommendations.
2) Identify training opportunities such as professional conferences, grand rounds, continuing education programs, and distance learning.
3) Identify systems with regular education offerings and promote adoption of training curriculum.

Health Care Quality

GOAL 7

Assure a Competent and Qualified Health Care Workforce

A) Increase diabetes-related professional education opportunities for all health professionals.

1) Assure continuing education and training opportunities in diabetes management, lifestyle modification and behavior change, client empowerment, leadership, and cultural competency.
2) Encourage health professionals to pursue and / or participate in continuing education, advanced training, recognition programs, and certification, etc.
3) Encourage the use of web and satellite-based educational opportunities to expand reach across the state.

B) Increase the number of professionals providing quality diabetes education and diabetes self-management training.

1) Assess the number and distribution of diabetes educators in the state.
2) Focus professional education efforts in areas of greatest need.
3) Collaborate with partners to provide training and continuing education for professionals providing diabetes education.
4) Encourage health professionals to pursue advanced training, certification, and classes to remain current in diabetes education practice.
5) Assure that health care providers throughout the state have access to professional development in diabetes care and education.
6) Promote the training of community health workers by assuring appropriate and ongoing educational opportunities.

C) Promote the training and continuing education of community health workers.

1) Assure ongoing educational opportunities or trainings for community health workers.

D) Establish effective communication of diabetes professional opportunities and continuing education events.

1) Coordinate and disseminate information on continuing education opportunities.
2) Create a website where all diabetes-related education opportunities are shared.

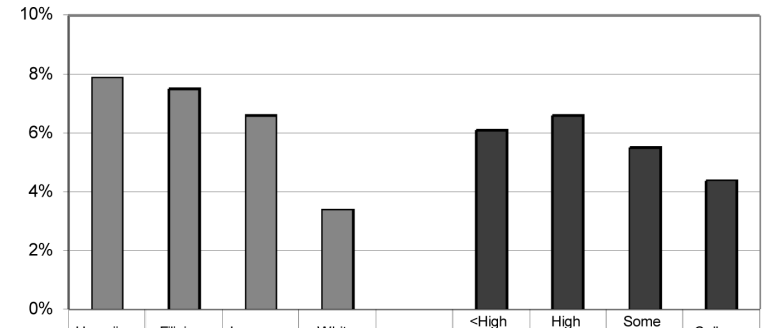
Focused Initiatives

The state of Hawaii has a highly diverse population, with no one ethnic group in the majority. Native Hawaiians, Whites, Japanese, and Filipinos are the four largest ethnic groups and together comprise roughly 82% of the population. The remainder is represented by Chinese, Korean, Vietnamese, Samoan, Tongan, and various other Asian and Pacific Island cultures. Noticeably distinct is the tiny percentage of the population represented by African Americans and Hispanic / Latinos compared to other states.

Data show that many of Hawaii's populations suffer a disproportionate burden of diabetes. But ethnic differences are not the sole reason for health disparities. Socioeconomic factors and access to health care within certain geographic regions play equally important roles in determining diabetes health outcomes.

Affecting a change in these disparities will require that focused initiatives be implemented to target underlying factors. A unified, systematic approach to the problem of health disparities must occur if a reduction in the diabetes burden is to be realized. The Hawaii Diabetes Health System is the network of public, private, and voluntary entities that together has the obligation to address these disparities. Building collaboration across the system is essential if a noticeable impact is to be made in health outcomes among those populations experiencing the greatest disparities in health.

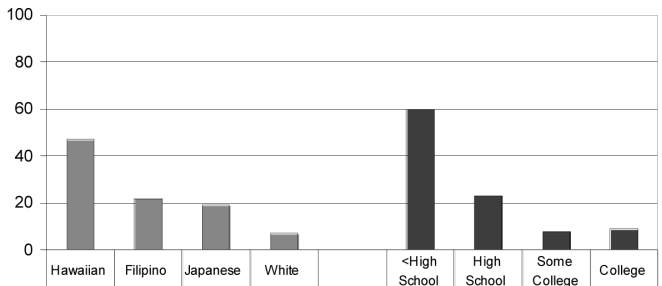
Prevalence (%) of adults diagnosed with diabetes, 2000 - 2002*



	Hawaiian	Filipino	Japanese	White		<High School	High School	Some College	College
Percent	7.9%	7.5%	6.6%	3.4%		6.1%	6.6%	5.5%	4.4%

*3-year average, age-adjusted
Data source/analysis: Hawaii BRFSS

Diabetes mortality rates per 100,000 population, 2000 - 2002*



	Hawaiian	Filipino	Japanese	White		<High School	High School	Some College	College
Diabetes as an underlying cause of death per 100,000 population	47	22	19	7		60	23	8	9

*3-year average, age-adjusted
Data source: Office of Health Status Monitoring
Data analysis: Hawaii BRFSS

Focused Initiatives

GOAL 8 — Reduce Health Disparities

A) Assess health disparities in diabetes outcomes.

1) Through the Hawaii Diabetes Data Work Group, identify the numbers and geographical distribution of health professionals working in diabetes, especially in specialty practices and rural areas.
2) Identify areas and populations experiencing the greatest disparities in diabetes health outcomes.
3) Utilize findings to focus initiatives.

B) Collaborate with community organizations to support diabetes public health efforts.

1) Identify organizations working with populations experiencing the greatest disparities in diabetes outcomes.
2) Partner to develop or expand programs to improve diabetes outcomes in high-risk populations.
3) Evaluate impact of partnerships and effect of programs.

C) Promote community health centers' participation in the Health Resources Services Administration's National Health Disparities Collaborative.

1) Partner with the Hawaii Primary Care Association and Community Health Centers to provide technical assistance and resources for applying to the Collaborative.
2) Support adoption and spread of Collaborative Chronic Care Model in Community Health Centers.
3) Establish linkages between community health centers and community partners to support the Collaborative initiative.

D) Increase the number of culturally appropriate diabetes education programs throughout the state.

1) Assess the availability of diabetes education programs throughout the state.
2) Provide technical assistance to community agencies to develop and/or strengthen diabetes education programs that focus on disparate populations.

E) Promote the use of community health workers.

1) Encourage community health centers and to develop and/or strengthen community health worker programs.
2) Promote sustainability of community health worker models by sharing evidence of successful programs and developing public health policies that recognize and support the role of community health workers.

F) Address diabetes burden in Native Hawaiians.

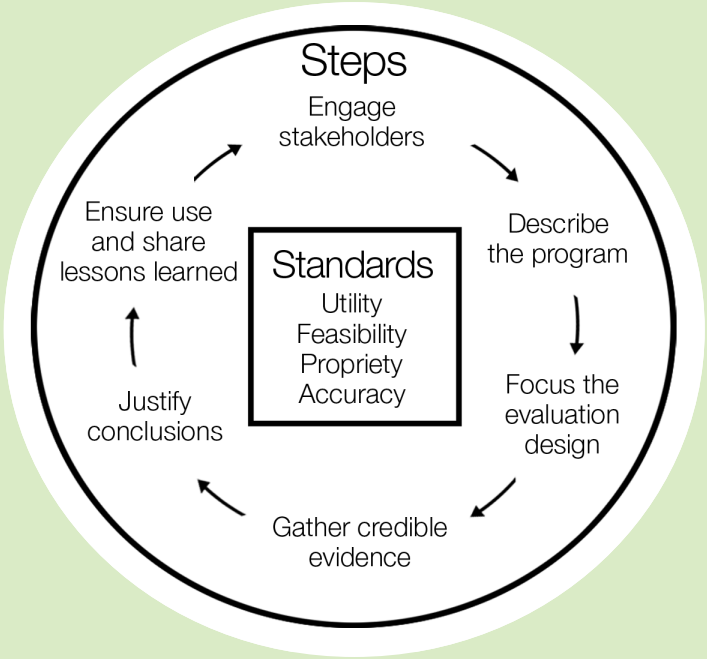
1) Identify organizations across the state working with Native Hawaiian communities and diabetes.
2) Partner to develop, enhance or expand programs in diabetes to increase sustainability of programs and improve diabetes outcomes in Native Hawaiians.
3) Promote the sharing of successful programs and lessons learned to increase the capacity of all programs and communities working with disparate populations.

Measuring Our Progress

To track our progress toward achieving the goals and objectives of the Hawaii Diabetes Plan over time, we will measure a variety of outcomes. The Hawaii Diabetes Prevention and Control Program and the Hawaii Diabetes Coalition members recognize the importance and need of monitoring and evaluation of the Plan. One example of a tool recommended by CDC to evaluate activities in public health is illustrated below.

Measures can come from a review of standardized measurement sets established by national organizations and Appendix A has an example of some of these measures. Performance and outcome measures for all of the activities related to the plan should be established by the organizations and workgroups involved.

CENTERS FOR DISEASE CONTROL AND PREVENTION'S (CDC)
SIX-STEP FRAMEWORK FOR PROGRAM EVALUATION IN PUBLIC HEALTH



Citation: Centers for Disease Control and Prevention. Framework for Program Evaluation in Public Health. MMWR 1999; 48(No. RR-11).

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1) Hawaii Behavioral Risk Factor Surveillance System (BRFSS), Hawaii State Department of Health

2) Office of Health Status Monitoring (OHSM), Hawaii State Department of Health

3) Centers for Disease Control and Prevention (http://www.cdc.gov/brfss/index.htm)

DATA ANALYSIS:

1) Hawaii State Diabetes Prevention and Control Program, Hawaii State Department of Health

REFERENCES:

1) Centers for Disease Control and Prevention, Diabetes Public Health Resource (http://www.cdc.gov/diabetes/)

2) United States Department of Health and Human Services, Healthy People 2010 (http://www.healthypeople.gov/default.htm)

3) Centers for Disease Control and Prevention, National Public Health Performance Standards Program (NPHPSP) (http://www.nphpsp/10EssentialPHServices.asp)

4) World Health Organization, The World Health Report 2000 - Health Systems: Improving Performance, (http://www.who.int/whr/2000/en/index.html)

Appendix A: National Objectives

The Healthy People 2010 Objectives and the CDC National Objectives for Diabetes are outcomes for all of our organizations to strive for. They have been broken down into proximal and distal outcomes to make it useful for planning and in developing logic models for plan related activities.

Proximal Outcomes

- **Identify** and reduce health disparities. (CDC National Objective)
- Increase the proportion of persons with diabetes who receive formal diabetes education. (HP 2010: 5-1)
- Increase the proportion of adults with diabetes whose condition has been diagnosed. (HP 2010: 5-4)
- Increase the proportion of persons with diabetes who obtain an annual urinary microalbumin measurement. (HP 2010: 5-11, Developmental)
- Increase the proportion of adults with diabetes who have a glycosylated hemoglobin measurement at least once a year. (HP2010: 5-12, CDC National Objective)
- Increase the proportion of adults with diabetes who have an annual dilated eye examination. (HP 2010: 5-13, CDC National Objective)
- Increase the proportion of adults with diabetes who have at least an annual foot examination. (HP 2010: 5-14, CDC National Objective)
- Increase the proportion of persons with diabetes who have at least an annual dental examination. (HP 2010: 5-15)
- Increase the proportion of adults with diabetes who take aspirin at least 15 times per month. (HP 2010: 5-16)
- Increase the proportion of adults with diabetes who perform self-blood-glucose-monitoring at least once daily. (HP 2010: 5-17)
- Establish linkages to promote wellness and physical activity. (CDC National Objective)
- Establish measurement procedures to track program success. (CDC National Objective)
- Increase flu immunizations. (CDC National Objective)
- Increase pneumococcal immunizations. (CDC National Objective)

Distal Outcomes

- Identify and **reduce** health disparities. (CDC National Objective)
- Prevent diabetes. (HP 2010: 5-2)
- Reduce the overall rate of diabetes that is clinically diagnosed. (HP 2010: 5-3)
- Reduce the diabetes death rate. (HP 2010: 5-5)
- Reduce diabetes-related deaths among persons with diabetes. (HP 2010: 5-6)
- Reduce deaths from cardiovascular disease in persons with diabetes. (HP 2010: 5-7)
- Decrease the proportion of pregnant women with gestational diabetes. (HP 2010: 5-8, Developmental)
- Reduce the frequency of foot ulcers in persons with diabetes. ((HP 2010: 5-9, Developmental)
- Reduce the rate of lower extremity amputations in persons with diabetes. (HP 2010: 5-10)

Appendix A: National Objectives

The Ten Essential Public Health Services describe a coordinated and well functioning public health system. All diabetes stakeholders contribute to the diabetes health system through assessment, policy development or assurance. Together, we must collaborate to achieve these outcomes.

Ten Essential Public Health Services

ASSESSMENT

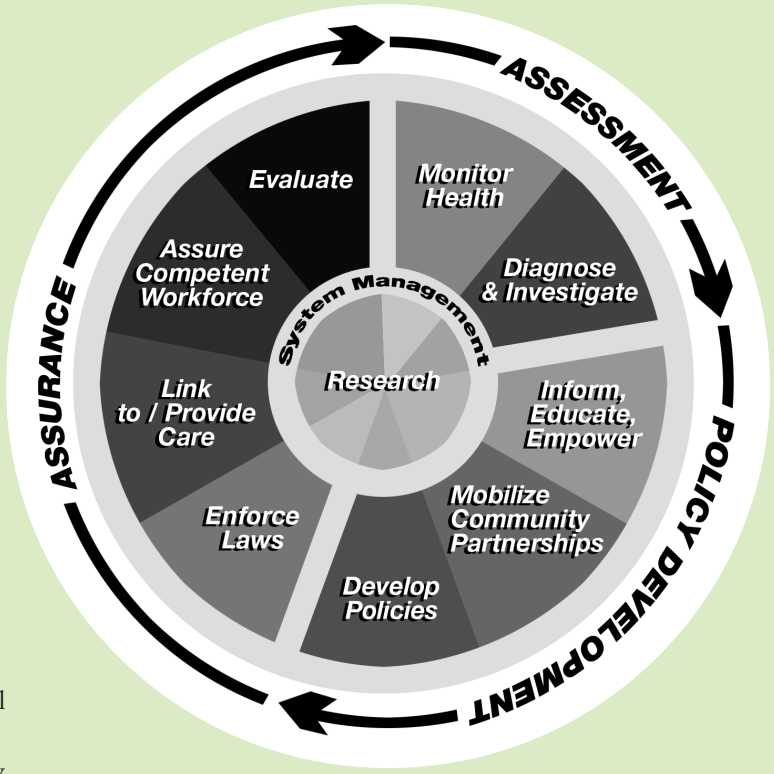
1) Monitor health status to identify community health problems.
2) Diagnose and investigate health problems and health hazards in the community.

POLICY DEVELOPMENT

3) Inform, educate, and empower people about health issues.
4) Mobilize community partnerships to identify and solve health problems.
5) Develop policies and plans that support individual and community health efforts.

ASSURANCE

6) Enforce laws and regulations that protect health and ensure safety.
7) Link people to needed personal health services and assure the provision of health care when otherwise unavailable.
8) Assure a competent public health and personal health care workforce.
9) Evaluate effectiveness, accessibility, and quality of personal and population-based health services.
10) Research for new insights and innovative solutions to health problems.



Appendix B: *Diabetes Plan Strategies and Actions*

CONTENT AREA	GOAL	STRATEGY	ACTIONS	KEY STAKEHOLDERS
Diabetes Surveillance	1) Define, Organize, and Formalize the Hawaii Diabetes Surveillance System (HDSS)	A) Improve coordination of the HDSS by establishing the Hawaii Diabetes Data Work Group.	1. Identify key data collection agencies. 2. Establish Diabetes Data Work Group. 3. Establish operating principles and expectations of participating organizations.	• Hawaii Diabetes Data Work Group
		B) Improve diabetes surveillance capacity in Hawaii to accurately assess the burden of diabetes in Hawaii.	1. Determine clinical measures to track and report. 2. Find consensus on a uniform set of data indicators to track clinical measures. 3. Assess feasibility and methods of collecting cost information for diabetes. 4. Adopt the recommendations of the Hawaii Department of Health to standardize the collection and categorization of ethnicity data. 5. Establish a standardized procedure to collect and report diabetes data for the state. 6. Assess the feasibility of a diabetes registry in selected pilot populations.	• Hawaii Diabetes Data Work Group
		C) Implement special surveillance projects.	1. Collaborate with entities performing research in special populations to establish specific data 2. Partner with systems collecting health data through electronic health records or electronic medical records.	• Hawaii Diabetes Coalition • Hawaii Diabetes Data Work Group
	2) Routinely Share and Use Diabetes Burden Reports.	A) Communicate Hawaii diabetes data to partners, stakeholders, policy makers, etc.	1. Develop a process to share findings of the Hawaii Diabetes Surveillance System. 2. Work with key partners to disseminate data reports through multiple and varied channels.	• Hawaii Diabetes Data Work Group
		B) Translate diabetes data into action.	1. Recommend the creation of new or coordination of existing programs to address identified needs. 2. Encourage partners to utilize recommendations to focus system efforts and resources efforts where needed. 3. Track and evaluate effect of new programs on health disparities.	• Hawaii Diabetes Coalition • Hawaii Diabetes Data Work Group

Appendix B: *Diabetes Plan Strategies and Actions*

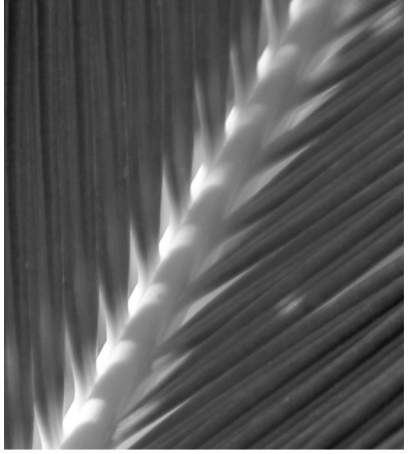
CONTENT AREA	GOAL	STRATEGY	ACTIONS	KEY STAKEHOLDERS
Prevention & Public Awareness	3) Advocate for the Adoption of Primary Prevention Efforts	A) Promote healthy lifestyle behaviors among school-age children.	1. Strengthen partnership with schools to promote the integration of curricula on physical activity and nutrition. 2. Partner with schools to establish policies that require healthy school environments, including increasing physical education opportunities and offering healthy food choices in cafeterias and vending machines. 3. Encourage / support healthy health practitioners to promote healthy lifestyle behaviors.	• Hawaii Diabetes Coalition • DOE • Hawaii Assoc. of Independent Schools • DOH Healthy Hawaii Initiative • Coordinated School Health Program • Clinical Services
		B) Identify pre-diabetes in high-risk patient populations.	1. In partnership with the Hawaii State Diabetes Task Force reach consensus on screening recommendations for high-risk patients. 2. Adapt or develop a toolkit for providers detailing screening recommendations. 3. Provide training on recommendations through continuing education opportunities and professional conferences. 4. Evaluate policies supporting early identification and screening of high-risk patients.	• Hawaii State Diabetes Task Force • Hawaii Diabetes Coalition • ADA
		C) Improve diabetes surveillance capacity through special projects.	1 Determine the feasibility of using diabetes-related data generated from research in special populations for surveillance. 2. Determine the feasibility of using diabetes-related health information collected by systems through electronic medical records for surveillance. 3. Through partnership with key organizations, implement special surveillance projects that identify health disparities.	• Hawaii Diabetes Coalition • Hawaii Diabetes Data Work Group
	4) Raise Public Awareness of Diabetes	A) Establish the Hawaii Diabetes Awareness Group (DAG).	1. Identify and convene key stakeholders targeting similar populations to coordinate educational efforts. 2. Establish operating principles of DAG and expectations of participating members.	• Hawaii Diabetes Coalition
		B) Through the DAG, conduct public awareness campaigns to raise awareness of diabetes, its risk factors, complications, and prevention.	1. Work with the Hawaii Diabetes Data Work Group to use data to identify and address priority areas through targeted messages. 2. Identify key elements of a public awareness message on diabetes. 3. Create a standard, core message about diabetes and its risk factors to be included in future campaigns. 4. Encourage adoption of core message by other organizations to assure consistency of information. 5. Develop, implement, and evaluate ongoing public awareness campaigns. 6. Adapt and use National Diabetes Education Program materials and campaigns for local use as appropriate.	• Diabetes Awareness Group • Hawaii Diabetes Data Work Group
		C) Educate local policy leaders and decision makers on the impact of diabetes on the people of Hawaii.	1. Collaborate with the Diabetes Data Work Group to produce a Diabetes Fact Sheet, which details the burden of diabetes in Hawaii's communities, including cost and complications. 2. Disseminate Fact Sheet to community leaders and policy and decision makers.	• Diabetes Awareness Group • Diabetes Data Work Group
		D) Maintain an updated Diabetes Resource Guide	1. Establish a process for collecting information on diabetes programs and resources. 2. Work with system partners and stakeholders to compile an inventory of diabetes programs, resources, and diabetes educators across the state. 3. Publicize directory to community-based organizations, providers, and the health system.	• DPCP • Hi ADE • ADA • Diabetes Awareness Group

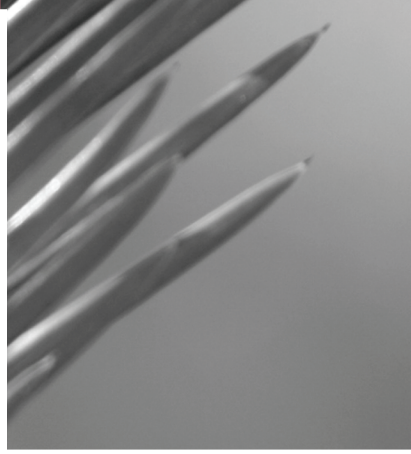
Appendix B: *Diabetes Plan Strategies and Actions*

CONTENT AREA	GOAL	STRATEGY	ACTIONS	KEY STAKEHOLDERS
Health Care Quality	5) Promote Health System Quality Improvement Programs	A) Increase the number of health care providers participating in continuous quality improvement initiatives.	1. Partner with health care providers or community health centers to establish ongoing quality improvement initiatives. 2. Establish baseline of current provider practice behaviors. 3. Provide training and technical assistance in system quality improvements efforts. 4. Adopt continuous quality improvement efforts systematically assuring patient input in system redesign efforts.	• Hawaii Diabetes Coalition • HPCA • MPQHF / CMS • DPCP
	6) Assure the Adoption of the Hawaii State Diabetes Practice Recommendations for Diabetes Mellitus	A) Convene the Hawaii State Diabetes Task Force biennially to update the Hawaii State Practice Recommendations for Diabetes Mellitus.	1. The Hawaii Diabetes Prevention and Control Program shall ensure representation from appropriate agencies and specialty areas, including insurers. Key professionals include but are not limited to endocrinologists, internists, registered dietitians, podiatrists, dentists, physical therapists, pharmacists, behavorists, exercise physiologists, optometrists, ophthalmologists, registered nurses, and diabetes educators. 2. Revise guidelines to better reflect current science base. 3. Identify emerging areas in the treatment of diabetes and adopt as necessary these issues into the guidelines.	• DPCP • Hawaii State Diabetes Task Force
		B) Assure adoption of the Practice Recommendations by insurers to establish standardized care across the health system.	1. Identify insurers operating in the state. 2. Work with insurers to assure adoption of Practice Recommendations as the basis of quality care. 3. Work with insurers to distribute patient-friendly version of Practice Recommendations.	• DPCP • Hawaii State Diabetes Task Force • Hawaii Assoc. of Health Plans
		C) Promote incorporation of Practice Recommendations into daily clinical practice.	1. Develop a curriculum for continuing education on the Practice Recommendations. 2. Identify training opportunities such as professional conferences, grand rounds, continuing education programs, and distance learning. 3. Identify systems with regular education offerings and promote adoption of training curriculum.	• Hawaii State Diabetes Task Force • Hawaii Diabetes Coalition • Hi ADE • ADA
	7) Assure a Competent and Qualified Health Care Workforce	A) Increase diabetes-related professional education opportunities for all health professionals.	1. Assure continuing education and training opportunities in diabetes management, lifestyle modification and behavior change, client empowerment, leadership, and cultural competency. 2. Encourage health professionals to pursue and / or participate in continuing education, advanced training, recognition programs and certification, etc. 3. Use web and satellite based educational opportunities to expand reach across the state	• DPCP • Hi ADE • AHEC
		B) Increase the number of professionals providing quality diabetes education and diabetes self-management training.	1. Assess the number and distribution of diabetes educators in the state. 2. Focus professional education efforts in areas of greatest need. 3. Collaborate with partners to provide training and continuing education for professionals providing diabetes education. 4. Encourage health professionals to pursue advanced training, certification, and classes to remain current in diabetes education practice. 5. Assure that professionals throughout the state have access to professional development in diabetes care and education. 6. Promote the training of community health educators by assuring appropriate and ongoing educational opportunities.	• DPCP • Hi ADE • HPCA • UH Dept. Native Hwn Health
		C) Promote the training and continuing education of community health workers.	1. Assure ongoing educational opportunities or trainings for community health workers.	• DPCP • HPCA
		D) Establish effective communication of diabetes professional opportunities and continuing education events.	1. Coordinate and disseminate information on continuing educational opportunities. 2. Create a website where all diabetes-related education opportunities are shared.	• DPCP • Hawaii Diabetes Coalition

Appendix B: *Diabetes Plan Strategies and Actions*

CONTENT AREA	GOAL	STRATEGY	ACTIONS	KEY STAKEHOLDERS
Focused Initiatives	8) Reduce Health Disparities	A) Assess health disparities in diabetes outcomes.	1. Through the Hawaii Diabetes Data Work Group identify the numbers and geographical distribution of health professionals working in diabetes, especially in specialty practices and rural areas. 2. Identify areas and populations experiencing the greatest disparities in diabetes health outcomes. 3. Utilize findings to focus initiatives.	• DPCP • HPCA • Hawaii Diabetes Data Work Group
		B) Collaborate with community organizations to support diabetes public health efforts.	1. Identify organizations working with populations experiencing the greatest disparities in diabetes outcomes. 2. Partner to develop or expand programs to improve diabetes outcomes in high-risk populations. 3. Evaluate impact of partnerships and effect of programs.	• DPCP • Hawaii Diabetes Coalition
		C) Promote community health center participation in the Health Resources Services Administration's National Health Disparities Collaborative.	1. Partner with the Hawaii Primary Care Association and Community Health Centers to provide technical assistance and resources for applying to the Collaborative. 2 . Support adoption and spread of Collaborative Chronic Care Model in Community Health Centers. 3. Establish linkages between community health centers and community partners to support the Collaborative initiative.	• DPCP • HPCA • Community Health Centers
		D) Increase the number of culturally appropriate diabetes education programs throughout the state.	1. Assess the availability of diabetes education programs throughout the state. 2. Provide technical assistance to programs to develop and/or strengthen diabetes education programs that focus on disparate populations.	• DPCP • Hi ADE • Diabetes Education Committee
		E) Promote the use of community health workers.	1. Encourage community health centers and to develop and/or strengthen community health worker programs. 2. Promote sustainability of community health worker models by sharing evidence of successful programs and developing public health policies that recognize and support the role of community health workers.	• UH Dept. Native Hwn Health • DPCP • HPCA
		E) Address diabetes burden in Native Hawaiians	1. Identify organizations across the state working with Native Hawaiian communities and diabetes. 2. Partner to develop, enhance or expand programs in diabetes to increase sustainability of programs and improve diabetes outcomes in Native Hawaiians. 3. Promote the sharing of successful programs and lessons learned to increase the capacity of all programs and communities working with disparate populations.	• DPCP • Papa Ola Lokahi • OHA • NHHCS • UH Dept. Native Hwn Health



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