

Recommendations from Minnesota's Diabetes Community

Facilitated by the Minnesota Department of Health

Minnesota Diabetes Plan 2010

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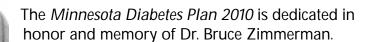
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Sn Dedication

BRUCE ZIMMERMAN, MD



Dr. Bruce Zimmerman was a nationally and internationally known diabetes expert and an endocrinologist at Mayo Clinic, in Rochester, Minnesota. He gave decades of service to the American Diabetes Association (ADA), working with over 30 committees and task forces and

serving as ADA President from 1999-2000. Bruce was particularly proud of three diabetes activities he gave his energy to: his involvement as a DCCT (Diabetes Control and Complications Trial) investigator for Mayo, his hard work as an associate editor of *Diabetes Care* during the 1980's and his role in helping develop an electronic medical records system for diabetes care at the Mayo Clinic.

Bruce was a diabetes leader in the state of Minnesota and served as a founding member of the Minnesota Diabetes Steering Committee from 1985 to 2001. He was a key contributor to the first Minnesota state diabetes plan, the *Minnesota Plan to Prevent Disability from Diabetes for 2000*.

In 2000, Bruce was diagnosed with a brain tumor, which eventually took his life. A great friend to the cause of improving the lives of people with diabetes has been lost, however, his tremendous contributions to diabetes health care and diabetes research will live on for generations to come.

EXECUTIVE SUMMARY

Purpose

The intent of the *Minnesota Diabetes Plan 2010* is to provide the vision for creating a healthier future for all people in the state by dramatically reducing the impact of diabetes. It is a call to action, urging individuals, communities and organizations to get involved in the statewide effort to achieve this vision. The success of this *Plan* depends upon all of us taking action on its farreaching goals and recommendations.

The Impact of Diabetes in Minnesota

Diabetes is a complex, serious and increasingly common chronic disease. It costs the people of Minnesota many hardships and \$2 billion each year for medical care, disability, lost work and premature death. The most common forms of diabetes are type 1 (an autoimmune form usually striking children and young adults), type 2 (the most common form, caused by the body failing to properly use insulin), and gestational diabetes (develops in some pregnancies but usually disappears when pregnancy is over). Diabetes is the sixth leading cause of death in Minnesota. Currently 1 out of 18 adults in the state have diabetes, one-third of whom do not even know they have the disease. Another 248,000 people in Minnesota have impaired glucose tolerance (prediabetes), which puts them at greatest risk of developing type 2 diabetes.

A growing number of people in Minnesota are at increased risk of developing type 2 diabetes. In 2000, over half of adults in the state were overweight or obese. Almost one in four adults in Minnesota do not participate in any leisure time physical activity. In addition, population groups at increased risk of developing type 2 diabetes are growing in number. These include the elderly, populations of color and American Indians, and new immigrants. The good news is that the risk of developing the devastating complications of diabetes, and even type 2 diabetes itself, can be substantially reduced with proper medical care and by practicing healthy behaviors.

Poor management of diabetes can lead to shortened life, heart disease, stroke, blindness, kidney failure, amputations, birth defects in newborns and even infant death. While proper management and care of diabetes can reduce the risk of developing complications, many people in Minnesota with diabetes do not receive the recommended preventive care. For instance, 1 in 3 people in Minnesota with diabetes do not have annual tests for blood cholesterol, annual foot checks by a health professional, or annual dilated eye exams. Nearly half do not check their blood glucose on a daily basis. Clearly, much more needs to be done to reduce the human and economic burden of diabetes on people in Minnesota.

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Development of the Minnesota Diabetes Plan 2010

To create the diabetes state plan, over 300 members of the diabetes community from across Minnesota came together to identify key diabetes issues and needs in our state. Results from these meetings were organized into five themes. Work groups then developed a 5-year vision, goals, recommendations and examples for each theme. The themes and corresponding goals outline a general course of action for the next 2-3 years.

Themes and Goals of the Minnesota Diabetes Plan 2010

Community Health Promotion

- Goal 1: Encourage healthy lifestyle behaviors for youth
- Goal 2: Raise public awareness about diabetes
- Goal 3: Foster community-based collaboration and communication
- Goal 4: Create a healthier environment

Health Care Delivery and Professional Issues

- Goal 1: Stimulate diabetes awareness and action
- Goal 2: Promote professional development and resolve workforce shortages
- Goal 3: Make diabetes services fully accessible
- Goal 4: Improve diabetes services

Diabetes Education and Support Systems

- Goal 1: Make diabetes education accessible and culturally appropriate
- Goal 2: Inform consumers about financial resources for diabetes health services
- Goal 3: Develop support systems for people with diabetes

Financial and Resource Issues

- Goal 1: Maximize and effectively use diabetes resources
- Goal 2: Make the economic case for diabetes prevention and care
- Goal 3: Assure health care coverage for all people in Minnesota
- Goal 4: Address socioeconomic factors impacting diabetes
- Goal 5: Increase legislative support for diabetes

Diabetes Data Assessment and Communication

- Goal 1: Improve the collection, quality, and scope of Minnesota's population-based diabetes data
- Goal 2: Encourage and support routine evaluation of diabetes programs in Minnesota
- Goal 3: Generate support and action for collecting diabetes data through advocacy, communication and marketing
- Goal 4: Effectively share, communicate, and use diabetes data

Get Involved!

Achieving the goals of the *Plan* will take the unified effort of many applying different and creative solutions to change infrastructure, policies, and behaviors. You can find your role in this effort by becoming a registered supporter of the *Minnesota Diabetes Plan 2010*. By registering, you can receive up-to-date information on diabetes, Minnesota-specific statistics, strategies and resources, opportunities to network and share with other registered *Plan* supporters, and public recognition for your contributions.

Register your support at http://www.health.state.mn.us/diabetes/2010plan or call (651) 281-9849 (Outside the metro area, call 1-800-627-3529 and ask for the MDH Diabetes Program).

It is only through the concerted efforts of dedicated individuals, communities and organizations from across the state that we can achieve the Minnesota Diabetes Plan goals by 2010 and ensure a healthier future for everyone in Minnesota.

Creating a Healthier Future for All People in Minnesota

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Introduction

WHY A DIABETES PLAN FOR MINNESOTA?

The purpose of the *Minnesota Diabetes Plan 2010* (the "Plan") is to articulate the vision of creating a healthier future for all people in Minnesota and to provide a road map for achieving that vision.

The *Minnesota Diabetes Plan 2010* is a call to action, urging individuals, communities and organizations, to take an active role in implementing the *Plan*.

Diabetes is a leading cause of death and disability in Minnesota. The burden in terms of human suffering and cost is very high and growing. It is urgent that we act now.

There is an epidemic of type 2 diabetes in Minnesota. The number of cases has increased dramatically in the last five years. Major complications, the death rate and costs associated with diabetes are also rising. There is every indication that these trends will continue throughout the next decade.

Minnesota is one of the healthiest states in the nation and a leader in health care and innovative change. This status could be eroded quickly if we don't take immediate and concerted action to reverse these trends.

It is only through concerted action toward a common vision that we will move ahead in dramatically reducing the impact of diabetes in Minnesota. The Minnesota Diabetes Plan 2010 is a guide for achieving that vision.

WHAT IS DIABETES?

Diabetes is a complex, serious and increasingly common chronic disease that occurs in multiple forms. When people have diabetes, their bodies do not produce or properly use insulin. Insulin is an essential hormone that converts sugar, starches and other carbohydrates into energy needed for daily life. Without insulin, sugars build up in the blood, causing serious, life threatening complications and eventually death. What triggers diabetes is still unknown, although both genetics and environmental factors appear to play roles.

The Major Types of Diabetes

Type 1 Diabetes is a form of diabetes usually striking children and young adults. It develops when the body's immune system destroys the cells that make the insulin. People with type 1 diabetes require daily insulin treatment to survive. Risk factors include autoimmune, genetic, and environmental factors. An estimated 5-10 percent of all diagnosed cases of diabetes are type 1. There are currently no known methods of preventing type 1 diabetes.

Type 2 Diabetes results from the body failing to properly use insulin (usually insulin resistance combined with insulin deficiency). It is a progressive disease with no cure. Approximately 90-95 percent of people with diabetes have type 2. An estimated one-third of those with type 2 diabetes are undiagnosed. This form of diabetes is associated with older age, family history of diabetes, obesity, physical inactivity, prior history of gestational diabetes, pre-diabetes, and certain races and ethnicities. Type 2 diabetes is increasingly being diagnosed in children and adolescents.

Pre-Diabetes is a condition where blood glucose levels are higher than normal but are not yet high enough to be diagnosed as having type 2 diabetes. Most people with pre-diabetes develop type 2 diabetes within 10 years. Currently, pre-diabetes is defined as impaired glucose tolerance (IGT) or impaired fasting glucose (IFG). Studies have shown that people with pre-diabetes can prevent or delay the onset of type 2 diabetes through modest weight loss, healthy diet and regular exercise. The risk factors for pre-diabetes are the same as for type 2 diabetes.

Gestational Diabetes develops in 2-5 percent of all pregnancies but usually disappears when pregnancy is over. Gestational diabetes occurs more frequently in African Americans, Hispanic/Latina Americans, American Indians, and women with a family history of diabetes. Obesity is also associated with higher risk of gestational diabetes. Women who have had gestational diabetes are at increased risk for developing type 2 diabetes later in life. Nearly 40 percent of women with a history of gestational diabetes are subsequently diagnosed with diabetes.

THE CURRENT STATE OF DIABETES IN MINNESOTA

Diabetes is not just a common disease, it is an epidemic. Among adults, type 2 diabetes has increased 24 percent since 1994 in Minnesota. Currently 269,000 (or 1 of every 18) adults in the state have diabetes. Of these, 96,000 do not even know that they have the disease. Recent reports also highlight that some of the greatest increases in type 2 diabetes are occurring in our younger populations, including children. In addition, another 248,000 people in Minnesota are at increased risk of developing diabetes because they have impaired glucose tolerance (pre-diabetes). Diabetes costs the people of Minnesota \$2 billion each year for medical care, disability, lost work and premature death.

Management of Diabetes in Minnesota

Poor management of diabetes can lead to shortened life, heart disease, stroke, blindness, kidney failure, and amputations. During pregnancy, poor management of gestational diabetes or pre-existing diabetes can lead to birth defects in newborns and even infant death. While proper management and care of diabetes can reduce the risk of developing complications, many people in Minnesota with diabetes do not receive the recommended preventive care. For instance, one in three people in Minnesota with diabetes do not have annual tests for blood cholesterol, annual foot checks by a health professional, or annual dilated eye exams. Nearly half do not check their blood glucose on a daily basis. Diabetes is now the sixth leading cause of death in Minnesota.

Diabetes and Risk Prevention in Minnesota

Studies show that diabetes and its potential complications can be delayed or prevented. Yet the risk factors for diabetes and its complications are increasing at an alarming rate. In 2000, over half of adults in Minnesota were overweight or obese. In fact, obesity has increased over 60 percent since 1990. Almost one in four adults in Minnesota do not participate in any leisure time physical activity. In addition, more population groups are at increased risk of developing type 2 diabetes. These include the elderly, populations of color, American Indians, and new immigrants. Clearly, there is much work to do to reduce the human and economic burden of current and future diabetes on people in Minnesota.

References

- 1. Desai J, Devlin H. (2003). *Diabetes in Minnesota*. Minnesota Department of Health, St. Paul, MN, 2001. Available at: http://www.health.state.mn.us/diabetes/diabetesinminnesota/
- 2. Fagot-Campagna A, et al. (2000). Type 2 Diabetes among North American Children and Adolescents: An Epidemiologic Review and A Public Health Perspective. *Journal of Pediatrics, Vol. 136 (5)*, 664-672.
- 3. Acton K, Rios Burrows N, Moore K, Querec L, Geiss S, Engelgau M. (2002). Trends in Diabetes Prevalence Among American Indian and Alaska Native Children, Adolescents, and Young Adults. *American Journal of Public Health, Vol.* 92 (9), 1485-1490.

DIABETES PLANNING IN MINNESOTA

The *Minnesota Diabetes Plan 2010* is the second statewide, ten-year plan addressing issues of diabetes in Minnesota. The first plan, the *Minnesota Plan to Prevent Disability From Diabetes* (1990-2000), led to significant progress in preventing disability from diabetes through activities in the areas of health care services, education for professionals and people with diabetes, health care reimbursement, and monitoring and evaluation. A summary of accomplishments from the 1990-2000 *Plan* can be found in Appendix C.

The new *Minnesota Diabetes Plan 2010* is a compilation of a broad set of consensus agreements among diverse individuals and organizations in the Minnesota diabetes community. These agreements identify how we can work together more effectively to reduce the burden of diabetes in the state and make Minnesota a better place for people living with diabetes. Development of the *Plan* was funded by the Centers for Disease Control and Prevention (CDC), and guided by the Minnesota Diabetes Steering Committee (MDSC), and the Minnesota Diabetes Program (MDP). The MDP is Minnesota's state-level public health diabetes program established by the CDC in 1980. The MDSC supports and guides the work of the MDP and oversees the development, implementation and evaluation of the *Minnesota Diabetes Plan 2010*.

The Minnesota Diabetes Steering Committee (MDSC)

This advisory group is comprised of experts in diabetes, representing professional and voluntary organizations, health care delivery systems, and people with diabetes. Its mission is to:

- Oversee implementation of the *Minnesota Diabetes Plan*
- Facilitate communication, sharing and partnership building among diabetes stakeholders in the State
- Provide expertise to guide the Minnesota Diabetes Program activities at the Minnesota Department of Health

The Minnesota Diabetes Program (MDP)

The Minnesota Department of Health's Diabetes Program is dedicated to improving the health of all people in Minnesota by reducing the impact of diabetes. To achieve this, the MDP strives to:

- Collect and publicize state diabetes data to guide policy and program design
- Convene forums to identify common interests and foster collaborative action to improve health
- Facilitate effective partnerships with health systems, communities and other stakeholders
- Translate health research and information into practice
- Promote and develop innovative, effective, and culturally appropriate health promotion strategies
- Work to achieve population-wide impact

Minnesota Diabetes Plan 2010 Development

To create the *Minnesota Diabetes Plan 2010*, meetings were held across the state with over 300 members of the diabetes community. (Figure 1). The meetings brought people together to gather information, exchange perspectives, and reach agreement on key diabetes issues that affect our state. The resulting consensus includes a vision for preventing and managing diabetes in Minnesota, as well as goals and activities to achieve this vision. The *Plan* development process included multiple phases of consensus building and planning. Appendix D describes the development process in greater detail.

Public Health Goals and the Minnesota Diabetes Plan 2010

The recommendations in this document support state and national public health goals for diabetes. Healthy People 2010 (http://www.health.gov/healthypeople/) and Healthy Minnesotans: Public Health Goals for 2004 (http://www.health.state.mn.us/divs/chs/ophp/goals.htm) are examples of comprehensive public health goals that identify what is needed for people to live healthy, productive lives. The Minnesota Diabetes Plan 2010 suggests directions, strategies and activities to help us reach our goals.

PROCESS S

Diabetes

Education

Financial

Resources

14 Assessment Meetings Described the current status of diabetes in Minnesota **Five Work Groups** Care Health **Diabetes Delivery Promotion** Data Diabetes goals and Recommendations Work groups develop vision and goals Minnesota Diabetes Plan 2010 Plan created The Future Statewide implementation by people, communities and organizations

Figure 1: Minnesota Diabetes Plan Development Process

How to Get Involved

Achieving the goals of the *Plan* will take the unified action of many applying different and creative solutions to change infrastructure, policies, and behaviors. By working together to implement the *Plan*, we can create a healthier future for Minnesota.

Find Your Role

- Review the Minnesota Diabetes Plan 2010 Goals and Recommendations beginning on page 11 to find specific items you are already working toward or would like to address.
- 2. Become a registered supporter of the *Plan*. Registration is free and is open to anyone with existing activities, new ideas, or simply an interest in being involved.
- 3. Look for potential partners among other *Plan* registrants or in your community who share your goals in order to maximize resources and broaden your reach.
- 4. Get ideas for interventions from the *Plan*'s newsletter and other communications, or share yours with others working on the *Plan*. Pooling our combined knowledge, ideas and experience will be a tremendous asset to everyone in the state.

The Benefits of Registering

By registering you can receive:

- Up-to-date information
- Minnesota-specific statistics
- Strategies and resources
- Contacts with other registered *Plan* supporters
- Opportunities to network
- Publicity and recognition

Demonstrate your support of the *Minnesota Diabetes Plan 2010* at http://www.health.state.mn.us/diabetes/2010plan or call (651) 281-9849.

Outside the metro area, call 1-800-627-3529 and ask for the MDH Diabetes Program.

Good evaluation tells you:

- What and how much you have done
- How well you have done it
- How effective you have been

Measuring Progress and Success

Evaluation will be critical to coordinating our efforts and demonstrating our successes in achieving the *Plan* goals. Ongoing evaluation will help us to continually refine our strategies and focus our activities.

By evaluating your efforts toward achieving the *Plan* goals, you will be contributing to our collective progress and success. Measuring your progress will enable you to see the impact you are having on this statewide effort. Everyone is encouraged to share their successes, challenges and lessons learned so that we may all benefit.

How you evaluate your progress will depend on your needs, the activity being assessed, and the resources available. To ensure the best results, it is important that you begin planning your evaluation at the same time you design your program or intervention.

Having an evaluation plan helps you to: 1) define measurable program objectives up front, 2) reduce uncertainties, 3) improve your program's effectiveness, and 4) make informed decisions about continuing, changing, expanding, or ending your activities.

As a guide to planning and conducting an evaluation of your program, we recommend the *Framework for Program Evaluation in Public Health* developed by the Centers for Disease Control and Prevention (CDC) and found at http://www.cdc.gov/eval/index.htm. This framework is useful for any type of program, whether clinical or community based. It includes two main components, "Steps in Program Evaluation" and "Standards for Effective Evaluation." Appendix E contains a summary of this framework to help get you started.

STRUCTURE OF THE 2010 PLAN

The *Minnesota Diabetes Plan 2010* consists of five broad, overlapping themes. Each theme is defined by a **5-year vision** and **goals** that describe the general course of action for the next 2-3 years. Each goal is supported by specific **recommendations** for activities. Most recommendations are supplemented with **examples**.

The themes of the Plan are:

Community Health Promotion
Health Care Delivery and Professional Issues
Diabetes Education and Support Systems
Financial and Resource Issues
Diabetes Data Assessment and Communication

Cross-Cutting Issues

Eight issues were identified as being important to all themes in the *Plan*. You will find these crosscutting issues embedded into goals throughout the *Plan*. These issues are:

- Policy change and advocacy
- Eliminating health disparities
- Prevention
- Access to care
- Coordination and partnership
- Evidence and best practices
- Research and technology
- Evaluation

Conclusions

Diabetes is a leading health problem in Minnesota. Without coordinated statewide action, it will increasingly result in death, disability and a decreased quality of life for residents of our state. It will have grave financial consequences for our health care system, but its effects will negatively impact all sectors of our community and state's economy. In short, diabetes is not a disease; it is an impending crisis.

Yet, the future need not be so bleak. Diabetes is preventable. Death and disability from diabetes are preventable. The problem of diabetes is widespread; hence the solution must be widespread. Unified statewide action, involving all aspects of diabetes and the entire community with sustained effort and a common vision, is required. The *Minnesota Diabetes Plan 2010* has been developed to guide that vision: creating a healthier future for all Minnesotans.

Creating a Healthier Future for All People in Minnesota

GOALS AND RECOMMENDATIONS

This section contains the vision and goals for the *Minnesota Diabetes Plan 2010*. The *Plan* is divided into five Themes, each addressing multiple issues.

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Creating a Healthier Future for All People in Minnesota

COMMUNITY HEALTH PROMOTION

This theme identifies ways Minnesota communities can help promote healthier lifestyles and reduce risk factors to prevent diabetes and its complications.

5-Year Vision

Minnesota schools promote healthy lifestyles for youth through appropriate curricula and polices.

All Minnesota schools and child care providers practice consistent and safe policies and procedures to support effective management of diabetes in children.

All people in Minnesota are aware of the risks for diabetes and what they can do to prevent it.

Minnesota diabetes stakeholders coordinate and collaborate effectively around diabetes.

Communities are actively addressing the prevention and management of diabetes.

Healthy food choices are readily available in all venues.

The environments and policies of Minnesota communities support and promote healthy lifestyles.

Goal

Encourage Healthy Lifestyle Behaviors for Youth

Address the issue of preventing and managing diabetes and its complications by educating and providing opportunities for Minnesota's youth to adopt healthy lifestyle behaviors.

A. Work with state and local school officials to address curricula-related issues impacting students' health.

- 1. Increase opportunities for physical education and physical activity in K-12 school settings.
- 2. Assess current health education curricula regarding physical activity, nutrition and diabetes for accuracy of information, appropriateness of teaching strategies, as well as cultural and linguistic appropriateness for the intended audience.
- 3. Develop and implement new school curricula that address healthy lifestyle behaviors.

B. Work with the state and local school officials to address school policies impacting students' health.

- 1. Establish policies requiring healthy food choices in schools, including cafeterias and vending machines.
- 2. Develop and implement consensus guidelines for daily physical education in Minnesota schools.
- 3. Develop and use diabetes treatment guidelines for children in schools and child care settings in Minnesota.

C. Encourage communities to develop and implement community-based recreation programs for youth, which provide opportunities for physical activity and healthy eating.

- 1. Ensure that communities have recreation centers, programs and parks that are safe, free or low-cost and open to all children.
- 2. Implement mentoring programs that match youth to adults to participate in healthy lifestyle activities together.
- Offer a variety of opportunities to boys and girls of all ages and abilities to participate in competitive and non-competitive sports and activities at low cost.
- 4. Seek community and organizational partners to offer free and reliable transportation for youth to and from recreational activities.
- 5. Offer a variety of opportunities for families to learn and participate in fun and healthy activities together.

Goal 2

Raise Public Awareness about Diabetes

Conduct campaigns to raise the awareness of all people in Minnesota about diabetes risk factors, prevention and management.

A. Implement public awareness campaigns, which promote healthy lifestyle behaviors and the prevention and treatment of diabetes and other chronic diseases.

- 1. Develop a social marketing campaign for youth to promote healthy lifestyle behaviors, such as healthy eating and increased physical activity.
- 2. Adapt media campaigns, such as the National Diabetes Education Program (NDEP), for use in a variety of Minnesota communities.
- 3. Enlist the help of celebrities and other important figures representing diverse communities to help promote awareness campaigns.

Goal 3

Foster Community-based Collaboration and Communication

Develop, implement and share results of community interventions, build and strengthen relationships, and promote open communication within the diabetes community.

A. Support community-based programs to prevent and manage diabetes in Minnesota utilizing effective strategies.

- 1. Cultivate relationships between the communities, individuals and other stakeholders impacted by diabetes in Minnesota.
- 2. Develop and implement programs for coordinated community partnerships to increase opportunities for healthy lifestyle behaviors, including faith-based organizations, government, businesses, schools and elder care services.
- 3. Evaluate, document and share the outcomes of coordinated community partnerships, and develop models that are replicable by others.

B. Work with health experts and representatives of populations at risk to build collaborative relationships and to communicate effectively about diabetes.

- 1. Come to consensus on key health promotion and prevention messages for diabetes and related chronic diseases for Minnesota.
- 2. Develop recommendations with health entities statewide to coordinate health promotion and prevention messages.
- 3. Develop and disseminate tools that allow people with diabetes, health professionals, community experts, researchers and other stakeholders to share information and resources specific to diabetes in Minnesota.

Goal 1

Create a Healthier Environment

Assist the diabetes community in finding ways to support the health of all people in Minnesota by promoting policy change and improvements to the built environment.

A. Work with state and local community partners to identify and implement changes in the built environment and community policies that will facilitate healthy lifestyle behaviors.

- 1. Establish community coalitions to examine their community environments and policies and to identify ways of increasing opportunities for physical activity and healthy eating.
- 2. Work with existing physical activity and nutrition councils to develop and support a plan for promoting physical activity and healthy eating or food choices for all people in Minnesota.
- 3. Work with members of the food industry to promote more healthy food choices.
- 4. Raise awareness among the public and policymakers about how the built environment and community policies impact health and what they can do about it.
- 5. Change existing policies and zoning codes to encourage land-development patterns that make working, shopping, going to school and recreation possible within walking distance of where people live.
- 6. Support research to determine how changes in the built environment impact the prevention and management of diabetes.
- 7. Provide opportunities for people to get involved in making decisions that improve access to physical activity and healthy foods in their neighborhoods and communities.
- 8. Promote bicycling, walking and other forms of physical activity as viable means of transportation through changes in transportation policy and infrastructure.
- 9. Encourage employers to support employee health by offering programs and benefits that facilitate daily physical activity and healthy eating.
- 10. Assure that the mobility needs of all community members, especially seniors and disabled residents, are met by removing environmental barriers such as inaccessible buildings, sidewalks, curb cuts and safe walking routes.

Creating a Healthier Future for All People in Minnesota

HEALTH CARE DELIVERY AND PROFESSIONAL ISSUES

This theme provides a framework for addressing diabetes care delivery improvement, workforce development, access to services, patient empowerment, and policy change advocacy.

5-Year Vision

Health professionals and health delivery systems engage in ongoing advocacy for diabetes care policies and legislation.

Health care professionals are diverse, competent, accessible and appropriately credentialed.

Diabetes care is comprehensive, coordinated, patient-centered and team managed.

Evidence-based practice is used consistently by health systems across the State.

People with diabetes in Minnesota are receiving the highest quality diabetes care.

People with diabetes in Minnesota are competent and active in managing their own care and supported in practicing healthy lifestyles.

Resources are available to continually improve the quality of diabetes care.

Health systems and community organizations work together to provide diabetes preventive services and support.

Early diagnosis is assured through consistent screening of populations most at risk.

Programs for seniors are enhanced by the development and implementation of diabetes quidelines for prevention and care.

Providers and health systems deliver sensitive, safe, holistic approaches to diabetes care.

Goal

Stimulate Diabetes Awareness and Action

Engage health professionals and health systems in patient empowerment, awareness campaigns, and advocacy for policy change.

A. Implement programs to change behaviors and attitudes about diabetes prevention and management and empower people to stay healthy.

- 1. Implement diabetes self-care and risk factor awareness campaigns and interventions.
- 2. Identify people most at risk of developing diabetes and help them to reduce their risk.
- 3. Offer psychosocial support and incentives to help people achieve their health goals and to practice healthy behaviors.
- 4. Make diabetes care and education recommendations accessible for people of varying literacy levels and cultural backgrounds.
- 5. Develop mechanisms that provide reminders for recommended self-care regimens and diabetes services.

B. Advocate for policy changes that support access to comprehensive diabetes care, improvements to care delivery and health professional development.

- 1. Define advocacy and policy roles for health professionals and care delivery systems to benefit diabetes care.
- 2. Engage health professional and health system trade organizations in advocating for diabetes care issues.
- 3. Develop strategies for policy change and advocacy that benefit diabetes prevention and care.

Goal

Promote Professional Development and Resolve Workforce Shortages

Develop workforce skills and diversity to ensure that health professionals are available and equipped to offer high quality and culturally appropriate diabetes services.

A. Develop and implement accessible continuing education programs that promote proficiency in diabetes among health professionals.

- 1. Fuel ongoing education and advanced diabetes training through licensing requirements and incentives.
- 2. Increase access to continuing professional education in diabetes by expanding the use of communication technology and by offering scholarships, fellowships and programs to meet varied learning needs.

B. Promote cultural competency training programs for professionals to improve diabetes care for diverse populations.

- 1. Offer continuing education credits for cultural competency programs.
- 2. Incorporate cultural competency training into academic curricula for new diabetes health professionals.
- 3. Enhance health professionals' understanding of alternative and complementary care practices and the impact on diabetes management.

C. Address health care workforce retention and shortages that impact diabetes care and education.

- 1. Monitor workforce shortages and the impact on health and outcomes for people with diabetes.
- 2. Encourage diabetes health professionals to practice in shortage areas through incentives, loan forgiveness, local student recruitment, and training and placement bonuses.
- 3. Apply methods to meet diabetes workforce needs for retention and career enhancement.

D. Increase the proportion of diabetes health professionals of different racial, ethnic and cultural backgrounds.

- 1. Recruit students from diverse backgrounds into diabetes care professions.
- 2. Develop programs to support the work and career development of health professionals from a variety of racial, ethnic and cultural backgrounds serving people with diabetes.

Goal 3

Make Diabetes Services Fully Accessible

Ensure that every person with diabetes in Minnesota has access to comprehensive health services, including self-management education.

A. Improve access to comprehensive diabetes services and self-management education.

- 1. Expand the use of creative service delivery approaches including technology.
- 2. Address barriers to accessing care such as language, culture and transportation.
- 3. Encourage health insurance purchasers and insurers to offer full coverage for all services and supplies needed for comprehensive diabetes care and education.
- 4. Improve communication regarding insurance coverage and alternative financing for the under- and un-insured.
- 5. Create and maintain regional directories of diabetes-related health care services and providers.
- 6. Translate western health care concepts for immigrant populations with diabetes.

Goal 1

Improve Diabetes Services

Improve the quality and delivery of diabetes clinical care and selfmanagement education.

A. Practice patient-centered diabetes care and education that are delivered by multi-disciplinary teams of health professionals.

- 1. Define the roles and responsibilities of all diabetes team members, including the patient.
- 2. Develop models of communication for patient-centered team care.
- 3. Integrate patient-centered team care approaches into curricula for training health professionals.

B. Stimulate improvements in diabetes care delivery to achieve optimal health outcomes.

- 1. Create partnerships and community coalitions to explore and address diabetes care improvements and guideline implementation.
- 2. Promote statewide use of a common set of evidence-based diabetes practice guidelines.
- 3. Develop statewide consensus on guidelines for diabetes self-management education.
- 4. Support national and local efforts to standardize lab A1C values.
- 5. Share diabetes quality improvement tools, methodologies, and best practices.
- 6. Develop health care initiatives and policies based on quality of care data.
- 7. Support the use of state-of-the-art technologies in diabetes care and prevention.
- 8. Invest in information systems that support diabetes management and quality improvement.

C. Promote collaboration between community groups, health systems, and other stakeholders to improve diabetes outcomes.

- 1. Involve health systems and health professionals in community-based diabetes coalitions.
- 2. Train lay health workers to link people with diabetes to resources and services in their communities.
- 3. Encourage health system and community partnerships to support diabetes programs and services.
- 4. Work with diverse populations to develop culturally specific materials, programs and self-management education curricula.

D. Coordinate services across providers and care settings to ensure that diabetes care and self-management education is complete and comprehensive.

- 1. Develop standardized information systems to ensure continuity of care for people with diabetes as they move between providers.
- 2. Promote effective models and best practices for coordinating diabetes services.

E. Stimulate participation in diabetes research and development.

- 1. Encourage and support participation by people with diabetes and providers in diabetes-related research and new product testing.
- 2. Involve people with diabetes and health professionals in research on alternative and complementary diabetes therapies.
- 3. Communicate the latest diabetes-related research and integrate findings into health care delivery practices.

Creating a Healthier Future for All People in Minnesota

DIABETES EDUCATION AND SUPPORT SYSTEMS

This theme outlines strategies to build social support and improve access to diabetes education, care and resources for people with diabetes.

5-Year Vision

Community-specific (e.g. cultural, geographic and age-specific) resources to improve and support wellness are in place and utilized.

People with diabetes and their families are connected to culturally relevant support networks.

Consumers, educators and providers regularly access diabetes education.

People with diabetes in Minnesota have access to all elements of diabetes education and support including health professional services, equipment and supplies, transportation, education programs and insurance coverage.

The well-being of people with diabetes is enhanced by full communication and collaboration between all participants in diabetes care and education processes.

Diabetes education and support systems are improved by state-of-the-art technologies.

The efficacy of diabetes education programs and services are regularly measured and evaluated.

Diabetes Education and Support Systems

Goal

Make Diabetes Education Accessible and Culturally Appropriate

Promote culturally and linguistically appropriate diabetes education and selfmanagement strategies to people with diabetes and their families.

A. Develop and distribute diabetes education and self-management resources.

- 1. Develop diabetes self-management and nutrition education materials and programs for people to use at home.
- 2. Promote multimedia approaches to diabetes self-management education.
- 3. Provide practical, easy-to-understand diabetes self-management and nutritional training to seniors with diabetes.

B. Make diabetes self-management education culturally appropriate and readily available.

- 1. Work with at-risk communities to develop and implement culturally and linguistically appropriate diabetes educational materials and programs.
- Evaluate, update and improve diabetes educational materials and programs to maintain their effectiveness, accuracy and cultural and linguistic appropriateness.
- 3. Develop and promote diabetes websites with up-to-date resources for the public that are linguistically and culturally specific.

C. Work with Minnesota youth and their families to develop age appropriate diabetes support and self-management educational materials.

- 1. Work with youth from diverse backgrounds to create diabetes self-management education that is age appropriate and uses new technologies.
- 2. Develop culturally sensitive support groups for youth with diabetes.

D. Assure that the efficacy of diabetes education and care are regularly measured and evaluated.

- 1. Conduct regular evaluations of existing diabetes education programs.
- 2. Pilot test diabetes education programs with different racial and ethnic groups.
- 3. Use research and evaluation results to guide development of new and innovative diabetes education and support programs.

Diabetes Education and Support Systems

Goal 2

Inform Consumers about Financial Resources for Diabetes Health Services

Increase access to diabetes care by providing insurance coverage information.

A. Inform the public about diabetes health insurance coverage.

- 1. Distribute information about Medicare and other health insurance reimbursement for diabetes care to seniors and the community organizations that serve them.
- 2. Develop and maintain a guide that summarizes health insurance coverage for diabetes by insurer, including Medicare and Medicaid benefits.
- 3. Publicize free and low-cost diabetes services, supplies and medicines.

Diabetes Education and Support Systems

Goal 3

Develop Support Systems for People with Diabetes

Identify needs and develop appropriate support systems for people with diabetes.

A. Build and expand community support systems for people with diabetes.

- 1. Convene regional planning groups to identify support needs of people with diabetes and develop recommendations for action.
- 2. Engage non-traditional partners (such as beauty salons, faith-based organizations, grocery stores and movie theaters) to provide resources, support and information to people with diabetes.
- 3. Create regional diabetes service resource guides for people with diabetes and their families.
- 4. Maintain a centralized diabetes support group referral and contact list for Minnesota.

B. Involve people with diabetes and their families in diabetes education and self-management.

- 1. Increase awareness and knowledge about diabetes self-management roles for people with diabetes and their families.
- 2. Encourage people with diabetes and their families to seek life-long diabetes self-management education.

Creating a Healthier Future for All People in Minnesota

FINANCIAL AND RESOURCE ISSUES

This theme provides a framework to alleviate the social and economic crises faced by people with diabetes and to assist the community organizations and health care systems serving them.

5-Year Vision

There is effective coordination of resources throughout the Minnesota diabetes community.

Information about the cost-benefit of preventing diabetes and its complications will be used to make program and policy decisions.

Everyone has insurance that provides the coverage levels needed to effectively prevent and manage diabetes.

Diabetes care and coverage decisions are based on quality of care, cost-benefit and health outcome information.

Resources have been allocated to improve the socioeconomic conditions impacting diabetes for all people in Minnesota.

Legislation is enacted that reduces the impact of diabetes by improving socioeconomic conditions and health care access and coverage for people with diabetes.

Funding is substantially increased for diabetes-related research and programs.

Financial and Resource Issues

Goal

Maximize and Effectively Use Diabetes Resources

Facilitate collaboration and advocacy among individuals, organizations, and communities to maximize resources.

A. Collaborate to obtain and share diabetes resources.

- 1. Remove barriers to collaboration.
- 2. Offer an up-to-date listing of funding sources for collaborative diabetes activities from local, state and national agencies.
- 3. Develop forums to share and better utilize diabetes resources.

B. Advocate for increased funding and support of diabetes-related research and technology development conducted in Minnesota.

- 1. Direct funds to the development and testing of new technologies such as monitoring devices and genetic screening methods.
- 2. Advocate for research and development to improve diabetes treatment.
- 3. Support translating current diabetes research into practice.
- 4. Promote the application of new technologies and research to benefit uninsured and underinsured populations.

Financial and Resource Issues

Goal 2

Make the Economic Case for Diabetes Prevention and Care

A. Determine the cost-benefit of preventing diabetes and its complications.

- 1. Research the long-term cost savings of diabetes prevention and care.
- 2. Assess the economic costs of diabetes in Minnesota (i.e. medical costs, disability, lost work and premature mortality).
- 3. Assess the cost-benefit of social and behavioral factors that impact diabetes.
- 4. Share cost-benefit findings with program and policy decision makers.

Financial and Resource Issues

Goal 3

Assure Health Care Coverage for All People in Minnesota

Provide universal insurance coverage and reimbursement for diabetes-related services.

A. Establish universal diabetes care insurance coverage for all people in Minnesota.

- 1. Advocate for self-insured plans to have diabetes coverage equal to or exceeding that of insurers who are regulated and mandated by law to cover certain diabetes care elements.
- 2. Educate health insurance purchasers about the coverage levels needed to effectively prevent and manage diabetes.
- 3. Solicit public and private funds to expand options and address gaps in health care coverage.
- 4. Promote effective methods to reduce health insurance administrative costs.
- 5. Create a new reimbursement model that pays for all aspects of diabetes prevention, care and self-management education.

Financial and Resource Issues

Goal 4

Address Socioeconomic Factors Impacting Diabetes

Engage individuals, communities and systems in improving socioeconomic factors that influence diabetes risk, prevalence and care.

A. Assess the socioeconomic factors that influence diabetes.

- 1. Compile research and data that describe the impact of socioeconomic factors on diabetes.
- 2. Assess socioeconomic barriers to improving diabetes outcomes; summarize findings and make recommendations for action.
- 3. Evaluate and report the cost-benefit of specific socioeconomic policies and programs that impact diabetes.

B. Address socioeconomic factors.

- 1. Assess the impact of social and economic policies on diabetes.
- 2. Identify and share promising social and economic practices and policies.
- 3. Create social and economic environments that encourage and support healthful activities.
- 4. Recognize and reward organizations that demonstrate commitment to improving social conditions that impact diabetes.

Financial and Resource Issues

Goal 5

Increase Legislative Support for Diabetes

Stimulate legislative action to finance and support diabetes-related activities in Minnesota.

A. Build support for diabetes legislative action.

- 1. Identify and cultivate champions for diabetes advocacy among state and federal legislators.
- 2. Educate legislators on the impact of diabetes.
- 3. Develop fact sheets highlighting the human and economic costs of diabetes in Minnesota and the cost-benefits of diabetes prevention and care.
- 4. Establish a diabetes caucus in the state legislature to promote and evaluate diabetes-related legislation.

Creating a Healthier Future for All People in Minnesota

DIABETES DATA ASSESSMENT AND COMMUNICATION

This theme provides a framework to promote and support collaboration and advocacy for monitoring diabetes in Minnesota; evaluating diabetes strategies, programs and policies; and effectively communicating diabetes data and results to people in Minnesota.

5-Year Vision

Standardized diabetes data definitions and data collection methods are established.

State-of-the-art, user-friendly, seamless, and efficient entry and retrieval systems for diabetes data are in place.

Data development and collection support and respond to research needs.

A statewide diabetes database is implemented.

There is timely analysis and reporting of diabetes data for all populations and at all health care levels.

Diabetes data are effectively communicated.

Ongoing systematic collaboration occurs to translate data into practice.

Data are used to guide health care legislation and organizational and research policies.

Goal 1

Improve the Collection, Quality, and Scope of Minnesota's Population-based Diabetes Data

A. Establish an advisory group to coordinate diabetes data issues in Minnesota.

The advisory group will:

- 1. Provide leadership in creating a statewide diabetes database.
- 2. Assure that confidentiality and data privacy concerns are addressed.
- 3. Convene a statewide diabetes data coordinating group.

B. Collect, analyze and report on diverse and at-risk populations in Minnesota.

1. Develop and implement methods to monitor, assess and report on populations most at risk for developing diabetes or its complications.

2. Develop and implement methods to assess diverse populations, particularly for those whose risk of diabetes or its complications is not known or who face disparities in health.

C. Develop consensus on uniform diabetes data elements.

- 1. Develop and implement uniform diabetes data elements including race, ethnicity and socioeconomic status.
- 2. Collect data elements using standardized and validated data instruments and definitions.

D. Determine the feasibility and utility of statewide diabetes databases.

- 1. Report on the feasibility of using a statewide database for all people with diabetes in Minnesota, including an assessment of the costs and benefits of such a database.
- 2. Report on the feasibility of a statewide diabetes database for youth in Minnesota.

Goal 2

Encourage and Support Routine Evaluation of Diabetes Programs in Minnesota

A. Promote and support evaluation of diabetes programs and policies in Minnesota.

1. Develop and implement activities and resources for evaluating diabetes programs and policies such as evaluation training tools, models and resource guides.

B. Establish uniform diabetes evaluation measures.

1. Identify and promote uniform evaluation measures to assess the impact of diabetes programs and policies.

Goal 3

Generate Support and Action for Collecting Diabetes Data through Advocacy, Communication and Marketing

A. Promote the benefits of valid and reliable diabetes data

- 1. Establish a coalition to inform people in Minnesota and state policy-makers about the value of high quality diabetes data.
- 2. Develop a statement of need for diabetes-related data in Minnesota.
- 3. Advocate for improved diabetes data collection and data quality.
- 4. Effectively communicate diabetes data issues to policy-makers and people in Minnesota.

Goal 4

Effectively Share, Communicate, and Use Diabetes Data

A. Actively communicate Minnesota diabetes data.

- 1. Create strategies to inform people in Minnesota about diabetes data, evaluation results and implications.
- 2. Improve internet access and appropriate use by people with diabetes, health care providers, public health professionals and others involved in diabetes issues.

B. Apply diabetes data and results.

- 1. Determine the impact of diabetes in Minnesota.
- 2. Detect changes in health care practices.
- 3. Assess the quality of health care.
- 4. Identify the magnitude and causes of diabetes health disparities.
- 5. Evaluate prevention and control strategies.
- 6. Facilitate program planning and policy development.
- 7. Identify where additional research is needed.

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- American Indian people with diabetes and Health Professionals—Bemidji Area
- Representation People with diabetes Burnsville Area
- Reople with diabetes Mankato Area

- Realth Professionals Mankato Area (2)

- Research Representatives
- "Voices from the Community" Focus Group Participants − Twin Cities

Plan Development Work Groups:

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- Support and Education for People with Diabetes
- Realth Care Delivery and Professional Issues

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Creating a Healthier Future for All People in Minnesota

APPENDICES

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APPENDIX A

Acronyms

A1C Glycosylated hemoglobin - A1C fraction

ADA American Diabetes Association

CDC Centers for Disease Control and Prevention

IFG Impaired fasting glucose

IGT Impaired glucose tolerance

K-12 Kindergarten through 12th grade

MDH Minnesota Department of Health

MDP Minnesota Diabetes Program

MDSC Minnesota Diabetes Steering Committee

NDEP National Diabetes Education Program

APPENDIX B

Glossary

A1C (hemoglobin A1c or HbA1c) — a clinical test used to gauge the level of blood glucose control. It provides an average of the blood glucose levels for the past 120 days. A1C levels can range from about 6% (normal) to as high as 25% (uncontrolled glucose levels). Regular A1C testing is essential to monitoring the effectiveness of diabetes treatment plans.

Alternative and complementary care — a group of diverse medical and health care systems, practices, and products that are not presently considered to be part of conventional medical care as practiced in the US. A few examples include dietary supplements, acupuncture, qi gong, chiropractic manipulation, massage, meditation and prayer, therapeutic touch, electromagnetic fields, and aromatherapy. More information can be found at: http://nccam.nih.gov/.

Assessment — the process of regularly and systematically collecting, assembling, analyzing, and making information available on a health issue (such as the impact of diabetes on a community). Assessment can include statistics on health status and health needs, the epidemiology of health problems and other studies.

Behaviors (healthy lifestyle) — an individual's lifestyle choices (such as good nutrition, regular physical activity, and actions to control blood glucose, blood lipid and blood pressure levels) that decrease their risk of diabetes or its complications.

Body Mass Index (BMI) — a formula that assesses both height and weight in order to classify overweight and obesity and to estimate the relative risk of disease. BMI numbers generally range from < 18 (underweight) to 40 + (morbid obesity). BMI is <u>not</u> a measure of the percentage of body fat. Online BMI calculators can be found at http://www.nhlbisupport.com/bmi/bmicalc.htm and http://www.cdc.gov/nccdphp/dnpa/bmi/calc-bmi.htm.

Built environment — settings for which policies, social factors and physical space can be manipulated at some level. Built environments that impact diabetes include walking paths and recreational areas; healthy food choices in grocery stores, restaurants and schools; non-smoking policies; community-based educational programs; transportation to care settings; etc.

Chronic disease/Condition — an illness that is long-term or permanent. Diabetes is a progressive chronic disease that requires ongoing treatment and monitoring and as yet has no cure.

Community — defined in this document as a social unit usually encompassing a geographic area (such as a town, neighborhood or housing complex), shared characteristics (such as ethnicity, age, gender, occupation, culture or history), or common interest (such as an activity or health condition) typically convened for the purpose of benefiting members while addressing a need or providing a service.

Complementary and alternative care — See Alternative and Complementary Care.

Complications — conditions that can result from poorly controlled diabetes. The most common are lower extremity amputations, kidney failure, blindness, premature death, stroke, heart disease, congenital malformations, perinatal death, and long- and short-term disability. Diabetes can also cause depression, impaired wound healing, stomach and intestinal disorders, nerve damage, skin disorders, gum disease and other conditions. Fortunately, most complications can be effectively delayed, prevented or controlled.

Consensus — a decision in which all participants consent (i.e. agree they can live with and support). The process for gaining consensus is to find common ground with all participants. Consensus is distinct from majority rule, unanimous agreement or autocratic decisions.

Covered services/Coverage — health care services that are paid for, completely or partially, by an insurance plan. Coverage for diabetes-related services may vary between insurers and insurance products. Current legislation in Minnesota mandates coverage by health maintenance organizations (HMOs) of diabetes supplies and equipment, and self-management education.

Cultural competency — a set of behaviors and attitudes integrated into health care practices and policies that enable providers to work effectively in cross cultural situations.

Diabetes — a group of complex, serious and increasingly common chronic diseases characterized by the inability to produce or properly use the hormone insulin. Without insulin, sugars build up in the blood, causing serious, life threatening complications and eventually death. There are three main types of diabetes: type 1, type 2 and gestational diabetes. See page 2.

Diversity / Diverse populations — groups of people distinguished by social or demographic elements such as race/ethnicity, socioeconomic status, age and gender as well as culture, history, beliefs, attitudes, experiences, practices or health issues.

Evaluation — the process of describing the progress or results of a program, intervention, or policy. Evaluation illustrates what and how much was done, the effectiveness and the impact. The evaluation process can help to define measurable program objectives, reduce uncertainties, improve the effectiveness, and inform decisions about activity direction and duration. See pages 8 and Appendix E.

5-Year vision — describes the future conditions envisioned as necessary to reducing the impact of diabetes within 5 years. Each of the five topic areas of the *Minnesota Diabetes Plan 2010* is preceded by a 5-year vision. Work groups convened for each of the topic areas developed their 5-year vision by consensus.

Gestational diabetes — develops in 2-5 percent of all pregnancies but usually disappears when pregnancy is over. Women who have had gestational diabetes are at increased risk for developing type 2 diabetes later in life. See page 2.

Goal — a general course of action for the next 2-3 years. Each of the five topic areas of the *Minnesota Diabetes Plan 2010* has a set of goals which are further described by specific recommendations for action, and examples of activities that could help achieve the goal.

Guidelines — clinical practice recommendations for managing or preventing diseases. Guidelines are usually based on scientific evidence or expert opinion. Guidelines covering various elements of diabetes prevention and care are produced by a number of organizations for a variety of care givers (including people with diabetes). See http://www.guidelines.gov/ for an extensive listing.

Health promotion — the process of enabling people to change their lifestyle toward a state of optimal health (i.e. balanced physical, emotional, social, spiritual, and intellectual health). Lifestyle change can best be promoted through a combination of activities to enhance awareness, change behavior and create environments that support good health practices.

Health systems — organizations that contribute to diabetes services and programs or that directly impact diabetes care through administrative, financial, regulatory or geographic relationships. A few examples include health plans and insurers, health-related government programs, medical groups and clinics, hospitals, and local public health.

Insulin —an essential hormone that converts sugar, starches and other carbohydrates into energy needed for daily life. Without insulin, sugars to build up in the blood, causing serious, life threatening complications and eventually death. Diabetes is characterized by the inability to produce or properly use insulin. See page 2.

Insurance —see Covered Services/Coverage and Self-insured Plan

Lay health workers — individuals without formal medical training who serve as a bridge between community members and medical or social services. Related terms and roles are community health advocates, lay health educators, community health representatives, peer health promoters, community health outreach workers, peer counselors, and promotores de salud.

Medicaid (Medical Assistance) — a joint federal/state-funded program providing health care coverage for over 400,000 low-income families, children, pregnant women, seniors (65 or older) and people with disabilities in Minnesota. See http://www.dhs.state.mn.us/.

Medicare — the federal health insurance program for people aged 65 or older, people with disabilities, and people with end-stage renal disease (ESRD). Medicare beneficiaries receive coverage for inpatient stays, home care, outpatient visits, diabetes education, some diabetes supplies and equipment, but not prescription drugs (unless Medicare coverage is provided through a managed care organization). See http://www.medicare.gov/.

Minnesota Diabetes Program (MDP) — a publicly-funded, public health program within the Minnesota Department of Health dedicated to reducing the impact of diabetes. The MDP works to achieve population-wide impact by collecting and publicizing state diabetes data, fostering collaborative action and partnerships, translating research into practice, and promoting effective diabetes improvement strategies. See page 4.

Minnesota Diabetes Steering Committee (MDSC) — an advisory group comprised of experts in diabetes, representing professional and voluntary organizations, health care delivery systems, and people with diabetes. The Committee's mission is to oversee implementation of the *Minnesota Diabetes Plan 2010*; facilitate communication, sharing and partnership building; and guide Minnesota Diabetes Program activities. See page 4.

Obese / Obesity — the condition of having a high body weight (BMI of 30 or more), which creates a significant risk for disease or its complications. See **Body Mass Index**.

Overweight — the condition of having a higher than recommended body weight (BMI of 25 to 29.9), which increases the risk of disease or its complications. See **Body Mass Index**.

Partners — organizations that share a common goal and work together to achieve it. A few examples of organizations collaborating to address diabetes are health plans, care delivery systems, community or neighborhood organizations, schools, faith communities, advocacy groups, government agencies, the media, businesses, and health care purchasers.

Patient empowerment — the process of assisting people in being actively involved in their own diabetes care. A variety of "empowerment" methods are available, such as ongoing education, self-care goal setting, incentives, counseling, involvement by friends and family, referrals to special programs (e.g. weight loss, exercise, smoking cessation), interactive communication with the health care team, and tailored resources (e.g. translated materials, transportation).

Population-based (health) — the interrelated aspects of health and illness for specific groups of people. Populations may be defined by social or demographic factors; geography; health practices, risks and outcomes; or other elements. Aspects of health and illness include disease prevalence and incidence, related morbidities, mortality, risk factors and health behaviors.

Populations at risk —people with shared characteristics (the population) who are at higher risk for *developing diabetes* (e.g. people who are older, have a family history of diabetes, belong to certain racial/ethnic groups, are overweight or obese, are physically inactive or have a poor diet) or are at higher risk of *developing complications* of diabetes (e.g. those lacking access to preventive care; have uncontrolled blood sugar, blood lipid or blood pressure levels; or who practice unhealthy lifestyles).

Pre-diabetes — a condition where blood glucose levels are higher than normal but are not yet high enough to be diagnosed as having type 2 diabetes. Most people with pre-diabetes develop type 2 diabetes within 10 years. Currently, pre-diabetes is defined as impaired glucose tolerance (IGT) or impaired fasting glucose (IFG). See page 2.

Preventive care/Prevention — health care that stresses behavior, regular testing and screening, and other services to prevent diabetes and its complications. Preventive care for diabetes includes healthy exercise and diet, regular testing and early detection of complications, smoking cessation, frequent self-monitoring of blood glucose, etc. Prevention of type 2 diabetes includes screening for prediabetes, regular exercise and weight management.

Quality improvement (QI) — an organized approach to improving work processes to meet or exceed standards or expectations. Applied to diabetes care, QI can be used to improve processes such as treatment, education, follow-up and support to meet diabetes patient needs and guideline recommendations.

Risk behaviors — an individual's lifestyle choices (such as poor nutrition, physical inactivity, and inaction to control blood glucose, blood lipid and blood pressure levels) that increase their risk of diabetes or its complications.

Risk factors — characteristics of individuals that increase the probability that they will experience disease or death compared to the rest of the population. Risk factors for *developing diabetes* include genetics, environmental exposures, and socio-cultural living conditions. Risk factors for *complications* of diabetes include the same factors as above and more importantly, uncontrolled blood glucose, blood lipid or blood pressure levels.

Self-care / **Self-management** — activities undertaken by an individual to control and monitor their diabetes outside of the clinical setting. More than 90 percent of diabetes care is self-care. Self care can include monitoring blood glucose levels, following a treatment plan, eating healthfully, exercising, losing weight, checking for foot ulcers, attending classes and support groups, and scheduling regular clinical examinations and testing.

Self-management education — instruction about nutrition, exercise, medications, blood glucose monitoring, and emotional adjustment to help people control their diabetes and make healthy lifestyle choices.

Self-insured plan — a program for providing group health insurance with benefits financed entirely by the policyholder (typically an employer), in place of purchasing coverage from commercial insurance carriers. Self-insured plans are not subject to legislation mandating coverage levels and are not regulated for quality and financial stability, as are some commercial insurers (such as health maintenance organizations).

Social marketing — a strategy that uses traditional business marketing techniques to improve health or advance a social good. The goal of social marketing is to get selected audiences to understand, accept and value new ideas, and to ultimately change their attitudes and take positive actions.

Stakeholders — people or organizations with a "stake" or investment in the outcome of a program, intervention or service. Stakeholders for the *Minnesota Diabetes Plan 2010* are diverse and include people with diabetes and their families, health professionals, community agencies, at-risk populations, researchers, the medical products industry, educators, care delivery systems, health plans and insurers, policy makers, employers, diabetes advocates, social services, government agencies, and many others.

Theme — the five broad subject areas that encompass the specific goals and recommendations of the *Minnesota Diabetes Plan 2010*. The themes for the *Plan* are Community Health Promotion, Health Care Delivery and Professional Issues, Diabetes Education and Support Systems, Financial and Resource Issues, and Diabetes Data Assessment and Communication.

Type 1 diabetes — a form of diabetes usually striking children and young adults. It develops when the body's immune system destroys the cells that make the insulin. People with type 1 diabetes require daily insulin treatment to survive. Risk factors include autoimmune, genetic, and environmental factors. An estimated 5-10 percent of all diagnosed cases of diabetes are type 1. See page 2.

Type 2 diabetes — results from the body failing to properly use insulin (usually insulin resistance combined with insulin deficiency). Type 2 diabetes is associated with older age, family history of diabetes, obesity, physical inactivity, prior history of gestational diabetes, pre-diabetes, and certain racial/ethnic groups. Approximately 90-95 percent of people with diabetes have type 2. See page 2.

APPENDIX C

The Minnesota Plan to Prevent Disability from Diabetes 1990-2000 Summary of Results

Background

In 1990, the Minnesota Diabetes Steering Committee and the Minnesota Diabetes Program (MDP) produced a ten-year plan for preventing diabetes-related disabilities for people in Minnesota with diabetes. The *Minnesota Plan to Prevent Disability from Diabetes (2000 Plan)* provided a blueprint for how individuals and organizations could collaboratively address the health and economic issues related to diabetes. Steering Committee member organizations, representing key diabetes experts and stakeholders in the state, provided leadership in implementing the *2000 Plan*. The MDP, the state's public health program for diabetes prevention and control, partnered with numerous organizations to initiate, coordinate and support implementation efforts. Over 400 copies of the 2000 Plan were distributed to interested organizations. Many organizations have contributed activities and resources to achieving the *2000 Plan's* objectives.

Plan Content

The *Minnesota Plan to Prevent Disability from Diabetes* addressed current issues identified by Minnesota's diabetes experts. Recommendations for action and strategies were identified and grouped under five topic areas, each with a specific objective:

- **Patterns of Care.** Objective: Improve patterns of care relating to preventing, delaying and treating the complications of diabetes. Included one recommendation for action and four suggested strategies.
- Consumer Education. Objective: Increase consumer self-care behaviors that prevent, delay or help an individual live with the complications of diabetes. Included two recommendations for action and seven suggested strategies.
- Professional Education. Objective: Identify primary care providers who care for persons with diabetes and
 ensure that they receive up-to-date information on preventing and treating complications of diabetes. Included
 one recommendation for action and six suggested strategies.
- Reimbursement. Objective: Expand coverage and increase awareness of third party payment for services and
 devices that prevent, delay and treat the complications of diabetes. Included two recommendations for action
 and seven suggested strategies.
- *Monitoring and Evaluation*. Objective: Develop a system to guide, monitor, and evaluate the implementation of the 2000 Plan. Included two recommendations for action and five suggested strategies.

Plan Accomplishments 1990-2000

The *Minnesota Plan to Prevent Disability from Diabetes* stimulated diverse activities and numerous accomplishments. This section briefly describes three examples of progress made in each of the five topic areas. Many of the activities fostered by the *2000 Plan* continue today.

Examples of Progress from the 2010 Plan

Patterns of Care

- The Institute for Clinical Systems Improvement led a collaborative group to develop local consensus guidelines for type 2 diabetes. The guidelines have been regularly updated and continue to be adopted by a growing number of health plans and medical groups in the state.
- An MDP-led quality improvement demonstration in 10 primary care clinics resulted in substantial improvements in diabetes preventive services at those sites, and led to the creation of a manual for diabetes care improvement, the *Diabetes and Quality Improvement: A Guide for Primary Care*. This manual has been used by more than 150 organizations and individuals, including 28 clinics, 3 health plans, 2 communities, and 2 long-term care facilities in Minnesota.
- The Minneapolis/St. Paul Diabetes Educators collaboratively developed *Guidelines for Diabetes Care in Long-Term Care Facilities*, which were distributed to all 450 nursing homes in the state. These nationally recognized guidelines continue to be in demand, and are now in their 4th edition.

Consumer Education

- The MDP collaborated with the University of Minnesota, the Minneapolis American Indian Center, and Twin City schools to develop WOLF Work Out Low Fat, a program designed to reduce risk factors for type 2 diabetes in American Indian youth. The eight-week, curricula for grades one through four emphasize American Indian traditions to promote physical activity and health eating. WOLF was tested in urban schools, and later revised by the American Indian Diabetes Prevention Advisory Task Force, representing all 11 Minnesota tribes, for use in tribal schools. Since 1993, WOLF has been implemented in 10 urban, rural, and tribal schools throughout Minnesota and Wisconsin, reaching 2,132 children and their families.
- The MDP convened an expert group to develop the Diabetes Education Resource Kit containing educational materials for health professionals to use with their diabetes patients. One hundred fifty kits were distributed across the state to public health nurses, educators and physicians.
- To increase consumer awareness about preventing diabetes complications, health plans, diabetes education centers, and care delivery sites distributed information, appointment reminders, and wallet cards to people with diabetes. A growing number of organizations are using the National Diabetes Education Program campaigns, materials and messages.

Professional Education

- The MDP and the American Diabetes Association-Minnesota Affiliate initiated and cosponsored an annual educational event for health professionals serving people with diabetes in communities of color. The event, now called the Changing Face of Diabetes (CFD), was launched in 1995 to improve cultural competence in diabetes care. The number of participants has grown with each successive event. A key to the success of the CFD is the support of over 25 partners and co-sponsors, including the U.S. Midwest Regional Office of Minority and Multicultural Health.
- In 1994, the MDP convened the Diabetes Control and Complications Trial (DCCT) Work Group to help translate the DCCT and other research findings for clinical practice. The group developed a resource guide for primary care providers with recommendations, examples and tools. The guide was incorporated into the MDP's quality improvement manual for primary care providers.
- Diabetes care guidelines, treatment guides, and quality improvement manuals were distributed to health professionals statewide throughout the ten-year period by various organizations. A variety of diabetes educational forums and programs for health professionals were also offered in the period.

Reimbursement

- In 1992, researchers reviewed local reimbursement policies and discovered that coverage for diabetes services varied greatly. These findings helped fuel legislative action to mandate coverage.
- The American Diabetes Association-Minnesota Affiliate led a collaborative effort to expand diabetes coverage. The group first created a consumer checklist, *A Guide to Getting the Best Coverage*, and distributed 20,000 copies. In 1994, the group helped pass legislation mandating coverage of diabetes supplies and equipment. In 1997, they expanded the law to include coverage for diabetes education. The collaborative process used in Minnesota served as a model for diabetes legislation in other states.
- A coalition of local medical, professional and voluntary organizations worked with national diabetes organizations to maintain and improve Medicare and Medicaid coverage of diabetes services, supplies and equipment, and self-management education.

Monitoring and Evaluation

- To address the need for a statewide advisory group for diabetes surveillance, the Minnesota Diabetes Steering Committee formed the Surveillance and Data Review (SDR) Subcommittee in 1994. The SDR has since contributed to the annual fact sheet, helped analyze and interpret surveillance data, developed public health goals for diabetes, and provided a forum for discussing current research.
- The MDP convened a work group to examine cardiovascular disease (CVD) and diabetes in Minnesota. Because certain populations are at higher risk for CVD, the work group conducted focus groups with individuals from four ethnic communities. The resulting report, *Voices from the Community*, summarized participant recommendations for delivering culturally appropriate diabetes care and education. The report served as a foundation for many efforts to address cultural sensitivity and health disparities.

APPENDIX D

How the 2010 Plan Was Developed

The Minnesota Diabetes Plan for 2010 was developed through a series of meetings that began in early 2001. The process consisted of six phases (see Figure 1, p.6). This section details the development process and outlines future steps.

Phase 1: Consensus On Desired Outcomes and Process Design

In May of 2001, the Minnesota Diabetes Steering Committee (MDSC) members met to reach consensus on the outcomes they were seeking from the plan development process. In addition, they reached consensus on a preliminary design for the plan development process that would involve stakeholders from both the grassroots (i.e., neighborhoods, towns, small cities) of the Minnesota diabetes community and diabetes experts.

The 5-Year Vision for the 2010 Plan

MDSC members acknowledged the challenge of creating a 10-year plan for a rapidly changing environment. Breakthroughs in research and the changing economic and health care landscape could dramatically influence issues surrounding diabetes, rapidly making a 10-year plan obsolete. Consequently, the MDSC decided to create a vision and goals for 5 years, with provisions for a mid-point renewal to update the 2010 Plan (see below for details on the Plan renewal process).

Phase 2: Consensus on the Current Conditions

A diverse group of Minnesota diabetes stakeholders generated consensus on the current conditions in terms of strengths, weaknesses, opportunities, threats, and environmental issues. This took the shape of a series of meetings held in the Twin Cities, Moorhead, Bemidji, Grand Rapids and Mankato areas involving fourteen different stakeholder groups. The groups included people with diabetes, health care and social service professionals, researchers, industry representatives, health systems, health policy representatives, and the MDSC.

Phase 3: Consensus on the Themes and Cross-Cutting Issues

The MDSC organized the results into major topics for the *Plan*. Five themes were identified and work groups further developed the content for each of the five areas.

The themes addressed by the five work groups were:

- 1. **Community Health Promotion** ways that Minnesota communities can help promote healthier lifestyles and the reduce risk factors for diabetes and its complications.
- 2. **Health Care Delivery and Professional Issues** diabetes care delivery improvement, workforce development, access to services, patient empowerment and policy change advocacy.
- 3. **Diabetes Education and Support Systems** strategies to build social support and improve access to diabetes education and self-care resources.
- 4. **Financial and Resource Issues** the economic issues faced by people with diabetes and the communities and health care systems serving them.
- 5. **Diabetes Data Assessment and Communication** collaboration and advocacy for monitoring diabetes in Minnesota or evaluating diabetes strategies, programs and policies; and effectively communicating diabetes data and results to people in Minnesota.

Phase 4: Consensus on the 5-Year Vision and Barriers for Each Theme The 5-Year Vision

Theme-specific work groups reached consensus on what they wanted diabetes in Minnesota to look like in five years, and the current barriers that were blocking the path to that vision.

Phase 5: Consensus on the 2-3 Year Goals for Each Theme

Theme-specific work groups met again and reached agreement on goals that would span 2-3 years. Following this, they proposed activities and examples for each goal.

Phase 6: Refinement and Dissemination of the 2010 Plan

The MDSC refined and edited the content and format of the Plan and developed a marketing plan to guide the Plan's release in October 2003.

Additional Steps

Implementing the Plan

Organizations, partnerships and individuals in the Minnesota diabetes community have an opportunity register their support of the *Plan*. Registered participants will take on specific components of the *Plan* and implement activities relating to the goals. Registrants will provide feedback, share their progress, strategies, challenges, and lessons learned. Registration will also help participants identify potential partners, find additional resources, coordinate their activities, and network with other supporters of the *Plan*, and will contribute to a larger picture of the collective progress in achieving the goals.

Renewing the Plan

The MDSC will facilitate a mid-point renewal of the *Plan* to reflect current research and conditions in Minnesota. The renewal process will involve reconvening the five theme-specific work groups to update the vision and goals.

Evaluating the Plan

The MDSC will continuously monitor activities and progress through input from registered *Plan* participants. Monitoring will help guide marketing and promotional activities to fill activity gaps or lags, and will contribute information to the renewal process. An Evaluation Plan outlining the measures of the *Plan*'s success will be completed by October 2003.

APPENDIX E

Components of Effective Program Evaluation

The Framework for Program Evaluation in Public Health (http://www.cdc.gov/eval/index.htm) developed by the CDC provides a structure for planning and conducting an evaluation of your program or intervention. The six steps in this framework are summarized below.

- 1. Engage Stakeholders: It is important to identify and engage the stakeholders in your program to ensure that all partners are collectively involved in developing and implementing your program and its evaluation. Three important stakeholder groups to consider are those carrying out the program, those affected by the program (i.e. the target audience), and the main users of the evaluation. Some possible questions to answer for such an assessment include: Who are all the partners? What are their roles and responsibilities? What and how much expertise and resources do they bring to the program?
- **2. Describe the Program:** What is the program? What are its specific objectives? How do these objectives move toward achieving the Minnesota Plan goals? What strategies are being used? How is the program supposed to work? These are important issues to address when designing your program evaluation. The program description includes specific information on program needs, anticipated outcomes, specific activities, necessary resources, the maturity of the program (i.e., is it a new and untested program? Is it a program that still needs revisions or fine-tuning? Is it a program that has been implemented long and well enough to begin assessing its effects, both intended and unintended?), and the overall context of the program.
- **3. Focus the Evaluation Design:** The next step is to zero in on the evaluation. Keep in mind that not all stakeholder questions can be answered. Critical items to consider are the purpose of the evaluation, its users and uses, evaluation questions and methods, and the agreements that summarize the roles, responsibilities, budgets, and deliverables for those involved in the evaluation.
- **4. Gather Credible Evidence:** What are the indicators or measures being used to evaluate the program? How are they defined? What are the data sources for the evaluation (i.e. interviews, surveys, medical records, media reports, etc.)? What is the quality and quantity of the data? How is the data collected?
- **5. Justify Conclusions:** The evaluation conclusions are justified when they are tied to the data collected and interpreted based on a standard set of values or criteria initially established by the stakeholders. The four basic steps to justify conclusions are, 1) analysis and synthesis of the findings, 2) interpretation of the findings to determine what they mean, 3) judgment to determine the value of the findings based on selected standard criteria, and 4) actionable recommendations based on the evaluation results and the organizational context in which decisions are made.
- **6. Ensure Use and Share Lessons Learned:** As an integral part of the evaluation process consider how the conclusions will be used to continue the program, improve the program, end the program, inform other programs, and develop new programs. Activities to promote the use of the findings should be developed as part of planning the evaluation. Such activities may include continuous feedback to stakeholders, follow-up meetings with intended users, and dissemination of the lessons learned to those who may use the results to inform their programs.

Standards for Effective Evaluation

The following standards ensure a balanced evaluation that is accurate, feasible, useful, and ethical. The standards should be applied throughout the evaluation, according to where a program is within the six-step framework.

- **1. Utility Standards:** These standards ensure that information needs of evaluation users are satisfied. Who will be impacted by the evaluation? How much and what kind of information is being collected? What value do we place on the findings? How clear and timely are the evaluation reports?
- **2. Feasibility Standards:** These standards address whether the evaluation is viable and pragmatic. Is the proposed evaluation practical given the technical and logistical aspects? Are the different stakeholder interests taken into account and addressed? Are the available resources effectively and efficiently used to produce valuable findings?
- **3. Propriety Standards:** Is your evaluation ethical? These standards ensure that your evaluation is conducted with regard to the rights and interests of those involved in and affected by the program.
- **4. Accuracy Standards:** These standards guide your evaluation so that the findings are correct. What is the program and it's context? What are the purpose and methods of the evaluation? Are systematic procedures used to gather valid and reliable information? Are appropriate analysis performed? Are the reports objective? Are the conclusions justifiable?

A practical challenge you are likely to face is determining appropriate outcome measures for your program. These will include measures to assess whether you are doing a good job of implementing the program, whether the program is reaching its intended audience, and whether the program is achieving its intended short-term, intermediate or long-term outcomes. Most programs are designed to improve awareness, knowledge, behaviors, receipt of recommended care, or physiologic outcomes such as improvements in glucose, lipid or blood pressure levels. Practical examples of measures for different types of diabetes programs can be found in *Diabetes Strategies for Public Health* (http://www.health.state.mn.us/diabetes/pdf/strategies.pdf).

When you have developed an evaluation plan for your program, share it with other registered supporters of the *Plan*. This will help all of us to assess our collective progress towards achieving the *Minnesota Diabetes Plan 2010* goals. For more information on how to register or choose a goal to address, refer to the section on How to Get Involved (p. 7).

Additional Program Evaluation Resources

- 1. The Program Evaluation section of the Minnesota Department of Health's *Community Health Services Planning Manual* is a good introduction to evaluation planning. See http://www.health.state.mn.us/divs/chs/guidelines.html
- 2. The University of Kansas has developed a user-friendly and practical *Community Tool Box: Bringing Solutions to Light*. http://ctb.lsi.ukans.edu

APPENDIX F

Resource List

The following list of resources may be helpful in implementing *Minnesota Diabetes Plan 2010* recommendations. The list is categorized by the five themes of the *Plan*, and includes journal publications, classic studies, websites, instructional resources, public health goals, statistics, materials, guidelines, recommendations, and strategies.

	Community Health Promotion	Health Care Delivery and Professional Issues	Diabetes Education and Support Systems	Financial and Resource Issues	Diabetes Assessment and Communication
Acton K, Rios Burrows N, Moore K, Querec L, Geiss S, Engelgau M. (2002). Trends in Diabetes Prevalence Among American Indian and Alaska Native Children, Adolescents, and Young Adults. <i>American Journal of Public Health, Vol.</i> 92 (9), 1485-1490.	X		Х		Х
Agency for Healthcare Research and Quality, American Medical Association, American Association of Health Plans. <i>National Guideline Clearinghouse</i> [website]. Searchable database of over 1,000 clinical practice guidelines, many available in full text. http://www.guideline.gov/	X	X	X		
American Association of Diabetes Educators [website]. Includes education products, a core CDE curriculum, professional CME programs, searchable research database, and "Find a Diabetes Educator" listing. http://www.aadenet.org/		Х	X		X
American Diabetes Association [website]. Offers information about diabetes for the general public, people with diabetes, health professionals, policy makers and advocates. Includes a risk test, basic diabetes information, care guidelines, research and legislative updates, journals, local events and national programs. http://www.diabetes.org/	Х	Х	Х	Х	X
American Diabetes Association. (2003). Economic Costs of Diabetes in the United States in 2002. <i>Diabetes Care, Vol. 26 (3)</i> , 917-932.				Х	Х
American Dietetic Association [website]. Promotes optimal nutrition through publications and diet and nutrition resources for consumers and professionals. http://www.eatright.org/	Х	Х	Х		
Anderson BJ, Rubin RR, Eds. (2002). Practical Psychology for Diabetes Clinicians: How to Deal with Key Behavioral Issues Faced by Patients and Health Care Teams, 2nd edition. Alexandria, VA: American Diabetes Association. http://store.diabetes.org/		Х	Х		
Association of State and Territorial Directors of Health Promotion and Public Health Education, Centers for Disease Control and Prevention. (2001). <i>Policy and Environmental Change: New Directions for Public Health</i> . Santa Cruz, CA: ToucanEd. http://www.toucaned.com/	X				

	Community Health Promotion	Health Care Delivery and Professional Issues	Diabetes Education and Support Systems	Financial and Resource Issues	Diabetes Assessment and Communication
Beckles GLA, Thompson-Reid PE, Eds. (2001). Diabetes and Women's Health Across the Life Stages: A Public Health Perspective. Atlanta, GA: CDC. Monograph with facts and discussion on the issues that make diabetes a serious women's health concern. http://www.cdc.gov/diabetes/pubs/pdf/women.pdf	Х	Х	Х		Х
Bertera EM. (2003). Psychosocial Factors and Ethnic Disparities in Diabetes Diagnosis and Treatment among Older Adults. <i>Health and Social Work, Vol. 28</i> (1), 33-42.		Х	Х		
Blue Cross and Blue Shield of Minnesota Foundation. (2003). Critical Links: Study Findings and Forum Highlights on the Use of Community Health Workers and Interpreters in Minnesota [Report]. Eagan, MN: Blue Cross Foundation. http://www.bluecrossmn.com/foundation/pdfdocs/C381%20CHWFullRprt(503).pdf	X	X	X		
Bogden JF, Vega-Matos CA. (2000). Fit, Healthy, and Ready to Learn, A School Health Policy Guide - Part 1: Physical Activity, Healthy Eating, and Tobacco-Use Prevention. Alexandria, VA: National Association of State Boards of Education and the CDC. http://www.nasbe.org/	X				
Boyle JP, Honeycutt AA, Narayan KM, Hoerger TJ, Geiss LS, et al. (2001). Projection of Diabetes Burden through 2050: Impact of Changing Demography and Disease Prevalence in the US. <i>Diabetes Care, Vol. 24 (11)</i> , 1936-1940.	X	Х		Х	Х
Brach C, Fraser I. (2002). Reducing Disparities through Culturally Competent Health Care: An Analysis of the Business Case. <i>Quality Management in Health Care, Vol. 10 (4)</i> , 15-28.		X		Х	
Bureau of Primary Health Care. Health Disparities Collaboratives - Diabetes [website]. A national program to improve the health outcomes for all medically underserved people with diabetes, offering professional tools, a patient management database, quality improvement resources, successful strategies and patient materials. http://www.healthdisparities.net/		X	X	X	
Carlisle DM, Gardner JE, Liu H. (1998). The Entry of Underrepresented Minority Students into US Medical Schools: An Evaluation of Recent Trends. <i>American Journal of Public Health, Vol. 88</i> (9), 1314-1318.		X			
Cauffman JG, Forsyth RA, Clark VA, Foster JP, Martin KJ, et al. Randomized controlled trials of continuing medical education: what makes them most effective? [Review]. <i>Journal of Continuing Education in the Health Professions, Vol.</i> 22 (4), 214-221.		X			
Center for the Advancement of Collaborative Strategies in Health [website]. Conducts research studies and policy analyses to help partnerships, funders, and policy makers in collaboratively solving complex health problems. Offers practical tools, training programs and an online "Partnership Self-Assessment Tool." http://www.cacsh.org/	Х	Х		Х	
Center for Studying Health System Change: a Nonpartisan Policy Research Organization [website]. Studies and reports on trends in the health care system and their implications to inform policy makers and contribute to better health policy. http://www.hschange.com/		X		X	

	Community Health Promotion	Health Care Delivery and Professional Issues	Diabetes Education and Support Systems	Financial and Resource Issues	Diabetes Assessment and Communication
Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance Survey [website]. Data on diabetes prevalence and risk factors by state, year, gender, age, race, income and education available via interactive web queries. http://www.cdc.gov/nccdphp/brfss/	X	Х			Х
Centers for Disease Control and Prevention. (2001). CDCynergy 2001 Diabetes Edition: Your Guide to Effective Health Communications and Planning, version 1.0 [Interactive computer software]. http://www.cdc.gov/cdcynergy/	X				
Centers for Disease Control and Prevention. Community Health Workers/ Promotores de Salud: Critical Connections in Communities. [Position Statement]. http://www.cdc.gov/diabetes/projects/pdfs/comm.pdf	X	Х	Х		
Centers for Disease Control and Prevention. <i>Diabetes Public Health Resource</i> [website]. Includes publications, news and information for professionals and the public, statistics, trends, and other diabetes-related information. http://www.cdc.gov/diabetes/	X	X	X	X	X
Centers for Disease Control and Prevention. (1999). <i>The Economics of Diabetes Mellitus: An Annotated Bibliography</i> . Atlanta, Georgia: CDC. http://www.cdc.gov/diabetes				X	X
Centers for Disease Control and Prevention. (1999). Framework for Program Evaluation in Public Health. <i>Morbidity and Mortality Weekly Report, Vol. 48</i> (<i>No.RR-11</i>): 1-40. http://www.cdc.gov/eval/index.htm or http://www.cdc.gov/mmwr/preview/mmwrhtml/rr4811a1.htm	X	X	X	X	X
Centers for Disease Control and Prevention. (1997). Guidelines for School and Community Programs Promote Lifelong Physical Activity Among Young People. Morbidity and Mortality Weekly Report, Vol. 46 (RR-6), 1-36. http://www.cdc.gov/mmwr/preview/mmwrhtml/00046823.htm	X				
Centers for Disease Control and Prevention. (1996). Guidelines for School Health Programs to Promote Lifelong Healthy Eating. <i>Morbidity and Mortality Weekly Report, Vol. 45 (RR-9),</i> 1-41. http://www.cdc.gov/mmwr/preview/mmwrhtml/00042446.htm	X				
Centers for Disease Control and Prevention. (2003). Promising Practices in Chronic Disease Prevention and Control: A Public Health Framework for Action. Atlanta, GA: CDC. This book is a compilation of effective population-based chronic disease and risk reduction interventions. http://www.cdc.gov/nccdphp/promising_practices/pdfs/Promising_Practices.pdf	Х	Х	Х		X
Centers for Disease Control and Prevention Diabetes Cost-effectiveness Group. (2002). Cost-effectiveness of Intensive Glycemic Control, Intensified Hypertension Control, and Serum Cholesterol Level Reduction for Type 2 Diabetes. <i>Journal of the American Medical Association, Vol. 287</i> , 2542-2551.		Х	Х	Х	
Centers for Medicaid and Medicare Services - CMS. (2002). The Power to Control Diabetes is in Your Hands - Health Care Practitioners Kit and Community Outreach Kit are designed to aid educating people with diabetes about glucose control and their Medicare benefits. http://cms.hhs.gov/partnerships/outreach/initiatives/diabetes.asp		Х	Х	Х	

	Community Health Promotion	Health Care Delivery and Professional Issues	Diabetes Education and Support Systems	Financial and Resource Issues	Diabetes Assessment and Communication
Chronic Disease Directors. (2001). School Business: Building Effective Strategies for Chronic Disease Prevention and Health Promotion in Schools [kit]. Provides information about coordinated school health programs, effective strategies, ways to strengthen partnerships and educate professionals, school health policies and guidelines. http://www.chronicdisease.org/	X				
The Combined Health Information Database - CHID [website]. Bibliographic database of health information, health education resources, health promotion materials and program descriptions not indexed elsewhere. http://www.chid.nih.gov/	X	Х	X		
Committee on Physical Activity for Older Adults of the Minnesota Council on Physical Activity and Sports, Minnesota Department of Health. (1999). <i>Physical Activity and the Older Adult: Resources for People Working with Older Adults</i> . St. Paul, MN: Minnesota Department of Health. http://www.health.state.mn.us/divs/fh/chp/Older/Text/Splash.htm	X	Х			
Delamater AM, Jacobson AM, Anderson B, Cox D, Fisher L, Lustman P, Rubin R, Wysocki T. Psychosocial Therapies Working Group. (2001). Psychosocial Therapies in Diabetes: Report of the Psychosocial Therapies Working Group [Review]. <i>Diabetes Care, Vol. 24</i> (7),1286-1292.		Х	Х		
Diabetes Control and Complications Trial (DCCT) Research Group. (1993). The Effect of Intensive Treatment of Diabetes on the Development and Progression of Long-Term Complications in Insulin-Dependent Diabetes Mellitus. <i>New England Journal of Medicine, Vol.</i> 329, 977-986.	X	Х	Х	Х	Х
Diabetes Prevention Program Research Group. (2003). Costs Associated with the Primary Prevention of Type 2 Diabetes Mellitus in the Diabetes Prevention Program. <i>Diabetes Care, Vol. 26 (1)</i> , 36-47.	Х			Х	Х
Diabetes Prevention Program Research Group. (2002). Reduction in the Incidence of Type 2 Diabetes with Lifestyle Intervention or Metformin. New England Journal of Medicine, Vol. 346, 393-403.	Х	Х	Х	Х	Х
Diabetes Today National Training Center (NTC). Provides training and technical assistance to facilitators implementing Diabetes Today in their community. Diabetes Today is a community mobilization model for interventions to reduce the impact of diabetes. http://www.diabetestodayntc.org/	X				
Eakin EG, Bull SS, Glasgow RE, Mason M. (2002). Reaching Those Most in Need: A Review of Diabetes Self-Management Interventions in Disadvantaged Populations [Review]. <i>Diabetes Metabolism Research Reviews, Vol. 18</i> (1), 26-35.		Х	Х		
Fagot-Campagna A, Pettitt DJ, Engelgau MM, Burrows NR, Geiss LS, et al. (2000). Type 2 Diabetes among North American Children and Adolescents: An Epidemiologic Review and a Public Health Perspective [Review]. <i>Journal of Pediatrics, Vol. 136</i> (5), 664-672.	Х	Х			Х

	Community Health Promotion	Health Care Delivery and Professional Issues	Diabetes Education and Support Systems	Financial and Resource Issues	Diabetes Assessment and Communication
Fleming B, Greenfield S, Engelgau M, Pogach L, Clauser S, et al. (2001). The Diabetes Quality Improvement Project: Moving Science into Health Policy to Gain an Edge on the Diabetes Epidemic [Review]. <i>Diabetes Care, Vol. 24 (10)</i> , 1815-1820		Х		Х	
Glasgow RE, Hiss RG, Anderson RM, Friedman NM, Hayward RA, et al. (2001). Report of the Health Care Delivery Work Group: Behavioral Research Related to the Establishment of a Chronic Disease Model for Diabetes Care. [Review]. <i>Diabetes Care, Vol. 24 (1)</i> , 124-130.		Х	X		
Gonder-Redenick LA, Cox DJ, Ritterband LM. (2002). Diabetes and behavioral medicine: the second decade. <i>Journal of Consulting and Clinical Psychology, Vol.</i> 70(3), 611-625		Х	Х	Х	
Guasaso C, Heuer LJ, Laurch C. (2002). Providing Health Care and Education to Migrant Farmworkers in Nurse-Managed Centers. <i>Nursing Education Perspectives, Vol.</i> 23 (4), 166-171.	X	Х	Х	X	
Harris MI. (2001). Racial and ethnic differences in health care access and health outcomes for adults with type 2 diabetes. <i>Diabetes Care, Vol. 24</i> (3), 454-459.		Х	Х		
Health Canada. <i>The Social Marketing Network</i> [website]. Offers social marketing resources for researchers, educators, health professionals, and the public. Includes strategies, case studies, research updates and partnership tips. http://www.hc-sc.gc.ca/hppb/socialmarketing	X	Х			
Henry J. Kaiser Family Foundation. (2002). <i>Trends and Indicators in the Changing Health Care Marketplace</i> . Chartbook examining key trends in the health care marketplace, data on health plan enrollment and benefits, and the implications of trends for consumers and the safety net. http://www.kff.org/content/2002/3161				Х	
Indian Health Services National Diabetes Program [website]. Includes regional information, educational resources, a diabetes education and care recognition manual, care improvement tools and a best practice model for type 2 in youth. http://www.ihs.gov/	Х	Х	X	Х	Х
Institute of Medicine. (2002). Care Without Coverage: Too Little Too Late. Washington, DC: National Academy Press. Report examining the consequences for people lacking health insurance on disease prevention, chronic illness, hospital care and health status. http://www.nap.edu/				Х	
Institute of Medicine. (2001). Crossing the Quality Chasm: A New Health System for the 21st Century. Washington, DC: National Academy Press. Report outlining current health care quality issues in the US, recommends strategies and provided examples of actions for improving care systems. http://www.nap.edu/		Х		Х	
Institute of Medicine. (2001). The Right Thing to Do, the Smart Thing to Do. Enhancing Diversity in the Health Professions. Washington, DC: National Academy Press. Symposium summary discussing the causes and potential solutions to the problem of continued under-representation of populations of color in the health professions. http://www.nap.edu/		X			

	Community Health Promotion	Health Care Delivery and Professional Issues	Diabetes Education and Support Systems	Financial and Resource Issues	Diabetes Assessment and Communication
Institute of Medicine. (2002). <i>Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care</i> . Washington, DC: National Academy Press. Book examining how disparities in treatment arise in health care systems, and offering recommendations for improvements. http://www.nap.edu/		X		Х	
Jackson RJ, Kochtitzky C. (2001). <i>Creating a Healthy Environment: The Impact of the Built Environment on Public Health.</i> Washington, DC: CDC and Sprawl Watch Clearinghouse. http://www.sprawlwatch.org/	Х				
Juvenile Diabetes Research Foundation International: Dedicated to Finding a Cure for type 1 diabetes and its complications [website]. http://www.jdrf.org	Х	Х	Х	Х	
Kahn EB, Ramsey LT, Brownson RC, Heath GW, Howze EH, et al. (2002). The Effectiveness of Interventions to Increase Physical Activity: A Systematic Review. <i>American Journal of Preventive Medicine, Vol.</i> 22 (4S), 73-107.	Х	Х			
Karter AJ, Ferrara A, Liu JY, Moffet HH, Ackerson LM, Selby JV. (2002). Ethnic Disparities in Diabetic Complications in an Insured Population. <i>Journal of the American Medical Association, Vol.</i> 287 (19), 2519-2527.		Х		Х	
Kennedy BP, Kawachi I, Glass R, Prothrow-Stith D. (1998). Income distribution, socioeconomic status, and self rated health in the United States: multilevel analysis. <i>British Medical Journal, Vol. 317 (7163)</i> , 917-921.				X	Х
Klonoff DC, Schwartz DM. (2000). An Economic Analysis of Interventions for Diabetes [Review]. <i>Diabetes Care Vol.</i> 23, 390-404.				Х	
Lahtela JT, Lamminen H. (2002). Telemedical Devices in Diabetes Management [Review]. <i>Annals of Medicine, Vol. 34 (4)</i> , 241-247.		Х			
Leibson CL, O'Brien PC, Atkinson E, Palumbo PJ, Melton LJ 3rd. (1997). Relative Contributions of Incidence and Survival to Increasing Prevalence of Adult-Onset Diabetes Mellitus: A Population-based Study. <i>American Journal of Epidemiology, Vol. 146 (1)</i> , 12-22.					X
Longlett SK, Phillips DM, Wesley RM. (2002). Prevalence of Community-Oriented Primary Care Knowledge, Training, and Practice. <i>Family Medicine, Vol. 34 (3)</i> , 183-189.	Х	Х			
Macaulay AC, Commanda LE, Freeman WL, Gibson N, et al for the North American Primary Care Research Group. (1999). Participatory Research Maximises Community and Lay Involvement. <i>British Medical Journal, Vol.</i> 319, 774-778.	Х	Х	Х	Х	
Migrant Clinicians Network [website]. Promoting the health of migrant farmworkers by providing resources for professional development to heath professionals on topics that include diabetes and cultural competency. http://www.migrantclinician.org/		Х	Х		
Minneapolis/St. Paul Diabetes Educators. (2002). <i>Diabetes Support Groups in Minnesota</i> . Listing of support groups in the state, including those tailored to specific populations. http://www.health.state.mn.us/diabetes/news/diabetescontacts.pdf			X		

	Community Health Promotion	Health Care Delivery and Professional Issues	Diabetes Education and Support Systems	Financial and Resource Issues	Diabetes Assessment and Communication
Minnesota Department of Health. (2002). Community Engagement. Provides resources to support the processes of assessing, planning, implementing, and evaluating solutions to health problems in any community. http://www.health.state.mn.us/communityeng/index.html	X				
Minnesota Department of Health. (2002). Community Health Services Planning Manual. Provides tips and tools useful to any group engaged in community health assessment, program planning and program evaluation. http://www.health.state.mn.us/divs/chs/guidelines.html	X				
Minnesota Department of Health. (1999). <i>Diabetes Public Health Improvement Goals for 2004</i> . In <i>Healthy Minnesotans</i> , Goal #12. St. Paul, MN: Minnesota Department of Health. http://www.health.state.mn.us/divs/chs/phg/goals.html	Х	X	Х		X
Minnesota Department of Health. (2002). <i>Diabetes Strategies for Public Health</i> . St. Paul, MN: Minnesota Department of Health. Offers examples of proven or promising strategies for reducing the impact of diabetes and achieving public health goals. http://www.health.state.mn.us/diabetes/pdf/strategies.pdf	X	Х	Х		
Minnesota Department of Health. (2001). <i>Minnesota Eliminating Health Disparities Initiative</i> . Initiative creating innovative community-based strategies to address racial/ethnic disparities in the health status of populations of color and American Indians in the state. http://www.health.state.mn.us/ommh/	X	Х	X		
Minnesota Department of Health. (2002). Populations of Color in Minnesota: Health Status Report Update Summary. Saint Paul, MN: Minnesota Department of Health. Report describes trends in various health indicators for populations of color and American Indians in the state. http://www.health.state.mn.us/ommh/healthstatus.pdf	X	X			Х
Minnesota Diabetes Program [website]. A Minnesota Department of Health program offering public health-based information about diabetes, including Diabetes in Minnesota statistics, care improvement tools, an annual conference for professionals, news and updates, and links to resources. http://www.health.state.mn.us/diabetes/	Х	Х	Х	Х	X
Minnesota Health Improvement Partnership Social Conditions and Health Action Team. (2001). A Call to Action: Advancing Health for All through Social and Economic Change. St. Paul, MN: Minnesota Department of Health. Report examining the impact that social and economic conditions have on health and recommending health-enhancing changes to these conditions. http://www.health.state.mn.us/divs/chs/mhip/action.pdf	X	X	X	X	
Mokdad A, Bowman B, Ford E, Vinicor F, Marks J, et al. (2001). The Continuing Epidemics of Obesity and Diabetes in the United States. <i>Journal of the American Medical Association, Vol. 286 (10)</i> , 1195-1200.	Х	Х		Х	Х
Mokdad AH, Ford ES, Bowman BA, Nelson DE, Engelgau MM, Vinicor F, Marks JS. (2000). Diabetes Trends in the US: 1990 –1998. <i>Diabetes Care, Vol.</i> 23 (9), 1278–1283.					X

	Community Health Promotion	Health Care Delivery and Professional Issues	Diabetes Education and Support Systems	Financial and Resource Issues	Diabetes Assessment and Communication
National Diabetes Education Program (NDEP). A national initiative offering resources to improve diabetes care and self-care practices, and to raise public awareness about diabetes. Offers multilingual materials for people with diabetes, and tools for communities and health professionals, including the "Diabetes Community Partnership Guide." http://www.ndep.nih.gov/	Х	Х	Х	Х	
National Institute of Diabetes and Digestive and Kidney Diseases. <i>National Diabetes Information Clearinghouse</i> [website]. Publications include diabetes fact sheets, educational materials, summaries of key research trials, and statistics. http://www.niddk.nih.gov/health/diabetes/ndic.htm	Х	Х	X	Х	X
Nestle M, Jacobson F. (2000). Halting the Obesity Epidemic: A Public Health Policy Approach. <i>Public Health Reports, Vol. 115</i> , 12-24.	X			Х	
New York State Department of Health, Juvenile Diabetes Foundation, American Diabetes Association. (1999). <i>Children with Diabetes: A Resource Guide for Schools</i> . New York, NY: New York State Department of Health. http://www.health.state.ny.us/	X				
Norris SL, Engelgau MM, Narayan KM. (2001). Effectiveness of Self-Management Training in Type 2 Diabetes: a Systematic Review of Randomized Controlled Trials [Review]. <i>Diabetes Care, Vol. 24</i> (3), 561-587.		Х	Х		
Norris SL, Nichols PJ, Caspersen CJ, Glasgow RE, Engelgau MM, Jack L, Isham G, Snyder SR, Carande-Kulis VG, Garfield S, Briss P, McCulloch D. (2002). The Effectiveness of Disease and Case Management for People with Diabetes: A Systematic Review. <i>American Journal of Preventive Medicine, Vol. 22 (4S)</i> , 15-38.		Х			
Norris SL, Nichols PJ, Caspersen CJ, Glasgow RE, Engelgau MM, Jack L, Snyder SR, Carande-Kulis VG, Isham G, Garfield S, Briss P, McCulloch D. (2002). Increasing Diabetes Self-Management Education in Community Settings: A Systematic Review. <i>American Journal of Preventive Medicine, Vol. 22 (4S)</i> , 39-66.		Х	X		
Pathman DE. (2000). State Scholarship, Loan Forgiveness, and Related Programs: the Unheralded Safety Net. <i>Journal of the American Medical Association, Vol. 284</i> , 2084-2092.		X			
Peterson K, Riedel J, Lynch W, Baase C, Hymel P. (2001) The effect of Disease Prevention and Health Promotion on Workplace Productivity: A Literature Review. <i>American Journal of Health Promotion, Vol. 15 (3)</i> , 167-190.	Х			Х	
President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry. (1998). <i>Quality First: Better Health Care for All Americans</i> . Rockville, MD: Agency for Healthcare Research and Quality. Report with recommendations and steps to instituting a national commitment to improving health care quality. http://www.hcqualitycommission.gov/	Х	Х			Х
The Providers Guide to Quality and Culture [website]. Offers resources and tools to providers working to deliver high quality, culturally competent health services. http://erc.msh.org/		Х			

	Community Health Promotion	Health Care Delivery and Professional Issues	Diabetes Education and Support Systems	Financial and Resource Issues	Diabetes Assessment and Communication
Public Health Service. (2001). The Surgeon General's Call To Action To Prevent and Decrease Overweight and Obesity. Rockville, MA: U.S. Department of Health and Human Services. Report outlining strategies that communities can use in helping to address overweight and obesity problems. http://www.surgeongeneral.gov/topics/obesity	Х	Х	Х		
Purnell LD, Paulanka BJ, Eds. (1998). <i>Transcultural Health Care: A Culturally Competent Approach</i> . Philadelphia, PA: FA Davis Publ.		Х			
Renders CM, Valk GD, Griffin SJ, Wagner EH, Eijk van JT, et al. (2001). Interventions to Improve the Management of Diabetes in Primary Care, Outpatient, and Community Settings: A Systematic Review. <i>Diabetes Care, Vol.</i> 24, 1821-1833.		Х			
Robert Wood Johnson Foundation, FACCT-Foundation for Accountability. (2002). <i>A Portrait of the Chronically III in America, 2001</i> . Princeton, NJ: Robert Wood Johnson Foundation. Report describing how well people are living with chronic illness, their self-care practices, the health services they receive, and the barriers they face. http://www.rwjf.org/publications/other.jsp	X	Х	X	X	X
Runy LA. (2002). The Health Care Workforce. State-by-State Numbers and Initiatives. <i>Hospital and Healthcare Network, Vol.</i> 76 (8), 41-46.		Х			
Task Force on Community Preventive Services. (2001). Increasing physical activity: A Report on Recommendations of the Task Force on Community Preventive Services. <i>Morbidity and Mortality Weekly Report Recommendations & Reports, Vol.50 (RR-18)</i> , 1-15. http://www.cdc.gov/mmwr/PDF/RR/RR5018.pdf	X	X	Х		
Task Force on Community Preventive Services. (2002). Recommendations for Healthcare System and Self-Management Education Interventions to Reduce Morbidity and Mortality from Diabetes. <i>American Journal of Preventive Medicine</i> , Vol. 22 (4S), 10-14. http://www.medicinedirect.com/journal/journal/sdid=6075		Х	Х		
Teutsch SM, Churchill RE, Eds. (2000). <i>Principles and Practice of Public Health Surveillance</i> , 2nd Ed. New York, NY: Oxford University Press. Premier text describing all elements of public health surveillance, including current issues. http://www.oup-usa.org/					X
Thomas RJ, Palumbo PJ, Melton LJ 3rd, Roger VL, Ransom J, et al. (2003). Trends in the Mortality Burden Associated with Diabetes Mellitus: A Population-Based Study in Rochester, Minnesota, 1970-1994. <i>Archives of Internal Medicine, Vol. 163 (4)</i> , 445-451.					X
United Kingdom Prospective Diabetes Study Group. (1998). Intensive blood-glucose control with sulphonylureas or insulin compared with conventional treatment and risk of complications in patients with type 2 diabetes (UKPDS 33). <i>The Lancet, Vol.</i> 352, 837-853.		Х			
United Kingdom Prospective Diabetes Study Group. (1998). Tight Blood Pressure Control and Risk of Macrovascular and Microvascular Complications in Type 2 Diabetes (UKPDS 38). <i>British Medical Journal, Vol. 317</i> , 703-713.		Х	Х		

	Community Health Promotion	Health Care Delivery and Professional Issues	Diabetes Education and Support Systems	Financial and Resource Issues	Diabetes Assessment and Communication
US Department of Health and Human Services. (2000). Healthy People 2010: Diabetes (Focus Area #5). Washington, DC: Department of Health and Human Services. Identifies diabetes-specific objectives for improving our nation's health. http://www.health.gov/healthypeople/Document/pdf/Volume1/05Diabetes.pdf	X	X	X	X	Х
US Department of Health and Human Services. (2000). Office of Minority Health National Standards on Culturally and Linguistically Appropriate Services (CLAS) in Health Care. Federal Register, Vol. 65 (247). 80865-80879. http://www.gpoaccess.gov/fr/index.html	X	X	X		
US Department of Health and Human Services. (1996). <i>Physical Activity and Health: A Report of the Surgeon General</i> . Atlanta,GA: CDC. Report describing the health benefits from physical activity programs that are achievable for most Americans. http://www.cdc.gov/nccdphp/sgr/sgr.htm	X	X	X		
US Department of Health and Human Services. (1999). <i>Promoting Physical Activity: A Guide to Community Action</i> . Champaign, IL: Human Kinetics. Stepby-step guide offering ideas, tips and examples for facilitating community-wide behavior change around physical activity. http://www.cdc.gov/nccdphp/dnpa/pahand.htm	Х				
US Departments of Health and Human Services and Agriculture. (2000). <i>Nutrition and Your Health: Dietary Guidelines for Americans</i> , 5th Edition. Home and Garden Bulletin No. 232. Washington, DC: USDA and USDHHS. http://web.health.gov/	Х	Х	Х		
University of Kansas. <i>The Community Toolbox: Bringing Solutions to Light</i> [website]. Offers guidelines, examples, checklists, training materials and other tools for community health leadership, strategic planning, community assessment, advocacy, grant writing, and evaluation. http://ctb.ku.edu/	X				
Wilkinson WC, Eddy N, MacFadden G, Burgess B. (2002). <i>Increasing Physical Activity through Community Design: A Guide for Public Health Practitioners.</i> Washington, DC: National Center for Bicycling and Walking. Guide designed for community leaders, local planners, transportation officials and citizens interested in developing healthier designs for their community. http://www.bikewalk.org/	Х				
Yeh G, Eisenber D, Davis R, Phillips R. (2002). Use of Complementary and Alternative Medicine Among Persons With Diabetes Mellitus: Results of a National Survey. <i>American Journal of Public Health, Vol. 92 (10)</i> , 1648-1652.		X	X		

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Upon request, this material can be made available in alternative formats such as Braille, large print, or audio tape.



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