Arkansas Diabetes State Plan

2009-2014

Welcome

Preface & Acknowledgment

January, 2010

Arkansas Department of Health

Keeping Your Hometown Healthy

Diabetes has emerged as one of the most prevalent, costly and widespread epidemics facing health care systems in the United States. In Arkansas, an estimated 240,000 children and adults have diabetes mellitus. Pre-diabetes adds another 539,000 Arkansans facing diabetes-like problems and a predictable future diagnosis. Those living with diabetes face potential premature death due to impaired physical and emotional well-being. Thousands more Arkansans are indirectly affected by this disease: families, caregivers, teachers and employers. Beyond the human costs, diabetes accounts for one out of every five health care dollars spent in the United States and billions of dollars in indirect costs incurred by employers, schools and communities -- a combined $174 billion in 2007 alone.

(The scientific literature tells of remarkable advances in diabetes treatment on medical and socio-psychological fronts.) States like Arkansas are devising strategic action plans to attack diabetes head on in a timely fashion. Over the course of six months, Arkansas health officials, providers, citizens and health researchers systematically produced a new five-year diabetes state plan for 2009-2014 and an annual action plan for 2009. In concert with other public health standards and the 2008 Arkansas Chronic Disease Forum recommendations, these plans offer a clear vision to improving the lives of Arkansans by focusing on public health and policy-related issues. We hope you will join us in the fight against diabetes.

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The primary purpose of the Arkansas State Diabetes Plan is to suggest strategic goals and strategies to improve the prevention and control of diabetes in the state of Arkansas over the next five years. Furthermore, this plan strives to educate the reader about the prevalence of diabetes, its burden upon Arkansans, the health-associated disparities and evidence-based prevention, detection and treatment methods. The Arkansas State Diabetes Plan is the product of the combined knowledge, commitment and collaboration of over 40 partners, representing both public and private health organizations. Khadijah Uqdah, former Diabetes Section Chief, provided the coordination and leadership for the Diabetes Advisory Council and the Diabetes Prevention and Control Section of the Arkansas Department of Health to facilitate this effort to craft the recommendations set forth in this plan. We therefore wish to acknowledge the contributors responsible for development of this plan. Without their input and guidance this plan would not have been possible.

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Mission

The mission of the Council is to reduce the economic, social, physical and psychological impact of diabetes in Arkansas by improving access to care and enhancing the quality of services by linking and maintaining effective network management relationships and implementing sound public health strategies.

Arkansas Diabetes Control Program,
Arkansas Department of Health
Diabetes Advisory Council - Bylaws, Pg. 1

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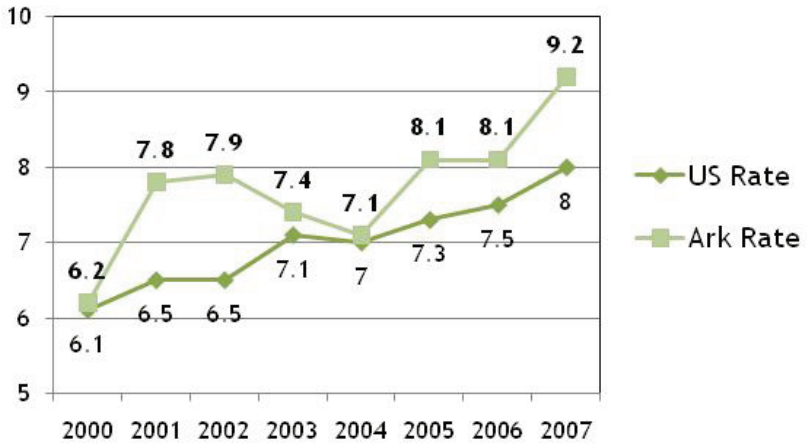
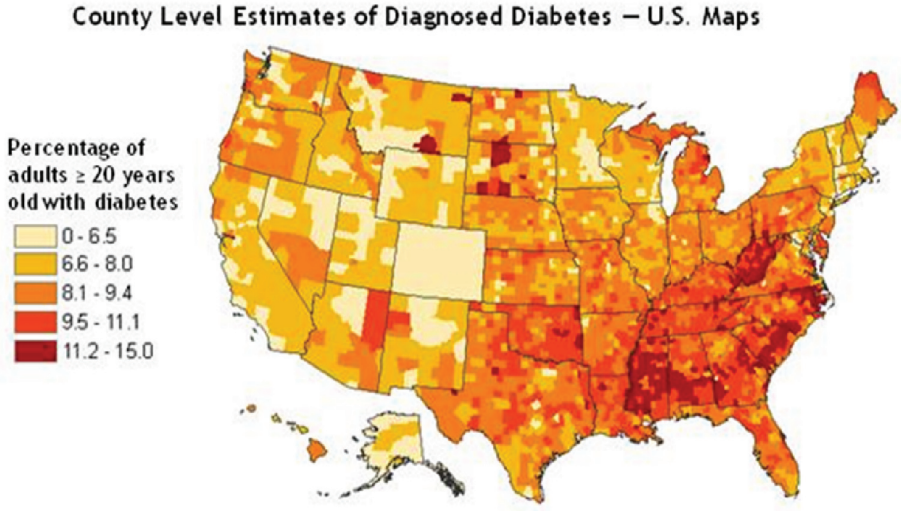
Diabetes

Diabetes has been declared a national public health crisis of epidemic proportions.



Source: CDC, Behavioral Risk Factor Surveillance System 2000-2007.



Source: Centers for Disease Control and Prevention: National Diabetes Surveillance System. Available online at: http://www.cdc.gov/diabetes/statistics/index.htm. Retrieved 2/23/2009

It is estimated that in 2008, 8 percent of Americans -- or 24 million adults and children -- currently have diabetes. This is an increase of almost 3 million in two years.[1-2] In addition, another 57 million Americans are estimated to have a condition known as pre-diabetes, which generally develops into type 2 diabetes if lifestyle factors are not addressed.[3] The Centers for Disease Control and Prevention (CDC) has estimated that these numbers will double by the year 2050 if we do not aggressively attack this problem.[2]

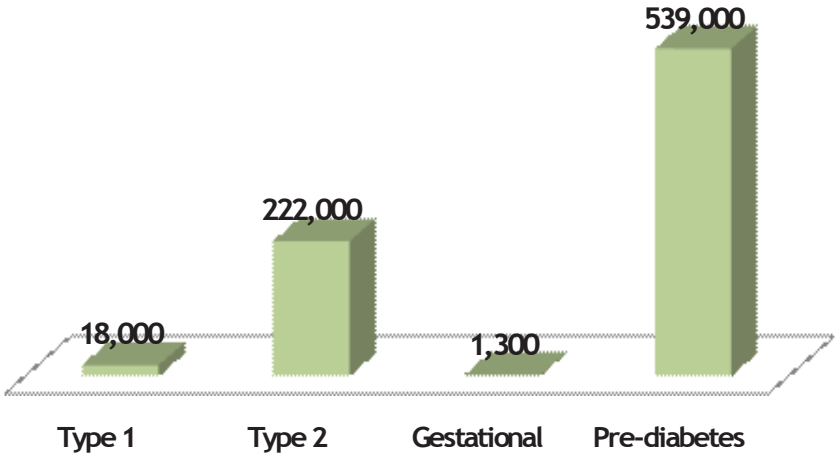
References are cited throughout this report. Refer to the complete list of references on pages 23-26.

Types of Diabetes

Diabetes mellitus refers to three separate forms of the disease linked by inadequate functioning and regulation of insulin and resulting in high blood glucose levels in the body. Although the three categories, type 1, type 2 and gestational diabetes, have unique characteristics, all are serious conditions and if left unchecked can cause harmful health complications.[3] The Arkansas Department of Health estimates that in 2005, 233,255 Arkansans were living with diabetes.[4]

Estimates of the current incidence in Arkansas for the various types of diabetes were calculated using current CDC (2008) projections for diabetes and the most current Census Bureau population figures for Arkansas.[3,5]

Type 1 diabetes is caused by the destruction of insulin-producing beta cells and usually requires life-long use of medication for treatment. It is most commonly diagnosed in children, although it can occur at any age. Type 1 diabetes accounts for about 5-10 percent of diabetes cases.[3] It is estimated that 18,000 Arkansans are living with type 1 diabetes.



1. Estimates calculated using figures from the Centers for Disease Control and Prevention (National Diabetes Surveillance System, 2008) and U.S. Census Bureau (2008).

Types of Diabetes - Continued

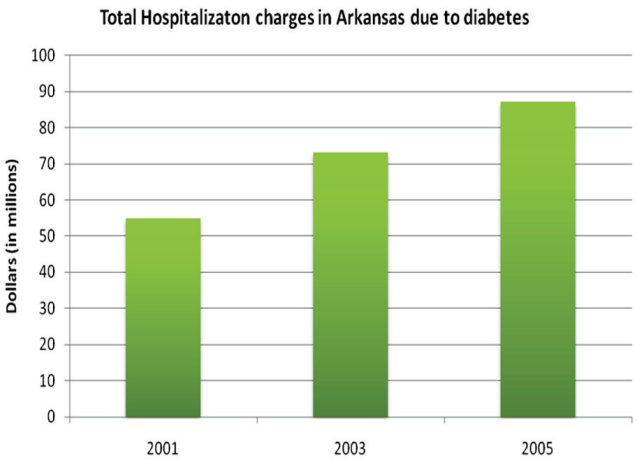
Type 2 diabetes, which accounts for 90-95 percent of diabetes cases, occurs when the body fails to properly utilize and produce insulin. Regular physical activity and proper nutrition play an integral role in the initial risk of developing type 2 diabetes, as well as in management and control of symptoms. Although type 2 diabetes was once referred to as "adult onset diabetes," there has been an alarming increase in the rate of diagnoses among children. In Arkansas there are about 222,000 people with type 2 diabetes.

Gestational diabetes, unlike type 1 and 2, is a form of diabetes that is not a chronic disease but a temporary disorder marked by glucose intolerance. It occurs in 2-5 percent of pregnancies.[3] Although gestational diabetes generally disappears after delivery, women who exhibit the condition have a 20-50 percent chance of developing type 2 diabetes in the next 5-10 years. Like type 2 diabetes, family history, minority racial heritage and obesity all increase the rate of occurrence.[3] About 1,300 Arkansas women are diagnosed during their pregnancies with gestational diabetes annually.

Pre-diabetes, a newly defined health condition, is not technically a disease. It occurs when a person has abnormally high blood glucose levels, but remains under the level required for an official diabetes diagnosis.[3] It is estimated that about 529,000 Arkansas residents are currently living with pre-diabetes. These individuals are at an increased risk for developing type 2 diabetes and other health complications such as heart disease and stroke.[6] Increased physical activity and dietary changes can prevent the onset of type 2 diabetes by reducing blood glucose levels.[7]

The Arkansas Burden of Disease

In 2008, 8.4 percent or 240,000 Arkansans had diabetes, a 29 percent increase over the past 10 years. Unfortunately, diabetes claims many lives and is the sixth leading cause of death in Arkansas and fourth among African Americans.[3] Another 529,000 Arkansans have pre-diabetes and face a diabetes diagnosis in the near future. Those with diabetes are at a higher risk for additional health problems, such as heart disease, kidney problems, blindness, amputations and dental issues.[6] Similarly, premature death occurs two to four times more often in individuals with diabetes than in individuals of comparable age without diabetes.[3] Since 2000, the prevalence of diabetes in Arkansas has increased by more than 29 percent.[4]



Seaton, D. (2007). Diabetes: The Burden in the Natural State 2007. Arkansas Diabetes Prevention and Control Section. Little Rock, Arkansas.

As the incidence of diabetes increases, so does the financial burden faced by individuals, families, health care organizations and businesses. Today one in five national dollars spent on health care goes to caring for people with diabetes.[2] Diabetes health care is costly for the individual, employers and insurance companies alike. According to the American Diabetes Association (ADA), people with diabetes, on average, have medical expenditures 2.3 times greater than those without diabetes. People with diabetes who manage their blood sugar cost employers $24 per month.[8] In comparison, those who do not control their blood sugar cost employers almost five times more at $115 per month.[8] Nationally, the cost of diabetes exceeded $174 billion in 2007.[8]

In Arkansas for 2006 alone, approximately $956 million was spent directly on diabetes care and $471 million on indirect costs like lost productivity.[9] In addition, Arkansas diabetes hospitalization costs increased an unprecedented 58 percent from 2001 to 2005.[4]

Disparities

"Of all forms of inequality, injustice in healthcare is the most shocking and the most inhumane."

Rev. Dr. Martin Luther King, Jr

Americans 20 years of age or older diagnosed with diabetes:

- **27% of Arkansas Marshallese**
- **23.1% of people 60 years of age & older**
- **14.7% of African Americans**
- **10.4% of Hispanics**
- **9.8% of Non-Hispanic Whites**

Source: CDC Diabetes Fact Sheet (2008). Estimate for Marshallese calculated from U.S. Census Bureau (2008) figures and rate of diabetes common for this ethnic group from Bauman et al. (2004).[11]

Age disparities exist on both a national and state level in diabetes prevalence as the risk of type 2 diabetes increases with age.

In America, about a quarter of people aged 60 and older currently have diabetes.[3] Alarming economic, racial and geographic disparities are also evident in the prevalence of diabetes.

Nationally, minorities are more likely to develop diabetes than are white, non-Hispanic Americans. While only about 6.6 percent of the white, non-Hispanic population have diabetes, 11.8 percent of African Americans and 10.4 percent of Hispanics have diabetes in America today.[3]

Such disparities must be addressed to curb the burden of this chronic disease in Arkansas.

"If states know which communities or areas have more people with diabetes, they can use that information to target their efforts or tailor them to meet the needs of specific communities."

Dr. Ann Albright, Director, CDC Division of Diabetes Translation

Disparities - Continued

The African American population in Arkansas has some of the most stark and well-documented racial health disparities related to diabetes. For example, African Americans have a 26 percent higher chance of being diagnosed with diabetes compared to white, non-Hispanics. Yet the diabetes mortality rate among African Americans is more than twice that of white, non-Hispanics with diabetes.[4] Furthermore, African Americans are more likely to experience serious diabetes complications, such as lower extremity amputation.[4] Not surprisingly, areas with the largest minority populations, like the Mississippi Delta region, have the most pronounced geographical health disparities. [10]

The Hispanic and Marshallese populations, both rapidly increasing, also have higher rates of diabetes. It is estimated that 27 percent of Marshallese adults over 30 years old have diabetes.[11]

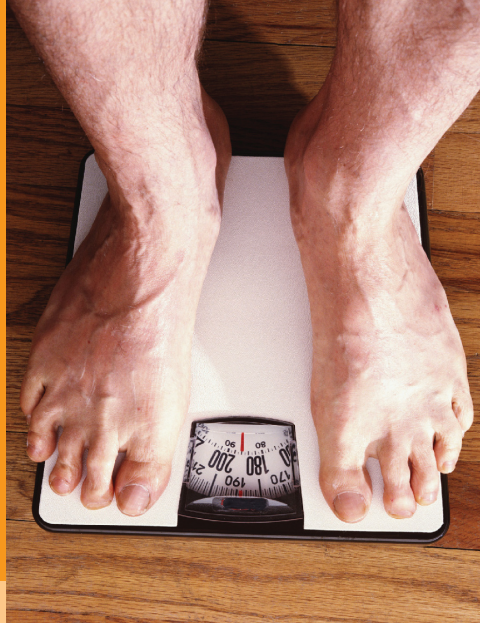
Racial disparities are the result of a variety of genetic, social and environmental risk factors, such as education, economic status, geographical region and cultural lifestyle patterns.

For example, one study showed that obese African Americans, Hispanic Americans, low-income individuals and those without college educations were significantly less likely to receive educational information on the health risks of obesity.[8] In addition, low-and middle-income individuals with diabetes were significantly less likely to receive the recommended services to prevent diabetes complications than were high-income individuals.[10]

One of the most important factors accounting for unequal access to health care among different ethnicities is the disparity in health care coverage. About 48 percent of the Hispanic population living in Arkansas do not have health insurance.[8] African Americans and the Marshallese are also less likely to have adequate health care coverage.

Without basic health care and diabetes self-management training, the burden of diabetes on our health care system will multiply as we are forced to deal with more severe, untreated complications.

Prevention, Detection, & Treatment



Obesity in Arkansas has reached astronomical proportions. In 1995, 17.5 percent of Arkansans were reportedly obese; by 2007 this number rose to a record high of 29.3 percent.[12]

Likewise, the number of individuals who consumed the recommended five fruits and vegetables per day has decreased from one in three people in 1996 to 1 in 5 people in 2007.[10] Yet, people can reduce their risk of developing diabetes by 58 percent by losing weight, increasing physical activity, not smoking and improving eating habits.[7]

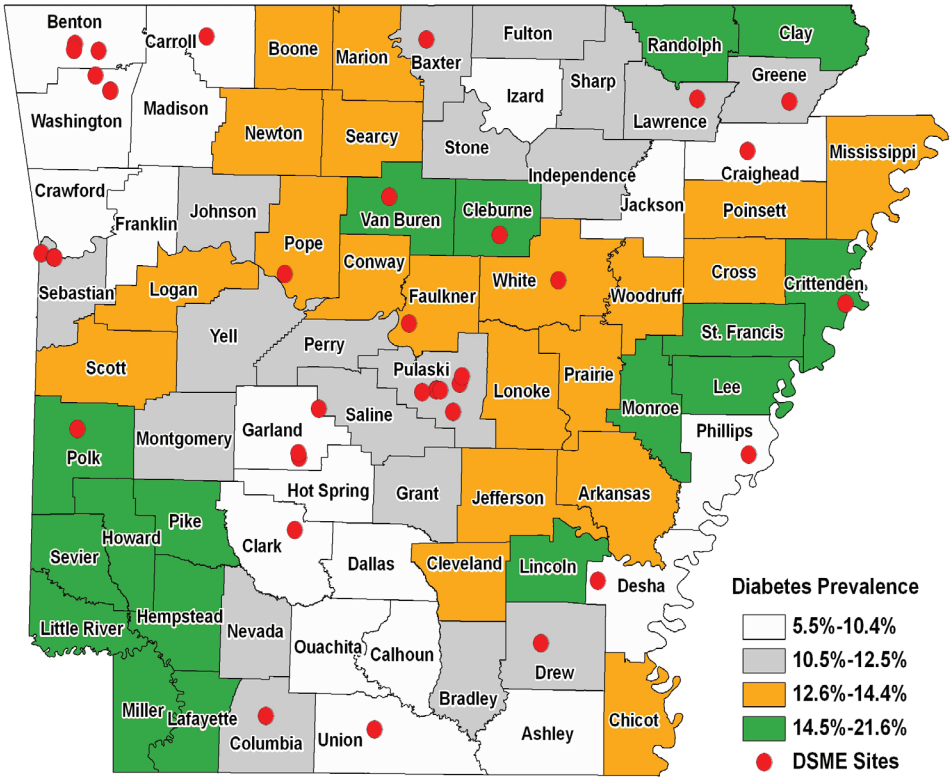
Among Arkansans, approximately one third of the individuals living with diabetes are undiagnosed.[4] Therefore, it is vital that people become aware of the signs and symptoms of diabetes. The most common symptoms of diabetes include frequent urination, excessive thirst, extreme hunger, unexplained weight loss, sudden vision changes, tingling or numbness in hands or feet, fatigue, dry skin, sores that are slow to heal and more infections than usual.[7]

Three ways to diagnose diabetes are possible, and each, in the absence of unequivocal hyperglycemia, must be confirmed, on a subsequent day, by any one of the three methods. 1) Symptoms of diabetes plus casual plasma glucose concentration ≥ 200 mg/dl. Casual is defined as any time of day without regard to time since last meal.
2) Fasting plasma glucose ≥ 126 mg/dl. Fasting is defined as no caloric intake for at least 8 hours. 3) Two hour postload glucose ≥ 200 mg/dl during an oral glucose tolerance test. The test should be performed using a glucose load containing the equivalent of 75 grams glucose dissolved in water. Diabetes is diagnosed if blood glucose levels equal or exceed 200 mg/dl after two hours.[13]

Typical treatment requires improvements to diet, physical activity, time and stress management habits, weight loss, reductions in smoking and alcohol consumption, self-blood glucose monitoring, medication and insulin treatment, if necessary.[14]

To make such lifestyle changes requires a remarkable amount of information, skill mastery, personal insight and a willingness to accept these responsibilities. Being well informed about diabetes self-management is considered the key to successful diabetes care.[15]

Diabetes Self Management Education (DSME) Program Sites by Location, Arkansas, 2008



Source: CDC Behavioral Risk Factor Surveillance System, 2008, American Diabetes Association, and American Association of Diabetes Educators.

Nevertheless, integrating knowledge and skills into daily living demands more than mere acquisition of information. It requires acceptance of the disease, support, problem-solving skills, motivation for change and self-control. In Arkansas, there are over 35 recognized DSME programs that address diabetes education, support groups, advocacy and policy. As the map depicts, however, the location of these programs does not always correspond to the areas most in need.

The Arkansas Department of Health Diabetes Prevention and Control Program, the Diabetes Advisory Council (DAC) and many other concerned professionals and citizens intend to address these and other discrepancies.

Arkansas Diabetes State Plan: Methods

Health officials with the Arkansas Diabetes Prevention and Control Section took a systematic approach to crafting a new state plan. In July 2008, 37 diabetes experts, state health officials, providers and concerned citizens affected by diabetes gathered in Little Rock to participate in a professionally facilitated strategic planning retreat.

The goal of the retreat was to create long-term strategies for combating diabetes in Arkansas that focused on the Diabetes Advisory Council's mission to reduce the economic, social, physical and psychological impact of diabetes, with an emphasis on addressing disparities. Small work teams focused on five programmatic areas: health systems change, education, public policy change, access and partnership development.

Within these areas, over 18 proposed issues arose with dozens of potential objectives and action steps. The plan was broad and covered multiple issues, like care provider regulations, health literacy, school-based prevention and community education. A criticism of this tentative plan was the breadth and lack of focus. Council members voiced concerns that it would take the state in multiple directions.

In September of 2008, after considerable discussion, the DAC elected to concentrate activities on diabetes education across four populations: patients, providers, the general public and policy makers.

University of Arkansas, Fayetteville, School of Social Work researchers then posted the revised state plan and invited DAC members and retreat attendees to comment on the draft state plan through multiple means: e-mailing, faxing or posting on an online discussion board. The feedback was incorporated into a final draft, and DAC members were briefed on its components and multiple Federal and State diabetes guidelines at a December 2008 meeting. The Council unanimously voted in favor of the final draft of the Arkansas Diabetes State Plan *(See Appendix A)*.

Patient education - diabetes health care knowledge or skills among individual children and adults diagnosed with diabetes or their caregivers.

Provider education - professional health care providers knowledge of diabetes, prevention, diagnosis and treatment protocols, as well as other factors such as socioeconomic cultural factors influencing care outcomes.

Public education - the general public's understanding of diabetes detection and treatment and the consequences for those living with diabetes.

Policy-maker education - legislators, public or private agencies and business leaders' knowledge of diabetes, its effect on their organization, community or constituents and effective ways to address these concerns through policy changes and initiatives.

Arkansas Diabetes State Plan: Patient Education

Goal #1:

Increase diabetes knowledge among patients and caregivers to improve diabetes self-management behaviors and related health outcomes.

Rationale:

Research shows that improved diabetes self-management knowledge and skills among patients and/or their caregivers improves health habits like diet and exercise, following medical advice and taking medications as prescribed.[16-17] Such behaviors increase blood sugar (glucose, glycemic) control, thereby delaying or preventing long-term consequences such as heart and kidney diseases, nerve damage, and vision problems.[18]

Fewer than 40 percent of adults

in the United States receive diabetes education.[18] Estimates from the 2007 Behavioral Risk Factor Surveillance System (BRFSS) reveal that 49.4 percent of Arkansas adults (50.4 percent females, 48.3 percent males) attended some form of formal diabetes education. Therefore, increasing the number of Arkansans receiving diabetes education and training would improve health habits essential to diabetes management and reduce complications.

Strategies:

1. Increase the number of Arkansans receiving formal diabetes education or training.
2. Target geographic areas and at-risk populations lacking adequate education resources.
3. Increase the number of Medicare-certified diabetes education programs. throughout the state, especially in under-served areas.
4. Develop Centers of Excellence for diabetes education and treatment.
5. Enlarge pool of non-certified diabetes education programs (e.g. those facilitated by health educators, extension workers, social workers, lay health ministers, etc.) as a stop-gap measure in under-served areas.
6. Expand programs and services for high-risk groups: minorities, elders, tobacco users, caregivers, under-insured, non-insured, and rural Arkansans.
7. Explore, expand and encourage worksite-based diabetes education programs.
8. Train, recruit and retain certified diabetes educators and registered dietitians.
9. Increase and promote diabetes self-help and support groups throughout the state.
10. Coordinate inter-agency delivery of diabetes education around the state.

Arkansas Diabetes State Plan: Provider Education

Goal #2:
Expand providers' cultural competency, diabetes knowledge and adherence to the American Diabetes Association (ADA) clinical practice guidelines.

Rationale:
Theoretical and practical diabetes knowledge and competence has a remarkable influence on the quality and outcome of care given by physicians, nurses, mental health providers, health educators and paraprofessionals, like childcare workers or nurse's aids.[19-20]

In a 2007 study, registered nurses, internal medicine, family practice and surgery residents scored an average of 61percent on a 21 question survey on diabetes standards of care.[21] Researchers found that, although physicians, nurse practitioners and physician assistants acknowledged racial disparities in diabetes care within the U.S. health system, they lacked awareness of it at the local level, namely in their own practices.[22]

A 2004 study found that urban and rural medical practices had modest to poor adherence to recognized American Diabetes Association standards of care and outcomes. Rural patients were less likely to receive screening and preventative services, such as lipid profiles, annual eye examinations, microalbumin screening, aspirin therapy and vaccinations.[23]

Therefore, by improving diabetes and cultural competency in health providers and systems, patient outcomes would be improved and complications reduced.

Strategies:
1. Assess providers' cultural competency, knowledge of diabetes and adherence to ADA clinical practice guidelines.
2. Identify existing Continuing Education Units (CEU) resources for professional diabetes education.
3. Promote or create a diabetes CEU seminar/series (e.g. webinar) available statewide.
4. Assess providers' adherence to ADA guidelines.
5. Encourage specialization and advanced training in diabetes among care providers.
6. Assess institutional diabetes knowledge (care guidelines) in hospitals, nursing homes and in rehabilitation and other care facilities.
7. Recognize diabetes excellence among providers and institutions in Arkansas.

Arkansas Diabetes State Plan: Public Education

Goal #3:
Build support and understanding among the general public regarding diabetes prevention, early detection and treatment methods in Arkansas.

Rationale:
Despite the fact that diabetes is a leading cause of death and serious disability, the general public often perceives it as a relatively mild condition.[24]

Multiple studies have documented that the inadequate understanding of diabetes, its risk-factors and poor health habits have contributed to the rise of this chronic disease and have hindered efforts to motivate health changes in at-risk populations.[25] Rye, Smith, and Tessaro found this to be true among an Appalachian population before and after being diagnosed with diabetes.[25]
A study published in 2002 showed significant gaps in diabetes knowledge among Arkansas public elementary teachers.[26]
According to Khuwaja and Rafique, a greater emphasis "on health education is needed to increase public awareness of the warning signs and risk factors" of diabetes and related conditions. [27]

Strategies:
1. Assess public understanding of diabetes, prevention and early detection.
2. Increase diabetes literacy among the general public.
3. Inform and involve community groups representatives in policy development related to diabetes in Arkansas.
4. Expand diabetes screening of targeted middle school children along with scoliosis screening (possibly adding to BMI report) and begin teaching diabetes risk/protective factors, symptoms and the consequences of diabetes by school health providers.
5. Develop and promote Arkansas, web-based clearinghouse on diabetes information, resources, state/community programs, speakers, etc.
6. Promote and support community screenings in under-served areas and among high-risk populations and begin the teaching of diabetes risk/protective factors, symptoms and its consequences.
7. Educate non-health care community organizations, such as churches and senior centers, on diabetes prevention, detection and self-management.

Arkansas Diabetes State Plan: Policy Maker Education

Goal #4:
Influence and encourage businesses, health facilities, state agencies and state government/legislative branches to promote policies and programs that support diabetes prevention and control.

Rationale:
Informed policy decisions at local and state levels in government and businesses have extraordinary potential to create sustainable changes in the organizations and communities where Arkansans live, learn and work. Advocates emphasize policies that address healthy lifestyles and increase individual and corporate responsibility to address the diabetes epidemic in America.[28-29]

In general, large and small companies benefit from health-supportive policies and business practices, such as wellness programs that reduce healthcare costs, increase productivity, improve company image and recruitment rate while reducing turnover, absenteeism and job injuries.[30-31] Freudenberg and Galea call for the "development of health policies that increase opportunities for primary prevention by discouraging harmful corporate practices" .[32]

A recent paper demonstrated the effectiveness of policy and community environment change with community participation on improving fruit-vegetable consumption, physical activity and smoking cessation among African Americans in Charlotte, North Carolina.[29]

Health policies and community development groups need to create environments that promote and encourage physical activity. Shared system changes across communities, businesses and public agencies will provide an environment that supports health and aids in preventing, detecting and controlling diabetes.

Arkansas Diabetes State Plan: Policy Maker Education - Continued

Strategies:

1. Mobilize a statewide, multi-organization advocacy coalition to promote positive changes in policies addressing diabetes.
2. Create a public policy committee (task force) within the DAC.
3. Inform, motivate and empower community, school, business and government decision makers regarding diabetes, prevention, early detection and self-management.
4. Work with schools to improve policies for healthy nutrition and physical activity.
5. Educate state public and private healthcare organizations about diabetes-related initiatives and programs.
6. Recognize providers of excellent diabetes service among Arkansas policy makers, state local, employers, community and school programs.

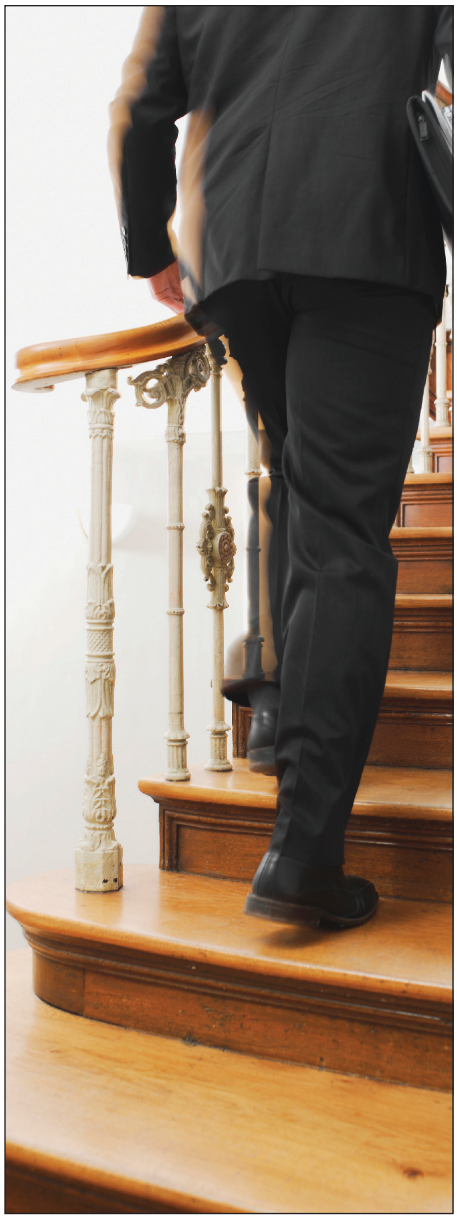
"Through prevention programs, reduce the disease and economic burden of diabetes, and improve the quality of life for all persons who have or are at risk for diabetes."

Healthy People 2010–Diabetes[34]

"Everyone, not just those working in public health, must ally themselves with community leaders to pursue programs and policies to create settings with more compact neighborhoods... a comprehensive network of pathways, trails, bike lanes, and mass transit to allow "active" transportation... site designs that welcome cyclists and pedestrians; and an umbrella of safety that encourages people to get out of their cars."

M. Fenton

Inclusion of Federal & State Guidelines



To demonstrate the overlapping themes between the Arkansas Diabetes State Plan, the CDC and other identified national goals and objectives, similar strategic goals and objectives for compliance with State and Federal plans were identified and are as follows:

- CDC 10 Essential Public Health Services
- CDC Cross-cutting Program Priorities for DPCPs
- CDC 4 National Diabetes Program Goals
- DPCP 3 Intervention Focuses, and
- Arkansas Chronic Disease Plan

As the table in Appendix B depicts, the Arkansas Diabetes State Plan addresses multiple elements across program goals and objectives over the course of five years.

Annual Action Plan 2009

In an effort to actualize the Arkansas Diabetes Five-Year State Plan: 2009-2014, health officials, providers and experts selected five strategies (long-term objectives) to pursue during 2009.

Annual Goal 1:

Develop Centers of Excellence for diabetes education & treatment.
-Goal #1, Strategy #4, Ark-DSP 09—14

Centers of excellence have been used in academics, business and in health care to promote higher standards of performance and outcomes. Diabetes centers of excellence recognize individual providers or programs that achieve a higher level of care, evident by outcomes.[36] Some programs, like the Joslin Diabetes Center, offer partnerships in developing diabetes centers of excellence, with documented evidence illustrating improved outcomes following their protocols.[37] By establishing and promoting diabetes centers of excellence, recognition and productive competition would raise the standard of care and related health outcomes.

Therefore, programs that complete center of excellence recognition protocols would show higher levels of adherence to national standards of care, e.g. A1C checks, foot and eye exams, flu shots, etc.

Objectives

1. By March 2010, develop standards and criteria for diabetes centers of excellence, possibly partnering with an existing organization to assist in developing said protocols;
2. By March 2010, develop/enhance partnership funding- statewide public/private ratio.
3. By December 2009, plan for integration and coordination of services/resources.

Coordinating Agencies

Arkansas Foundation for Medical Care
Diabetes Prevention and Control Section

AR Diabetes State Plan 2009-2014 goal addressed...

1) Increase diabetes knowledge among patients and caregivers to improve diabetes self management behaviors and related health outcomes.

National Diabetes Program Framework goal addressed...

2) Prevent the complications, disabilities and burden associated with diabetes.

Annual Goal 2:

Explore and research opportunities to collect and analyze diabetes data in order to assess the burden of diabetes of middle school children.
- Goal #3, Strategy #4, Ark-DSP 09-14

With the rise in childhood obesity, research demonstrates that routine screening for diabetes and other serious health conditions, targeting at-risk middle school children, is an effective approach to early detection.[38-41] Arkansas' proactive efforts in school-based screening for childhood obesity would be expanded to include diabetes[42], as a long-term goal. However, assessing the burden of diabetes of middle school children will be the first step towards this approach. Likewise, research supports that such strategies /inform and empower school nurses to educate Arkansans on the risk/protective factors, symptoms, and consequences of diabetes and other childhood diseases.[43-44] Consequently, targeting schools in under-served areas and in at-risk populations will assist in preventing the onset of Type II diabetes in middle school children.

Objectives

1. By December 2009, identify and coordinate with existing programs to identify diabetes data sources related to middle school children living with diabetes in Arkansas
2. By November 2009, DAC workgroup members will research and find relevant data (if available)
3. By December 2009, DAC workgroup will report findings to DAC members
4. By December 2009, coordinating agencies will present to DAC current interventions implemented in schools to address obesity, physical activity and nutrition
5. By March 2010, coordinating agencies and workgroups will complete an executive summary highlighting findings related to diabetes in middle school children

Coordinating Agencies

- Arkansas Department of Health
- Arkansas Center for Health Improvement
- Coordinated School Health
- Arkansas Department of Education
- American Diabetes Association

AR Diabetes State Plan 2009-2014 goal addressed...

3) Build support and understanding in the general public regarding diabetes prevention, early detection and treatment methods in Arkansas.

National Diabetes Program Framework goal addressed...

1) Prevent diabetes.

2) Prevent the complications, disabilities and burden associated with diabetes.

Annual Goal 3:

Develop and promote Arkansas web-based clearinghouse on diabetes information, resources, state/community programs, speakers, etc.
- Goal #3, Strategy #5, Ark-DSP 09-14

Healthcare knowledge management is an emerging field that seeks to facilitate information flow for patients as well as providers, programs and communities.[45-47] Coordinating programs and initiatives among agencies has proven useful in other areas of health concerns, such as HIV, chemical dependency, mental illness, domestic violence and sexual assault.[48-50] Sharing program information among professionals, patients and family members and increasing interagency collaboration would increase efficiency.

Coordinating Agencies

- Arkansas Department of Health
- Arkansas Center for Health Improvement
- Coordinated School Health
- Arkansas Department of Education
- American Diabetes Association

Objectives

1. By August 2009, update DPCP website, exploring other DPCP websites to identify models, solicit feedback from pool of potential professional/non-professional users, including within Arkansas Department of Health.
2. By September 2009, populate initial database with existing program data information.
3. By March 2010, release on-line searchable clearinghouse database, allowing users to register and edit details.
4. By October 2009, market within Department of Health clearinghouse, encourage editing and entry of data.
5. By September, collaboratively market on-line health clearinghouse to health providers/agencies and the general public.
6. By October 2009, electronically seek input from users.

7. By December 2009, integrate user suggestions into format and database protocols.
8. By February 2010, establish a dedicated technology/webmaster to manage database as needed.

AR Diabetes State Plan 2009-2014 goal addressed...

3) Build support and understanding in the general public regarding diabetes prevention, early detection and treatment methods in Arkansas.

National Diabetes Program Framework goal addressed...

4) Maximize organizational capacity to achieve the National Diabetes Program goals.

Annual Goal 4:

Create a public policy committee (task force) within the DAC.
- Goal #4, Strategy #2, Ark-DSP 09-14

Advocating for public policy changes in diabetes prevention, detection and treatment provides remarkable opportunities for widespread system changes. Successes seen in other issues like child mortality, measles, tobacco cessation and teenage pregnancy prevention beckon for such efforts in addressing chronic diseases like diabetes.[51-52] Policy change at multiple levels is also consistent with national and state priorities for healthcare reform. To adequately address meaningful policy analysis and change, a separate ongoing task force is needed in the state of Arkansas.

Coordinating Agencies

- Arkansas Foundation for Medical Care
- Diabetes Prevention and Control Section
- Fay W. Boozman College of Public Health, UAMS

Objectives

1. By April 2009, place issue on agenda for DAC.
2. By September 2009, adapt DAC bylaws to include committee, making their mission and objectives clear.
3. By July 2009, network and seek guidance from other policy-focused committees, identify shared goals and explore collaborative efforts.
4. By August 2009, develop a clear, focused, and reasonable agenda addressing policy issues across diabetes systems.
5. By September 2009, develop a specific legislative agenda from diabetes coalition members, partners and legislative members.

6. By October 2009, track state and federal legislation concerning Arkansas diabetes-related issues, timely dissemination of information to coalition and facilitate meaningful and informed action.
7. By March 2010, the DAC will make a report on completed objectives for the year to statewide partners.

AR Diabetes State Plan 2009-2014 goal addressed...

4) Influence and promote policy decisions in business, health facilities, state agencies and state government/ legislative branches to promote policies and programs that support diabetes prevention and control.

National Diabetes Program Framework goal addressed...

4) Maximize organizational capacity to achieve the National Diabetes Program goals.

Annual Goal 5:

Work with schools to improve policies for healthy nutrition and physical activity.
- Goal #4, Strategy #4, Ark-DSP 09-14

Federal mandates for local wellness policies provide an exceptional opportunity to enhance schools' student health policies and practices.[52] As others have noted, efforts to improve student health must seek system-wide changes, developing a coordinated healthy milieu.[53] Efforts must be empirically based and focused on policy-level changes that support multi-level integration of change.[54]

Improved school health policies and practices have proven effective in changing adolescents' food habits, injury prevention habits among 7 year-olds, deterring smoking among teens, increasing physical activity among primary school children and preventing depressive symptomatology in children.[55-61]

Hence, influencing school health policies through an empirical and collaborative manner would cause significant improvements in the health of children.

Objectives

1. By September 2009, the DAC workgroup will work with coordinating agencies to research if current evaluation data exists on these programs, and review their findings with statewide partners.
2. By December 2009, workgroup will determine the feasibility of strengthening the evaluation components of nutrition and physical activity prevention programs in schools.

Coordinating Agencies

- Arkansas Department of Health
- Arkansas Center for Health Improvement
- Coordinated School Health
- Arkansas Department of Education
- American Diabetes Association

Annual Action Plan 2009 - Continued

AR Diabetes State Plan 2009-2014 goal addressed...	National Diabetes Program Framework goal addressed...
4) Influence and promote policy decisions in business, health facilities, state agencies and state government/ legislative branches to promote policies and programs that support diabetes prevention and control.	1) Prevent diabetes. 2) Prevent the complications, disabilities and burden associated with diabetes.

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Appendix A

Arkansas Department of Health
Keeping Your Hometown Healthy

Arkansas Diabetes State Plan: 2009-2014

Goal #1 – Patient Education

Increase diabetes knowledge among patients and caregivers to improve diabetes self-management behaviors and related health outcomes.

Strategies

1. Increase the number of Arkansans receiving formal diabetes education/training.
2. Target areas and at-risk populations lacking adequate education resources.
3. Increase the number of Medicare-certified diabetes education programs throughout the state, especially in under-served areas.
4. Develop Centers of Excellence for diabetes education and treatment.
5. Enlarge pool of non-certified diabetes education programs (e.g. those facilitated by health educators, extension workers, social workers, lay health ministers) as a stop-gap measure in under-served areas.
6. Expand programs/services for high-risk groups: minorities, elders, tobacco users, caregivers, under-insured, non-insured and rural Arkansans.
7. Explore, expand and encourage worksite-based diabetes education programs.
8. Train, recruit and retain certified diabetes educators and registered dietitians.
9. Increase and promote diabetes self-help and support groups throughout the state.
10. Coordinate inter-agency delivery of diabetes education across the state.

Goal #2 – Provider Education

Expand providers' cultural competency, diabetes knowledge and adherence to the American Diabetes Association (ADA) clinical practice guidelines.

Strategies

1. Assess providers' knowledge of cultural competence, diabetes and ADA clinical practice guidelines.
2. Identify existing CEU resources for professional diabetes education.
3. Promote or create an original diabetes CEU seminar/series (e.g. webinar) available statewide.
4. Assess providers' adherence to ADA guidelines.
5. Encourage specialization, advanced training in diabetes among care providers.
6. Assess institutional diabetes knowledge (care guidelines) in hospitals, nursing homes, rehabilitation and other care facilities.
7. Recognize diabetes excellence among providers/ care institutions in Arkansas.

Goal #3 – Public Education

Build support and understanding in the general public regarding diabetes prevention, early detection and treatment methods in Arkansas.

Strategies

1. Assess public understanding of Arkansas diabetes, prevention and early detection.
2. Increase diabetes literacy among the general public.
3. Inform and involve community groups representative of the state in diabetes decision-making and related programs.
4. Explore diabetes screening of targeted middle school children along with scoliosis screening (possibly adding to BMI report) and begin the teaching of diabetes risk/protective factors, symptoms, as well as the consequences of diabetes by school health providers.

5. Develop and promote Arkansas, web-based, clearinghouse on diabetes information, resources, state/community programs, speakers, etc.
6. Promote and support community screenings in under-served areas and among high-risk populations and begin the teaching of diabetes risk/protective factors, symptoms, as well as its consequences.
7. Educate non-healthcare community organizations such as churches and senior activities centers on diabetes prevention, detection and self-management.

Goal #4 – Policy-maker Education

Influence and promote policy decisions in businesses, health facilities, state agencies, and state government/ legislative branches to promote policies and programs that support diabetes prevention and control.

Strategies

1. Mobilize a statewide, multi-organization advocacy coalition to promote positive changes in policies addressing diabetes.
2. Create a public policy committee (task force) within the DAC.
3. Inform, motivate and empower community, school, business and government decision makers on diabetes, prevention, early detection and self-management.
4. Work with schools to improve policies for healthy nutrition and physical activity.
5. Educate state public and private health care organizations about diabetes-related initiatives and programs.
6. Recognize providers of excellent diabetes service among Arkansas policy makers, state local, employers, community and school programs.

Appendix B

Arkansas Department of Health
Keeping Your Hometown Healthy

Arkansas Diabetes State Plan

	1. Increase % of Arkansans engaging in physical activity.	2. Promote tobacco cessation.	3. Improve screening & health care services for all chronic diseases in rural & under-served areas.	4. Educate & inform on health issues related to community partnerships, prevention, screening, treatment, outreach & control of chronic diseases.	5. Develop & implement a legislative agenda to support the policy and fiscal needs of chronic disease activities.	6. Support the development of communities that promote life-long physical activity, healthy nutrition & tobacco-free environments.
	1	2	3	4	5	6
			Arkansas Chronic Disease Plan:			
Goal #1: Increase diabetes knowledge among patients and caregivers to improve diabetes self-management behaviors and related health outcomes.	●	●	●	●	●	●
1. Increase the number of Arkansans receiving formal diabetes education/training.	●	●	●	●		●
2.Target areas and at-risk populations lacking adequate education resources.	●	●	●	●		●
3.Increase the number of Medicare-certified diabetes education programs throughout the state, especially in under-served areas.	●	●	●	●		
4. Develop Centers of Excellence for diabetes education and treatment.	●	●	●	●		
5. Enlarge pool of non-certified diabetes education programs (e.g. those facilitated by health educators, extension workers, social workers, lay health ministers) as a stop-gap measure in under-served areas.	●	●	●	●		●
6. Expand programs/services for high-risk groups: minorities, elders, tobacco users, caregivers, under-insured, non-insured and rural Arkansans.	●	●	●	●		●
7. Explore, expand and encourage worksite-based diabetes education programs.	●	●	●	●	●	●
8. Train, recruit and retain certified diabetes educators and registered dietitians.	●	●	●	●		●
9. Increase and promote diabetes self-help and support groups throughout the state.	●	●	●	●		●
10. Coordinate inter-agency delivery of diabetes education across the state.	●	●	●	●		●
Goal #2: Expand providers' cultural competency, diabetes knowledge and adherence to the American Diabetes Association (ADA) clinical practice guidelines.	●	●	●	●		●
1. Assess providers' knowledge of cultural competence, diabetes and ADA clinical practice guidelines.	●	●	●	●		●
2. Identify existing CEU resources for professional diabetes education.		●	●	●		
3. Promote or create an original diabetes CEU seminar/series (e.g. webinar) available state-wide.	●	●	●	●		
4. Assess providers' adherence to ADA guidelines.			●	●	●	●
5. Encourage specialization, advanced training in diabetes among care providers.			●	●		
6. Assess institutional diabetes knowledge (care guidelines) in hospitals, nursing homes, rehabilitation and other care facilities.			●	●	●	
7. Recognize diabetes excellence among providers/care institutions in Arkansas.	●	●	●	●		●

Arkansas Department of Health
Keeping Your Hometown Healthy

Arkansas Diabetes State Plan	1. Increase % of Arkansans engaging in physical activity.	2. Promote tobacco cessation.	3. Improve screening & health care services for all chronic diseases in rural & under-served areas.	4. Educate & inform on health issues related to community partnerships, prevention, screening, treatment, outreach & control of chronic diseases.	5. Develop & implement a legislative agenda to support the policy and fiscal needs of chronic disease activities.	6. Support the development of communities that promote life-long physical activity, healthy nutrition & tobacco-free environments.
	1	2		4	5	6
Arkansas Chronic Disease Plan:						
Goal #3: Build support and understanding in the general public regarding diabetes prevention, early detection and treatment methods in Arkansas.	●	●	●	●	●	●
1. Assess public understanding of Arkansas diabetes, prevention and early detection.	●	●	●	●		●
2. Increase diabetes literacy among the general public.	●	●	●	●	●	●
3. Inform and involve community groups representative of the state in diabetes decision-making and related programs.	●	●	●	●	●	●
4. Expand diabetes screening of targeted middle school children along with scoliosis screening (possibly adding to BMI report) and begin the teaching of diabetes risk/protective factors, symptoms, as well as the consequences of diabetes by school health providers.	●	●	●	●	●	●
5. Develop and promote Arkansas, web-based, clearinghouse on diabetes information, resources, state/community programs, speakers, etc.			●	●		
6. Promote and support community screenings in under-served areas and among high-risk populations and begin the teaching of diabetes risk/protective factors, symptoms, as well as its consequences.	●	●	●	●	●	●
7. Educate non-healthcare community organizations such as churches, senior activities centers on diabetes prevention, detection and self-management.	●	●	●	●		●
Goal #4: Influence and promote policy decisions in businesses, health facilities, state agencies and state government/legislative branches to promote policies and programs that support diabetes prevention and control.	●	●	●	●	●	●
1. Mobilize a statewide, multi-organization advocacy coalition to promote positive changes in policies addressing diabetes.					●	
2. Create a public policy committee (task force) within the DAC.	●	●	●	●	●	●
3. Inform, motivate and empower community, school, business, and government decision-makers on diabetes, prevention, early detection and self-management.	●	●	●	●	●	●
4. Work with schools to improve policies for healthy nutrition and physical activity.	●	●	●	●	●	●
5. Educate state public and private health care organizations about diabetes-related initiatives and programs.		●	●	●		●
6.Recognize providers of excellent service in diabetes among Arkansas policy makers, state and local, employer, community and school programs.	●	●	●	●	●	●

Arkansas Department of Health
Keeping Your Hometown Healthy

Arkansas Diabetes State Plan	1 Improving A1C, Blood Pressure, & Lipid Control	2 Focusing Interventions & Evaluation Efforts to Develop Best & Promising Practices	3 Development of DPCP Organizational Capacity & Standard Operating Procedures	4 Partnerships	5 Work to Influence System or Population Level Change	6 Increased Use of Burden & Program Data	7 Sustainability	8 State Chronic Disease Programs	9 Collaboration with Other Primary Prevention	10 Health Disparities
	Cross-cutting Priorities for DPCP									
Goal #1: Increase diabetes knowledge among patients and caregivers to improve diabetes self-management behaviors and related health outcomes.	●	●	●	●	●			●	●	●
1. Increase the number of Arkansans receiving formal diabetes education/training.	●	●	●	●	●	●		●	●	●
2.Target areas and at-risk populations lacking adequate education resources.	●	●	●	●	●	●	●		●	●
3.Increase the number of Medicare -certified diabetes education programs throughout the state, especially in under-served areas.	●	●		●	●					●
4. Develop Centers of Excellence for diabetes education and treatment.	●	●	●	●	●				●	●
5. Enlarge pool of non-certified diabetes education programs (e.g. those facilitated by health educators, extension workers, social workers, lay health ministers) as a stop-gap measure in under-served areas.	●	●	●	●	●	●		●	●	●
6. Expand programs/services for high-risk groups: minorities, elders, tobacco users, caregivers, under-insured, non-insured and rural Arkansans.	●	●	●	●	●			●	●	●
7. Explore, expand and encourage worksite based diabetes education programs.	●	●	●	●	●		●		●	●
8. Train, recruit and retain certified diabetes educators, registered dietitians.	●	●	●	●	●		●	●	●	●
9. Increase and promote diabetes self-help and support groups throughout the state.	●	●	●	●	●		●	●	●	●
10. Coordinate inter-agency delivery of diabetes education across the state.	●	●	●	●	●	●	●	●	●	●
Goal #2: Expand providers' cultural competency, diabetes knowledge and adherence to the American Diabetes Association (ADA) clinical practice guidelines.		●	●	●	●		●		●	●
1. Assess providers' knowledge of cultural competence, diabetes and ADA clinical practice guidelines.		●	●	●	●				●	●
2. Identify existing CEU resources for professional diabetes education.		●	●			x	●		●	●
3. Promote or create an original diabetes CEU seminar/series (e.g. webinar) available state-wide.	●	●	●		●	●		●	●	●
4. Assess providers' adherence to ADA guidelines.		●	●		●					
5. Encourage specialization, advanced training in diabetes among care providers.				●		●		●	●	●
6. Assess institutional diabetes knowledge (care guidelines) in hospitals, nursing homes, rehabilitation and other care facilities.	●	●	●	●	●				●	●
7. Recognize diabetes excellence among providers/care institutions in Arkansas.	●	●	●	●	●	●	●	●	●	●

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Arkansas Diabetes State Plan	1 Improving A1C, Blood Pressure, & Lipid Control	2 Focusing Interventions & Evaluation Efforts to Develop Best & Promising Practices	3 Development of DPCP Organizational Capacity & Standard Operating Procedures	4 Partnerships	5 Work to Influence System or Population Level Change	6 Increased Use of Burden & Program Data	7 Sustainability	8 State Chronic Disease Programs	9 Collaboration with Other Primary Prevention	10 Health Disparities
	Cross-cutting Priorities for DPCP									
Goal #1: Increase diabetes knowledge among patients and caregivers to improve diabetes self-management behaviors and related health outcomes.	●	●	●	●	●			●	●	●
1. Increase the number of Arkansans receiving formal diabetes education/training.	●	●	●	●	●	●		●	●	●
2.Target areas and at-risk populations lacking adequate education resources.	●	●	●	●	●	●	●		●	●
3.Increase the number of Medicare -certified diabetes education programs throughout the state, especially in under-served areas.	●	●		●	●					●
4. Develop Centers of Excellence for diabetes education and treatment.	●	●	●	●	●				●	●
5. Enlarge pool of non-certified diabetes education programs (e.g. those facilitated by health educators, extension workers, social workers, lay health ministers) as a stop-gap measure in under-served areas.	●	●	●	●	●	●		●	●	●
6. Expand programs/services for high-risk groups: minorities, elders, tobacco users, caregivers, under-insured, non-insured and rural Arkansans.	●	●	●	●	●			●	●	●
7. Explore, expand and encourage worksite based diabetes education programs.	●	●	●	●	●		●		●	●
8. Train, recruit and retain certified diabetes educators, registered dietitians.	●	●	●	●	●		●	●	●	●
9. Increase and promote diabetes self-help and support groups throughout the state.	●	●	●	●	●		●	●	●	●
10. Coordinate inter-agency delivery of diabetes education across the state.	●	●	●	●	●	●	●	●	●	●
Goal #2: Expand providers' cultural competency, diabetes knowledge and adherence to the American Diabetes Association (ADA) clinical practice guidelines.		●	●	●	●		●		●	●
1. Assess providers' knowledge of cultural competence, diabetes and ADA clinical practice guidelines.		●	●	●	●				●	●
2. Identify existing CEU resources for professional diabetes education.		●	●			x	●		●	●
3. Promote or create an original diabetes CEU seminar/series (e.g. webinar) available state-wide.	●	●	●		●	●		●	●	●
4. Assess providers' adherence to ADA guidelines.		●	●		●					
5. Encourage specialization, advanced training in diabetes among care providers.				●		●		●	●	●
6. Assess institutional diabetes knowledge (care guidelines) in hospitals, nursing homes, rehabilitation and other care facilities.	●	●	●	●	●				●	●

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Arkansas Diabetes State Plan

	1.Prevent diabetes	2.Prevent the complications, disabilities, and burden associated with diabetes	3.Eliminate diabetes-related health disparities;	4.Maximize organizational capacity to achieve the National Diabetes Program Goals	1.Promoting Social, Environmental, Policy and Systems Approaches at the State and Community Level	2.Health Communication Interventions	3.Health Care Systems Interventions
	1	2	3	4	5	6	7
	4 National Diabetes Program Goals (NDPG):				3 Intervention focus areas for DPCP:		
Goal #1: Increase diabetes knowledge among patients and caregivers to improve diabetes self-management behaviors and related health outcomes.	●	●	●		●	●	●
1. Increase the number of Arkansans receiving formal diabetes education/training.		●	●	●	●	●	●
2.Target areas and at-risk populations lacking adequate education resources.	●	●	●	●	●	●	●
3.Increase the number of Medicare-certified diabetes education programs throughout the state, especially in under-served areas.	●	●	●	●	●	●	
4. Develop Centers of Excellence for diabetes education and treatment.	●	●	●	●	●	●	●
5. Enlarge pool of non-certified diabetes education programs (e.g. those facilitated by health educators, extension workers, social workers, lay health ministers) as a stop-gap measure in under-served areas.	●	●	●	●	●	●	●
6. Expand programs/services for high-risk groups: minorities, elders, tobacco users, caregivers, under-insured, non-insured and rural Arkansans.	●	●	●	●	●	●	●
7. Explore, expand and encourage worksite-based diabetes education programs.	●	●	●	●	●	●	
8. Train, recruit and retain certified diabetes educators and registered dietitians.	●	●	●	●	●	●	●
9. Increase and promote diabetes self-help and support groups throughout the state.	●	●	●	●	●	●	●
10. Coordinate inter-agency delivery of diabetes education across the state.	●	●	●	●	●	●	●
Goal #2: Expand providers' cultural competency, diabetes knowledge and adherence to the American Diabetes Association (ADA) clinical practice guidelines.	●	●	●	●	●	●	●
1. Assess providers' knowledge of cultural competence, diabetes and ADA clinical practice guidelines.	●	●	●	●	●	●	●
2. Identify existing CEU resources for professional diabetes education.	●	●	●	●	●	●	
3. Promote or create an original diabetes CEU seminar/series (e.g. webinar) available state-wide.	●	●	●	●	●	●	
4. Assess providers' adherence to ADA guidelines.				●	●	●	●
5. Encourage specialization, advanced training in diabetes among care providers.	●	●	●	●	●	●	●
6. Assess institutional diabetes knowledge (care guidelines) in hospitals, nursing homes, rehabilitation and other care facilities.	●	●	●	●	●	●	●
7. Recognize diabetes excellence among providers/care institutions in Arkansas.	●	●	●	●	●	●	●

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Arkansas Diabetes State Plan

	1.Prevent diabetes associated with diabetes	2.Prevent the complications, disabilities and burden	3.Eliminate diabetes-related health disparities;	4.Maximize organizational capacity to achieve the National Diabetes Program Goals	1.Promoting Social, Environmental, Policy and Systems Approaches at the State and Community Level	2.Health Communication Interventions	3.Health Care Systems Interventions
	1	2	3	4	5	6	7
	4 National Diabetes Program Goals (NDPG):				3 Intervention focus areas for DPCP:		
Goal #3: Build support and understanding in the general public regarding diabetes prevention, early detection and treatment methods in Arkansas.	●	●	●	●	●	●	●
1. Assess public understanding of Arkansas diabetes, prevention and early detection.	●	●	●	●	●	●	●
2. Increase diabetes literacy among the general public.	●	●	●	●	●	●	●
3. Inform and involve community groups representative of the state in diabetes decision-making and related programs.	●	●	●	●	●	●	
4. Expand diabetes screening of targeted middle school children along with scoliosis screening (possibly adding to BMI report) and begin the teaching of diabetes risk/protective factors, symptoms, as well as the consequences of diabetes by school health providers.	●	●	●	●	●	●	
5. Develop and promote Arkansas, web-based, clearinghouse on diabetes information, resources, state/community programs, speakers, etc.	●	●	●	●	●	●	
6. Promote and support community screenings in under-served areas and among high-risk populations and begin the teaching of diabetes risk/protective factors, symptoms, as well as its consequences.	●	●	●	●	●	●	●
7. Educate non-healthcare community organizations such as churches, senior activities centers on diabetes prevention, detection and self-management.	●	●	●	●	●	●	
Goal #4: Influence and promote policy decisions in businesses, health facilities, state agencies and state government/legislative branches to promote policies and programs that support diabetes prevention and control.	●	●	●	●	●	●	●
1. Mobilize a statewide, multi-organization advocacy coalition to promote positive changes in policies addressing diabetes.				●	●	●	
2. Create a public policy committee (task force) within the DAC.				●	●	●	
3. Inform, motivate and empower community, school, business and government decision-makers on diabetes, prevention, early detection and self-management.	●	●	●	●	●	●	
4. Work with schools to improve policies for healthy nutrition and physical activity.	●	●	●	●	●	●	
5. Educate state public and private health care organizations about diabetes-related initiatives and programs.	●	●	●		●	●	●
6. Recognize providers of excellent service in diabetes among Arkansas policy makers, state and local, employer, community and school programs.	●	●	●	●	●	●	●

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Arkansas Diabetes State Plan

	1. Increase % of Arkansans engaging in physical activity.	2. Promote tobacco cessation.	3. Improve screening & health care services for all chronic diseases in rural & under-served areas.	4. Educate & inform on health issues related to community partnerships, prevention, screening, treatment, outreach & control of chronic diseases.	5. Develop & implement a legislative agenda to support the policy and fiscal needs of chronic disease activities.	6. Support the development of communities that promote life-long physical activity, healthy nutrition & tobacco-free environments.
	1	2	3	4	5	6
				Arkansas Chronic Disease Plan:		
Goal #1: Increase diabetes knowledge among patients and caregivers to improve diabetes self-management behaviors and related health outcomes.	●	●	●	●	●	●
1. Increase the number of Arkansans receiving formal diabetes education/training.	●	●	●	●		●
2.Target areas and at-risk populations lacking adequate education resources.	●	●	●	●		●
3.Increase the number of Medicare-certified diabetes education programs throughout the state, especially in under-served areas.	●	●	●	●		
4. Develop Centers of Excellence for diabetes education and treatment.	●	●	●	●		
5. Enlarge pool of non-certified diabetes education programs (e.g. those facilitated by health educators, extension workers, social workers, lay health ministers) as a stop-gap measure in under-served areas.	●	●	●	●		●
6. Expand programs/services for high-risk groups: minorities, elders, tobacco users, caregivers, under-insured, non-insured and rural Arkansans.	●	●	●	●		●
7. Explore, expand and encourage worksite-based diabetes education programs.	●	●	●	●	●	●
8. Train, recruit and retain certified diabetes educators and registered dietitians.	●	●	●	●		●
9. Increase and promote diabetes self-help and support groups throughout the state.	●	●	●	●		●
10. Coordinate inter-agency delivery of diabetes education across the state.	●	●	●	●		●
Goal #2: Expand providers' cultural competency, diabetes knowledge and adherence to the American Diabetes Association (ADA) clinical practice guidelines.	●	●	●	●		●
1. Assess providers' knowledge of cultural competence, diabetes and ADA clinical practice guidelines.	●	●	●	●		●
2. Identify existing CEU resources for professional diabetes education.		●	●	●		
3. Promote or create an original diabetes CEU seminar/series (e.g. webinar) available state-wide.	●	●	●	●		
4. Assess providers' adherence to ADA guidelines.			●	●	●	●
5. Encourage specialization, advanced training in diabetes among care providers.			●	●		
6. Assess institutional diabetes knowledge (care guidelines) in hospitals, nursing homes, rehabilitation and other care facilities.			●	●	●	
7. Recognize diabetes excellence among providers/care institutions in Arkansas.	●	●	●	●		●

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Arkansas Diabetes State Plan

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	1	2		4	5	6
	Arkansas Chronic Disease Plan:					
Goal #3: Build support and understanding in the general public regarding diabetes prevention, early detection and treatment methods in Arkansas.	●	●	●	●	●	●
1. Assess public understanding of Arkansas diabetes, prevention and early detection.	●	●	●	●		●
2. Increase diabetes literacy among the general public.	●	●	●	●	●	●
3. Inform and involve community groups representative of the state in diabetes decision-making and related programs.	●	●	●	●	●	●
4. Expand diabetes screening of targeted middle school children along with scoliosis screening (possibly adding to BMI report) and begin the teaching of diabetes risk/protective factors, symptoms, as well as the consequences of diabetes by school health providers.	●	●	●	●	●	●
5. Develop and promote Arkansas, web-based, clearinghouse on diabetes information, resources, state/community programs, speakers, etc.			●	●		
6. Promote and support community screenings in under-served areas and among high-risk populations and begin the teaching of diabetes risk/protective factors, symptoms, as well as its consequences.	●	●	●	●	●	●
7. Educate non-healthcare community organizations such as churches, senior activities centers on diabetes prevention, detection and self-management.	●	●	●	●		●
Goal #4: Influence and promote policy decisions in businesses, health facilities, state agencies and state government/legislative branches to promote policies and programs that support diabetes prevention and control.	●	●	●	●	●	●
1. Mobilize a statewide, multi-organization advocacy coalition to promote positive changes in policies addressing diabetes.					●	
2. Create a public policy committee (task force) within the DAC.	●	●	●	●	●	●
3. Inform, motivate and empower community, school, business, and government decision-makers on diabetes, prevention, early detection and self-management.	●	●	●	●	●	●
4. Work with schools to improve policies for healthy nutrition and physical activity.	●	●	●	●	●	●
5. Educate state public and private health care organizations about diabetes-related initiatives and programs.		●	●	●		●
6.Recognize providers of excellent service in diabetes among Arkansas policy makers, state and local, employer, community and school programs.	●	●	●	●	●	●

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