

Key Findings:
**How State Health Agencies Can Support
Diabetes Prevention and Control Initiatives**

July 2017



Introduction

The Association of State and Territorial Health Officials (ASTHO) is working with its members, affiliates, and partner organizations to identify actions that state and territorial health agencies can take to promote diabetes prevention and control efforts. This report contains findings and expert input from several sources, including: state diabetes action plan reports; an advisory roundtable hosted by ASTHO in August 2016 on the role of public health in supporting state systems to improve diabetes prevention and control; the diabetes policy scan conducted by the National Association of Chronic Disease Directors (NACDD); and case studies highlighting successful integration efforts between state health agencies and their healthcare partners to prevent and control diabetes. ASTHO will add best practices and promising strategies to the [ASTHO Diabetes website](#) as they are identified.

The following findings demonstrate the strengths of public health and highlight areas where states may benefit from greater coordination and integration with healthcare partners and other stakeholders to promote diabetes prevention and control efforts.

Key Findings

Policy Change

Support policies that improve outcomes for people with and at risk for diabetes and other chronic illnesses.

Collaboration between policymakers and organizations is vital to adopting and implementing public and private policies that support diabetes prevention and control measures. States may consider the following strategies to enhance collaboration with policymakers and to encourage policies that strengthen systems to prevent diabetes and promote improved management and outcomes of diabetes:

- Ensure diabetes prevention, treatment, and management are included in the regulations and provisions emerging from federal or state healthcare reform implementation processes.
- Promote policies and programs that support diabetes prevention and control with businesses, health facilities, state agencies and state government or legislative branches.
- Promote healthy lifestyles by increasing the availability and affordability of healthy food and physical activity options.

Summary of Recommendations to Promote State Diabetes Prevention and Control Initiatives

- Support policies that improve outcomes for people with and at risk for diabetes and other chronic illnesses.
- Improve diabetes and chronic disease surveillance systems.
- Increase the availability and utilization of evidence-based lifestyle change programs, such as the National Diabetes Prevention Program (DPP).
- Support local communities that have identified chronic disease management or obesity and physical activity as a top priority.
- Raise public awareness of how to prevent and manage diabetes.
- Expand coverage for preventive services and integration efforts.
- Encourage evidence-based diabetes self-management education, training, and services for patients diagnosed with Type 2 and gestational diabetes.

- Integrate and expand physical activity and nutrition options by leveraging land use and transportation policy and funding.
- Collaborate with state and local health agencies to implement policy initiatives that support strategies and actions plans promoted by national priorities for diabetes prevention and control.
- Increase implementation of national quality standards for physical activity policies in schools, communities, and workplaces.

State Example:

In **South Carolina**, state statute requires counties to develop 10-year comprehensive plans to define their vision for future growth. The South Carolina Department of Health and Environmental Control and stakeholders created the [SC Health + Planning Toolkit](#). This policy guide is intended to assist health professionals and planners with assessing healthy eating and active living policies.ⁱ

Data-Driven Action

Improve diabetes and chronic disease surveillance systems.

States may consider the following strategies to leverage technology and data-sharing among stakeholders for diabetes control and prevention:

- Improve the implementation of diabetes and chronic disease surveillance systems across multi-sectoral partnerships.
- Increase capacity to support analytics, interoperability, and measurement by encouraging healthcare purchasers and payers to participate in All-Payers Claims Databases and provide financial support to develop and maintain population health data systems.
- Enhance electronic clinical information systems to assure access to data, medication lists, and bi-directional referrals to promote quality of care, generate efficiencies, reduce duplication, and collect and report meaningful data.
- Reduce the time between diabetes screening and results reading with patients to ensure timely and accurate electronic medical record data.
- Establish and use a core set of common metrics to evaluate the impact of health systems change to improve access to and quality of diabetes care.

State Examples:

The **Delaware** Division of Public Health contracts with a regional extension center (REC), to monitor state health systems and physician practices that use and report on National Quality Forum measure 0059 (HbA1c > 9%). REC staff met with 40 practices to provide educational flyers about prevention and self-management programs. Staff also convened five electronic medical record user group meetings with 60 participating practices to discuss referrals to the National Diabetes Prevention Program and diabetes self-management education programs (DSME) for patients with prediabetes or diabetes. The REC identifies systems interventions, such as workflow changes, clinical decision support, patient notifications, and HIT alerts and reminders, to support this work.ⁱⁱ

The **West Virginia** Diabetes Prevention and Control Program collaborated with West Virginia University Office of Health Services Research to create a prevention referral system for health centers to utilize.

The referral system used an algorithm to identify prediabetes patients and support providers in referring patients to appropriate prevention programs.ⁱⁱⁱ

Evidence-Based Programs

Increase the availability and utilization of evidence-based lifestyle change programs such as the National Diabetes Prevention Program (DPP).

States may consider the following strategies to standardize definitions, practices, and protocols to replicate guideline-based diabetes prevention and control:

- Establish new partnerships and referral mechanisms to increase the availability and utilization of evidence-based lifestyle change programs, such as the DPP.
- Encourage providers to establish, maintain, and implement a system to screen patients with risk factors for prediabetes and diabetes according to the American Diabetes Association's latest clinical guidelines.
- Encourage evidence-based diabetes self-management education program training for health educators and community health workers.
- Encourage evidence-based diabetes prevention education and CDC-recognized lifestyle change programs for the primary prevention of Type 2 diabetes among patients diagnosed with prediabetes or those at high risk for Type 2 and gestational diabetes.

State Examples:

In **Michigan**, two diabetes prevention program providers at the YMCA of Marquette County and the state chapter of the National Kidney Foundation established prevention referral systems in large health systems. The program providers leveraged relationships with key leaders within the health system (or health plan) to secure meetings with decisionmakers to discuss diabetes prevention and potential for developing a referral system. The effort led to both provider agencies encouraging partners to cover the evidence-based lifestyle change program for employees and individuals insured by health plans.^{iv}

The **Minnesota** Department of Health worked to increase provider referrals by partnering with 24 clinics involved in the We Can Prevent Diabetes Minnesota research study, which assessed the effect of incentives on attendance and weight loss for Medicaid-covered enrollees in the YMCA DPP evidence-based lifestyle change program. At the conclusion of the study, over 560 adults were referred to the program.^v

Community-Level Resources

Support local communities that have identified chronic disease management or obesity and physical activity as a top priority.

States may consider the following strategies to identify and promote models that link clinical care with community resources.

- Establish partnerships with transportation, parks, and recreation agencies, especially in rural areas or areas that have experienced substantial environmental damage.
- Improve availability of safe multi-modal streets (which accommodate cars, bikers, and walkers) throughout the state.

- Assure a sustainable diabetes prevention and control infrastructure and workforce that includes opportunities for professional development (e.g., CMEs, etc.) and other related trainings.
- Strengthen the overall system of diabetes clinical care to ensure bi-directional information flow between the healthcare system to the referred community program or resource.
- Support efforts to monitor diabetes prevalence, implement and evaluate diabetes interventions, and promote public awareness about diabetes.
- Ensure involvement of community health workers and pharmacists to address diabetes treatment in populations with the greatest needs, including piloting telehealth programs to reach those in rural areas.
- Promote healthy lifestyles through nutritious and physically active options where people work, learn, live, play, and worship.
- As a cross-cutting strategy, explore the built environment and social conditions as avenues to promote health and address underlying causes of health inequities.

State Examples:

The **Kansas** Department of Health and Environment addressed the state’s built environment by funding local communities to work on complete streets policies and master bicycle and pedestrian plans. Grantees educated community leaders and collaborated with city planners and transportation officials, resulting in 15 counties adopting new policies to improve physical activity access. Some efforts included improving master bike or pedestrian plans, walk- or bike-to-school plans, and master trail plans.^{vi}

The **Washington** State Department of Health supported community organizations in implementing the Healthy Eating Active Living (HEAL) program, which focuses on building healthy communities through policy, system, and environmental improvements. The health department worked with the state transportation agency to provide technical assistance and training to 21 cities, two counties, and one tribe who were interested in improving safety and promoting physical activity. This resulted in increased physical activity opportunities for 70,000 residents in 12 cities, one county, and one tribe that established complete streets with the help of HEAL.^{vii}

Engaged Individuals

Raise public awareness of how to prevent and manage diabetes.

States may consider the following strategies to engage and raise awareness among patients and their support systems:

- Increase diabetes knowledge among patients and caregivers to improve diabetes self-management behaviors and related health outcomes through education programs and provider interactions.
- Use targeted education and marketing campaigns to build support and improve the public’s understanding of diabetes prevention, early detection, and treatment methods.
- Increase the availability and utilization of sustainable, evidence-based diabetes and chronic disease self-management education.
- Educate prediabetic patients about the potential risks to their health and available resources for further education and health behavior change.
- Provide consumers with easy access to information to make healthy food choices.

State Examples:

The **Colorado** Department of Public Health and Environment initiated a prediabetes awareness campaign through 15- and 30-second TV spots, social media postings, and a [prediabetes section](#) on the CBS4 Denver website. Targeted in Denver, Colorado Springs, Grand Junction, and surrounding areas, the campaign included information about risk factors for prediabetes, the evidence-based lifestyle change program, and the American Diabetes Association's hotline (1-800-DIABETES).^{viii}

The **New York** Diabetes Prevention and Control Program created diabetes prevention awareness toolkits with the help of a contractor to increase awareness of prediabetes and introduce and promote referrals to the evidence-based lifestyle change program. The toolkits included information on prediabetes, the benefits of diabetes prevention, and how to enroll in the evidence-based lifestyle change program, and were disseminated to health systems, healthcare providers, community organizations, and employers.^{ix}

Complementary Sectors and Partners

Encourage public and private partners to be actively involved in communities to assure diabetes priorities are addressed.

States may consider the following strategies to foster leadership-led partnerships across public health, healthcare, payers, and communities to share successful strategies, leverage other statewide initiatives, and gain policymakers' support.

- Help partners see their role in implementing strategies outlined in the state's diabetes action plan.
- Partner with other organizations and local health departments to share goals and strategies for preventing, identifying, and controlling diabetes.
- Encourage employers and employees to seek care from provider groups recognized by the NCQA.
- Support existing state health promotion plans, coalitions, and partnerships related to diabetes prevention and control.
- Increase stakeholder involvement in policymaking that pertains to diabetes.

State Example:

In **Washington State** Department of Health provides support for a public-private partnership that uses evidence-based strategies to reduce deaths from heart disease, diabetes, and obesity. Public health specialists supported by the department work with major employers, healthcare systems, public agencies, communities, schools, and childcare providers to implement and evaluate the evidence-based strategies. Examples of success include 1,859 adults with prediabetes or at high risk for Type 2 diabetes becoming enrolled in one of the state's 23 CDC-recognized DPPs, and 113 clinics and hospitals getting approved for Medicaid reimbursement of the diabetes self-management education program, which is a benefit that Washington state's Medicaid plan covers for over 118,000 enrollees with diabetes.^x

Financing

Expand coverage for preventive services and integration efforts.

States may consider the following strategies to expand coverage for preventive services and care management, while considering alternative funding mechanisms to sustain efforts.

- Partner with payers to incentivize healthcare providers to follow nationally recognized treatment standards for diabetes.
- Support reimbursement for and expanded access to diabetes self-management supplies and services, as well as chronic disease self-management education; assure continued access to diabetes self-management education and preventive services under the state Medicaid program.
- Increase insurance or other reimbursement coverage, availability, and use of the evidence-based lifestyle change programs recognized by the National DPP.
- Dedicate significant funding to obesity prevention and education efforts in communities throughout the state.

State Examples

The **California** Department of Public Health, as part of its action plan to scale-up and sustain the National DPP, partnered with the California Public Employees Retirement System (CalPERS) to discuss adding the DPP as a benefit for state employees and their dependents. All CalPERS health plans offer the CDC-recognized DPP at no cost to eligible members as of January 2017, a plan that covers more than 1.4 million members and their families.^{xi}

The **Washington** State Department of Health has convened the Diabetes Network Leadership Team since 2004, with partners from YMCAs (which established DPPs starting in 2009), Washington State University Extension, and the Public Employees Benefits Board (PEBB). The partnership has led to changes in insurance coverage for diabetes prevention. In January 2014, PEBB beneficiaries began receiving coverage for the National DPP. As of January 2016, over 200,000 PEBB members met the criteria for this benefit coverage, and an estimated 80,000 of these members who have prediabetes and meet body mass criteria can take advantage of this benefit.^{xii}

Case Studies

The following recommendations are summarized from case studies highlighting successful integration efforts between state health agencies and their healthcare partners to address diabetes prevention and management. They are intended to help other states implement similar approaches. The full case studies are available on the [ASTHO Diabetes website](#).

North Dakota

North Dakota's network of public health, healthcare, payer, business, and community partners is implementing several approaches to reduce the burden of diabetes across the state that strengthen chronic disease prevention infrastructure, standardize diabetes care, improve patient follow-up, expand access to self-management resources, and align reimbursement with quality care. The purpose of this case study is to describe key levers the state has focused on to strengthen systems for diabetes prevention and control.

Summary of Recommendations from North Dakota:

- Strengthen the prevention infrastructure in worksites, healthcare systems, and communities.
- Increase access and referrals to accredited and recognized diabetes self-management education programs.
- Drive guideline-based diabetes care across the state.
- Assess health systems to identify opportunities for clinical quality improvement and to increase the use of data to identify individuals with diabetes.
- Expand access to diabetes care in rural areas through telehealth.
- Align payment with care management and quality of care.

Oregon

As part of Oregon's approach to reduce the burden of obesity, diabetes, and other chronic diseases, the state has developed and incentivized new healthcare delivery systems such as coordinated care organizations, shifted state-provided insurance programs to value-based payment methods, and funded the development of closed-loop referral systems to evidence-based self-management programs.

Summary of Recommendations from Oregon:

- Incentivize population and personal health targets.
- Use data to improve identification of undiagnosed or high-risk groups, quality of care, and patient follow-up.
- Test payment models for self-management programs.
- Establish closed-loop referral pathways and promote evidence-based chronic disease self-management programs.
- Recommend policies to improve diabetes prevention and treatment.

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Appendix: Resources for State Health Agencies and Healthcare Partners to Support Diabetes Prevention and Control

Many of the following tools and resources were discussed during the advisory roundtable hosted by ASTHO in August 2016 on the role of public health in supporting state systems to improve diabetes prevention and control. This list is not intended to be comprehensive and does not include state resources already described elsewhere in this document. ASTHO and its national and state partners will continue to update these resources on the ASTHO Diabetes website. Please send any recommendations to chronicdisease@astho.org. You can also find resources through NACDD's [Domain 4 website](#).

Evidence-Based Programs

[Living Well Toolkit](#) was provided by Oregon Public Health and is intended to help start *Living Well* programs with three sections: marketing to partners, marketing to participants, and financial sustainability.

[Improving Type 2 Diabetes Therapy Adherence and Persistence Around the World: July 2016](#) examines the burden of Type 2 diabetes and its complications the U.S. Medicare population, national initiatives to address this issue, and opportunities in relation to therapy adherence and persistence improvement strategies.

[Approaches to Promoting Referrals to Diabetes Self-Management Education and CDC-Recognized Diabetes Prevention Program Sites](#) describes the approaches of four states and one city to increase referrals to DSME programs and CDC-recognized DPP sites operating under the framework of the National DPP.

[Approaches to Increasing Access to and Participation in Diabetes Self-Management Education](#) describes the work of three states to increase access to and participation in DSME through targeted outreach, partnership, technical assistance, grant opportunities, and reimbursement initiatives.

Community-Level Resources

[Health Equity Key in Texas Diabetes Interventions](#) from ASTHO gives an overview of Texas's ways of combating disparate diabetes rates through a systems approach and community outreach. These systems approaches cross geographic and ethnic lines.

[Pathways to Diabetes Prevention](#) from NACCD contains three short case studies that highlight how organizations in Colorado created innovative referral systems to help individuals with diabetes.

Engaged Individuals

[Do I have prediabetes?](#) Is a one-minute quiz that can help individuals determine whether they may have prediabetes. The website also has tips, FAQs, and help to find a DPP.

[Approaches Taken by State and Local Health Departments to Market the National Diabetes Prevention Program to Populations at Risk and Healthcare Providers](#) highlights examples from three states and two counties that have done significant work to market the National DPP to populations at risk for Type 2 diabetes and to healthcare providers.

Complementary Sectors and Partners

[Working Together to Manage Diabetes: A Guide for Pharmacy, Podiatry, Optometry, and Dentistry](#) from CDC is intended to show how

practitioners in these four disciplines can work collaboratively to prevent and treat diabetes.

Policy Change

[Got Diabetes? There's a Plan for That](#) is from the Council of State Governments and provides an overview of what diabetes action plan legislation is, and the goals of passing this type of legislation.

Data-Driven Action

[Does Telemedicine Improve Treatment Outcomes for Diabetes? A Meta-Analysis of Results from 55 Randomized Controlled Trials](#) assesses the overall effect of telemedicine on diabetes management through a meta-analysis of 55 diabetes RCT's examining differences in the mean difference in HbA1c between patients receiving telemedicine and conventional treatments.

Financing

[Montana Diabetes Prevention Program](#) from ASTHO discusses how Montana secured

Medicaid reimbursement for chronic disease prevention services through a state plan amendment.

[Approaches to Employer Coverage of the National Diabetes Prevention Program for Employees at Risk for Type 2 Diabetes](#) tells the stories of five employers offering the National DPP's lifestyle change program as a covered health or wellness benefit for their employees and discusses the varied approaches, challenges, and key factors contributing to their success.

[Promoting the National Diabetes Prevention Program as a Covered Benefit for State Employees](#) describes the experiences of three states—Kentucky, Minnesota, and Washington—whose health departments have collaborated with state employee benefit agencies, health plans, CDC-recognized DPPs, and other partners to make the benefits of the National DPP more available to state employees and their families.

Advisory Roundtable on the Role of Public Health to Promote Diabetes Prevention and Control – August 19, 2016

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