

**APPROACHES TAKEN BY
STATE AND LOCAL HEALTH DEPARTMENTS
TO MARKET THE
NATIONAL DIABETES PREVENTION PROGRAM
TO POPULATIONS AT RISK AND
HEALTH CARE PROVIDERS**

September, 2016



TABLE OF CONTENTS

- Overview..... 1**
- California 2**
 - Background 2
 - Partners..... 3
 - Marketing and Communication Strategies..... 4
 - Social Media Strategies..... 5
 - Costs..... 5
 - Recommendations 5
 - Summary 6
- Montana 6**
 - Background 6
 - Marketing and Communication Strategy..... 6
 - Partners..... 7
 - How Success Is Measured 7
 - Challenges 7
 - Facilitators..... 8
 - Costs..... 8
 - Summary 9
- New Mexico 9**
 - Background 9
 - Partners and Planning Phase 9
 - Health Care Providers and Referral Systems 10
 - Challenges and Facilitators 10
 - Summary 10
- References 11**

Website addresses of nonfederal organizations are provided solely as a service to readers. Provision of an address does not constitute an endorsement of this organization by CDC or the federal government, and none should be inferred. CDC is not responsible for the content of other organizations' web pages.

APPROACHES TAKEN BY STATE AND LOCAL HEALTH DEPARTMENTS TO MARKET THE NATIONAL DIABETES PREVENTION PROGRAM TO POPULATIONS AT RISK AND HEALTH CARE PROVIDERS

Overview

In 2010, Congress authorized the Centers for Disease Control and Prevention (CDC) to establish and lead the National Diabetes Prevention Program (National DPP). The National DPP is a results-driven partnership of public and private organizations that provides a framework for national type 2 diabetes prevention efforts, including building an infrastructure for the delivery of an evidence-based lifestyle change program for people with prediabetes or at high risk for type 2 diabetes. This program has been proven effective in preventing or delaying onset of type 2 diabetes.¹⁻³

The National DPP has four components: (1) training the workforce; (2) developing intervention sites; (3) ensuring the quality of programs offered by the intervention sites through the Diabetes Prevention Recognition Program (DPRP); and (4) health marketing to ensure referrals, increase coverage, and facilitate program uptake. As of August, 2016, there were more than 1,000 in-person and virtual organizations in the DPRP registry that had enrolled at total of more than 84,000 participants. Coverage for CDC-recognized diabetes prevention programs as a health benefit is expanding. As of August, 2016, 11 states were covering the program for more than 3 million public employees and dependents, and more than 60 employers and insurers were covering the program in various markets.

Over the past 4 years, CDC has funded state and city health departments through State Public Health Actions to Prevent and Control Diabetes, Heart Disease, Obesity and Associated Risk

A CASE Framework for Preventing Type 2 Diabetes*

1. **Awareness**—Increasing public and clinician awareness of prediabetes and the diabetes epidemic.
2. **Coverage**—Ensuring that participation in CDC-recognized diabetes prevention programs is included in the health benefits package of public and private health insurance firms and large employers.
3. **Availability**—Ensuring that there are enough CDC-recognized diabetes prevention programs to meet local needs.
4. **Screening**—Increasing clinician screening, detection, and referral of individuals with prediabetes to CDC-recognized diabetes prevention programs, and building bidirectional communication.
5. **Enrollment**—Ensuring high rates of enrollment and participation by individuals with prediabetes in CDC-recognized diabetes prevention programs.

*Developed by CDC/AMA to guide their collaboration and used by the 1212/1305/1422 grantees as a basis for state partner engagement meetings and state strategic plans to scale and sustain the National DPP.

Factors and Promote School Health (CDC-RFA-DP13-1305, hereafter referred to as 1305) and State and Local Public Health Actions to Prevent Obesity, Diabetes, and Heart Disease and Stroke (CDC-RFA-DP14-1422, hereafter referred to as 1422). Their efforts are helping to efficiently and effectively reach the 86 million Americans at risk for type 2 diabetes. The goal of the *Emerging Practices in Diabetes* series is to summarize and share information on these approaches to inform the work of all National DPP partners and to increase the collective impact of these partners on the four components of the National DPP. This report describes 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 or health care providers.

California

Background

The primary goal of the California Department of Public Health's (CDPH) marketing and communication initiatives for type 2 diabetes prevention is to increase the number of people in California who are aware they have prediabetes. To this end, CDPH created a marketing and communication plan for its work on type 2 diabetes prevention. The plan includes amplification of the first-ever national public service campaign to raise awareness about prediabetes, which was launched in January, 2016 by the Ad Council in partnership with the American Diabetes Association (ADA), the American Medical Association (AMA), and CDC.

The CDPH marketing and communication plan is being managed by the communication lead for the 1305-funded program, *Prevention First*, and for the 1422-funded program, *Lifetime of Wellness*. CDPH is working in conjunction with 1305- and 1422-funded local health departments in California; Los Angeles and the City of San Diego, which are funded under 1422; and CDC-recognized diabetes prevention programs in California. Monthly meetings between CDPH and local grantees ensure programmatic consistency across different elements of the marketing and communication plan for diabetes prevention.

In coordination with *Lifetime of Wellness*, 1305- and 1422-funded local health departments, and the Prevent Diabetes STAT™: California 2016 (PDSTAT) network, CDPH uses Ad Council campaign messages and materials in its type 2 diabetes prevention marketing and communication efforts. These Ad Council campaign resources complement the messaging and campaign elements developed by CDPH and its partners at the local and community levels. The PDSTAT Community Engagement and Awareness Work Group assists in coordination of these local activities, focusing on developing materials, sharing resources (e.g., a social media toolkit, marketing materials, and templates), establishing a website, and maintaining ongoing communication and coordination for future promotions.

Due to budget constraints, CDPH did not undertake any assessment or market research activities before developing its marketing and communication plan, although this type of work was done by some of the collaborating local health departments.

Local Collaborators: San Diego County Health and Human Services Agency

Key goals of the San Diego County Health and Human Services Agency's (SDHHS) type 2 diabetes prevention marketing efforts are to raise public awareness of prediabetes and the National DPP, and to increase enrollment in CDC-recognized diabetes prevention programs in the City of San Diego. SDHHS assembled its first diabetes prevention workgroup in July 2015 and shared the goals of its marketing and communication plan with this group of stakeholders. The group helped focus on local work in progress in type 2 diabetes prevention and related areas, and provided guidance on cultural sensitivity given the many diverse communities in San Diego County. (More than 50 languages are spoken within the county.) In October 2015, SDHHS developed a prediabetes awareness plan, and in December 2015 it completed an environmental scan to understand the community context and prioritize target audiences. SDHHS's target populations include Latino and African American communities and the economically disadvantaged.

The SDHHS marketing campaign aims to educate all its constituents, even those who do not have the opportunity to enroll in a CDC-recognized diabetes prevention program. In addition to prediabetes awareness messaging, broader educational messaging will emphasize lifestyle change. For example, a lifestyle change educational message might encourage "eating your vegetables." SDHHS chose this multipronged messaging approach in part because of the limited number of in-person CDC-recognized diabetes prevention programs currently serving the City of San Diego.

SDHHS launched its local marketing and communication plan for type 2 diabetes prevention in August, 2016. The launch included radio spots, mailers to targeted San Diego ZIP codes, a Facebook ad, and the introduction of SDHHS's local type 2 diabetes prevention website (<http://www.healthyworks.org/preventdiabetesd>). SDHHS leveraged earned media opportunities and promoted success stories from local CDC-recognized diabetes prevention programs. SDHHS's local website provides diabetes awareness resources, including prominent links to Ad Council campaign content, PDSTAT content, and information about the National DPP. A social media toolkit is in final development stages and will be distributed to key partners and stakeholders in the fall of 2016. While they were still developing and finalizing the media and communications plan, SDHHS supported placement of Ad Council radio spots using earned media for Diabetes Alert Day activities in March, 2016. This early opportunity was possible through a partnership with CBS radio, the Diabetes Coalition of California, and ADA.

Local Collaborators: Los Angeles County Department of Public Health

The overall goal for the Los Angeles County Department of Public Health (LADPH) in this effort is to increase public awareness of prediabetes and screening of those at risk in Los Angeles County. The LADPH marketing and communication plan targets three different groups: (1) the general public; (2) providers (CDC-recognized diabetes prevention program providers, health care providers, and health system leadership); and (3) health plans.

Partners

Aside from CDPH's partnerships with LADPH, SDHHS, and other local health departments, CDPH's marketing and communication efforts for type 2 diabetes prevention have also benefited

from input by Healthy Hearts California, an alliance of stakeholders dedicated to reducing the risk and prevalence of heart disease and stroke among all Californians. CDPH also coordinates with the American Heart Association (AHA) and promotes its messages on social media where appropriate.

CDPH, LADPH, and SDHSA all work with the Diabetes Coalition of California, which is composed of individuals and agencies dedicated to the prevention, recognition, and reduction of the adverse impact of diabetes in the state's diverse communities. Coalition members include representatives from the general public; local health departments; universities; insurance and pharmaceutical companies; and a variety of community-based, volunteer, health, and professional organizations.

SDHSA's marketing and communication work has been facilitated by key local partnerships, including work with *Live Well San Diego*. *Live Well San Diego* began in 2010 as a health strategy, and later developed into a vision to improve the health, safety, and well-being of all county residents. *Live Well San Diego* has a very well-branded communication element and provides a countywide strategic vision and operational platform. SDHSA has also taken advantage of diabetes-specific resources through partnerships with the local ADA office and has used cultural insights and resources from CDC.

Marketing and Communication Strategies

The primary target audience for CDPH's marketing and communication plan for type 2 diabetes prevention is the consumer patient population. CDPH has reached out to this target audience through social media and health fairs, by posting materials in patient waiting rooms, and sending e-mail blasts to state employees. In addition, CDPH provides links to the CDC's National DPP resources and to the DolHavePrediabetes.org website in its online marketing and communication efforts.

Beyond targeting the consumer patient population, CDPH created presentations for local health departments to share with local health care providers, CDC-recognized diabetes prevention programs, and other community partners. By including the CDPH logo on all slides in these presentations, CDPH has begun branding its type 2 diabetes prevention initiatives, while at the same time sharing resources from credible sources (e.g., AMA and CDC).

LADPH's marketing and communication efforts range from integrating public service announcements with other broader health marketing campaigns in the region, to promoting messages through social media, to providing resources for health care and CDC-recognized diabetes program providers. LADPH also spoke with health plan representatives about the National DPP, outlining how health plans could work with employers and others to offer the program as a covered health benefit. LADPH and CDPH believe that health plans will assume more of a role in marketing and promotion of the program, once they begin to offer coverage.

SDHSA used nationally available resources to inform the development of local materials where needed. Beyond aligning with and supporting the Ad Council campaign, SDHSA has

contracted with the media services contractor Civilian Inc. for assistance with the professional design of materials and the placement of media buys targeting priority populations.

SDHHSAs locally tailored materials are intended to connect the Ad Council campaign with San Diego County's *Live Well San Diego* brand. SDHHSAs has established Healthy Works as a brand for marketing and communication of type 2 diabetes prevention. Healthy Works is a program of *Live Well San Diego* and thus has social media channels in place that can be used for type 2 diabetes prevention. SDHHSAs also plans to have the marketing subcommittee of its diabetes prevention workgroup disseminate National DPP marketing materials through local community modalities. Local partners will tailor the materials to their populations (e.g., by adding their logos and swapping photos so that they reflect community members). To ensure a unified message, SDHHSAs is requiring that all CDC-recognized diabetes prevention programs promote their programs as part of the National DPP. The overarching campaign themes created by SDHHSAs are "Reverse your Risk" and "*Reduzca su Riesgo*" ("reduce your risk" in Spanish).

SDHHSAs also plans to use random-digit dialing surveys to evaluate the marketing and communication plan's effectiveness in raising public awareness. SDHHSAs is using focus groups composed of representatives of priority populations to test messages and evaluate local material development.

Social Media Strategies

To implement a social media presence that engages the general public, CDPH created a series of messages to direct public attention to type 2 diabetes prevention, National DPP efforts, and Ad Council campaign resources. As one example, CDPH developed a social media campaign to promote the DolHavePrediabetes.org website. In addition, CDPH utilized campaign elements (e.g., advertisements on television, images, and messages) during themed promotions such as Diabetes Alert Day on March 22, 2016; Diabetes Awareness Month (November); and CDPH's HealthierU (worksite wellness) promotions.

CDPH has not received permission from the Office of Public Affairs to have its own type 2 diabetes prevention Facebook page, because it is not yet a California brand. CDPH is working with the Office of Public Affairs to gain its support for a California-specific type 2 diabetes prevention social media campaign. CDPH is also in the process of creating a brand for the program.

Costs

Major costs associated with type 2 diabetes prevention marketing and communication work at CDPH and LADPH included staff time, printing, and production of promotional materials. SDHHSAs costs were primarily associated with tailoring messages to local audiences and printing marketing materials, but also included staff time.

Recommendations

CDPH and LADPH recommend that grantees planning or implementing similar work engage other grantees to discuss marketing and communication strategies for type 2 diabetes

prevention, including amplification of the Ad Council's prediabetes awareness campaign. SDHSA recommends that those planning diabetes prevention marketing work utilize available local, state, and national resources. They also recommend gathering as many testimonials as possible, since this type of media content generally can be obtained free of charge.

Summary

In California, the state health department and the local health departments of San Diego County and Los Angeles County have found that forging partnerships at the national, state, and local levels has been key to the success of their marketing and communication efforts for type 2 diabetes prevention, which are aimed at increasing both public awareness of prediabetes and enrollment in CDC-recognized diabetes prevention programs across the state.

Montana

Background

In its marketing and communication initiatives for type 2 diabetes prevention, the Montana Department of Public Health and Human Services (MT DPHHS) has focused on outreach to Medicaid beneficiaries and other underserved populations, and to providers and other health care professionals. The objectives of MT DPHHS' marketing efforts are to raise awareness of prediabetes and the National DPP among Medicaid beneficiaries in Montana and to encourage them to enroll in CDC-recognized diabetes prevention programs offered locally.

Marketing and Communication Strategy

MT DPHHS contracted with a call center that conducted telephone outreach to the Medicaid population using scripts developed by MT DPHHS. They adapted the targeted telephone outreach approach used by the Texas Department of State Health Services' Wellness Incentives and Navigation program. MT DPHHS followed up with additional outreach through letters and brochures. MT DPHHS tailored the language of the scripts, letters, and brochures to the Medicaid population for health literacy and numeracy, with input from expert reviewers and a focus group of Medicaid beneficiaries.

MT DPHHS leveraged National DPP and Prevent Diabetes STAT™ resources and the Ad Council's national prediabetes awareness campaign by sharing these materials and messages with lifestyle coaches, members of the Montana Diabetes Advisory Coalition, health care providers, and other partners. MT DPHHS also produced brochures targeted to health care providers and the general population about implementation of the National DPP in Montana; video clips featuring National DPP participants in Montana, which are aired on television and posted online; and the website dphhs.mt.gov/publichealth/Diabetes/DPP, which includes information about CDC-recognized diabetes prevention programs in Montana.

In 2014, MT DPHHS started to focus on men as an underserved target audience, since most of the CDC-recognized diabetes prevention program participants in Montana were women. MT DPHHS worked with a marketing agency to film a Montana man who told the story of talking to his health care provider about prediabetes and later enrolling in a CDC-recognized diabetes prevention

program. In 2015, MT DPHHS followed up on this success story video by filming the stories of Montana couples who participated in CDC-recognized diabetes prevention programs. These stories showed how men could be involved, both as participants and as spouses supporting their partners, and MT DPHHS shared the videos through earned and paid media.

Partners

To film the success stories, MT DPHHS modified an existing contract that Montana's Chronic Disease Prevention & Health Promotion Bureau had in place with the Asher Agency to include type 2 diabetes prevention marketing. The Asher Agency had subcontracts with the Lyons Group, a local organization in Helena. The Asher Agency developed a communication plan founded on branding.

MT DPHHS staff working on marketing and communication initiatives for type 2 diabetes prevention also had an opportunity to work with the leadership of the MT DPHHS initiative *Health in the 406* (406 is the statewide telephone area code in Montana). *Health in the 406* is intended to promote the various chronic disease prevention and management programs supported by MT DPHHS through messaging and information sharing. The initiative launched in January, 2016, and MT DPHHS and *Health in the 406* plan to include prediabetes messaging in October, 2016.

How Success Is Measured

MT DPHHS measures the success of its marketing and communication plan for type 2 diabetes prevention by tracking the numbers of people referred and enrolled in CDC-recognized diabetes prevention programs. It also maps where referrals are occurring in the state. MT DPHHS collects this information using its online data system, Prevention Access Web System (PAWS), which is an upgrade from the former Access database, Primary Prevention Software. PAWS collects information on the number of individuals participating in CDC-recognized diabetes prevention programs in the state and the sources of their referral. Program delivery organizations are provided access to PAWS free of charge to collect program data, and they can also submit their data reports to the CDC DPRP using this database.

In its outreach to Medicaid beneficiaries, MT DPHHS has used PAWS to collect Medicaid-specific information through a project funded by the Centers for Medicare & Medicaid Services, Medicaid Incentives for the Prevention of Chronic Diseases. MT DPHHS has documented how many people (health care providers and beneficiaries) have been contacted by mail and phone outreach and how many beneficiaries have shown interest from the targeted phone outreach and enrolled in a CDC-recognized diabetes prevention program based on their Medicaid ID numbers. MT DPHHS will be analyzing these data to determine which marketing and communication strategies are most effective.

Challenges

Until June, 2016, MT DPHHS did not have anyone on its staff dedicated to marketing and communication. MT DPHHS now has a full-time employee who serves as a subject matter expert on marketing for all programs in the Chronic Disease Prevention and Health Promotion Bureau of

MT DPHHS, including the Montana Diabetes Program. This expert will focus on messaging and developing a communication plan for all chronic disease programs in the bureau.

MT DPHHS has monitored participation in type 2 diabetes prevention programs in Montana for several years, and has seen much success, meeting or exceeding enrollment goals. However, recruitment of the Medicaid population has proven challenging, with enrollment amounting to less than 50% of the goal. According to a survey of lifestyle coaches, barriers to program participation seem to include addictions, mental health problems, unsupportive home environments, lack of transportation, curriculum complexity, and difficulty carrying out programmatic requirements (e.g., keeping track of food intake). MT DPHHS has been addressing these challenges by conducting training on disability and health, assessing public health programs and fitness centers for accessibility, and conducting motivational interviewing. Additionally, Medicaid provided alternative food journaling methods and transportation services.

Facilitators

Facilitators of National DPP marketing and communication work by MT DPHHS include state legislative support in the form of funding to support CDC-recognized diabetes prevention program delivery and outreach. Another facilitator is the marketing and communication work conducted by lifestyle coaches at the local level. In addition, the breaking down of barriers among chronic disease programs within MT DPHHS aids in the sharing and leveraging of resources.

MT DPHHS has used state funding (Tobacco Master Settlement Agreement dollars) and some Public Health Block Grant funding to support local organizations delivering CDC-recognized diabetes prevention programs. This includes funding all aspects of diabetes prevention program delivery (lifestyle coach time, room reservations, materials, labs, marketing, participant incentives such as nutrition or fitness items and gym memberships, and indirect costs). Local organizations may also use other sources of funding to support classes. These funds can include hospital community benefit funds, in-kind support from their organization, health benefit coverage from employers, reimbursement from insurers (such as Montana Medicaid), and participant fees. 1305 funds are used to support state staff salaries (primary investigator/supervisor, office manager, program manager, health educator, epidemiologist), the purchase of media to air advertisements on television for marketing, the design and printing of brochures, travel for state staff and lifestyle coaches for site visits and continuing education, and PAWS.

Costs

Costs of MT DPHHS's marketing and communication plan for type 2 diabetes prevention include funding provided by MT DPHHS to local CDC-recognized diabetes prevention program delivery organizations to implement their own marketing strategies. Local marketing strategies are supported by State of Montana funding. In addition, MT DPHHS uses 1305 funding to print general brochures which are distributed to partners statewide.

The most expensive budget item has been the cost of paid media. The purpose of paid media is to promote success stories of Montanans who had participated in CDC-recognized diabetes

prevention programs. From 2011 to 2015, MT DPHHS endeavored to reach target audiences by representing them in its video clips—women with a history of gestational diabetes, people in rural areas who participated via telehealth, men, and couples. MT DPHHS produced the videos in July 2015, edited them, and then aired them in November 2015 through early January, 2016. Thus, these videos were produced and aired before the Ad Council campaign was released on January 21, 2016; this paid media was supported with State of Montana funding.

Summary

The primary target audiences for MT DPHHS' marketing and communication plan for type 2 diabetes prevention are Medicaid beneficiaries and other underserved populations, and providers and other health care professionals in Montana. MT DPHHS' success in reaching these audiences has entailed key partnerships with marketing agencies, local CDC-recognized diabetes prevention programs, and CDC.

New Mexico

Background

The New Mexico Department of Health (NMDH) started to build support for National DPP implementation in New Mexico in 2011 by organizing a meeting to launch NMDH's marketing and communication plan for type 2 diabetes prevention. The meeting turned out to be very successful, with participation by the New Mexico Diabetes Advisory Council (NMDAC) and panelists including representatives from CDC, United Health Care, and local diabetes prevention program delivery organizations in New Mexico.

In 2012, New Mexico was one of eight states supported by the National Association of Chronic Disease Directors, with funding from CDC, to work on scaling and sustaining the National DPP. Part of that early work was devoted to creating marketing materials and a communication plan. At that time, no marketing materials were available at the national level. To develop materials, New Mexico contracted with McKee Wallwork + Company. The marketing agency brought together stakeholders to develop a basic communication plan.

Partners and Planning Phase

NMDH is currently contracting with the marketing agency CWA Strategic Communications (CWA). CWA has worked extensively with the Chronic Disease Prevention and Control Bureau of NMDH in other disease areas. Much of CWA's work is in social marketing, where it engages target audiences through focus groups and interviews. CWA is using some of the elements of the original communication plan established by the previous marketing agency and implementing new elements. For example, there is now more emphasis on social marketing. Together with CWA, NMDH plans to test Ad Council campaign resources with focus groups in 2017 to see how consumers in New Mexico respond.

Another key partner is NMDAC, which has been very engaged in NMDH's marketing and communication plan for type 2 diabetes prevention. NMDAC has provided a venue for both soliciting and sharing information about NMDH's diabetes prevention marketing efforts. NMDH

has held several meetings to educate, inform, and seek input from its NMDAC members on marketing and promotion over the last few years. NMDH is also working to integrate New Mexico's regional public health offices as partners in its diabetes prevention marketing and communication efforts.

In 2015, NMDH conducted in-depth interviews with lifestyle coaches to discuss barriers and facilitators with respect to program start-up, participant recruitment, and participant retention. NMDH is planning to conduct focus groups to help guide its marketing and communication plan for type 2 diabetes prevention. Focus groups will be composed of CDC-recognized diabetes prevention program providers, certified diabetes educators, lifestyle coaches, and community health workers, as well as high-level leadership/management staff within managed care organizations, health care systems, and other organizations.

NMDH is actively engaged in developing a brand to promote the National DPP in New Mexico. In May, 2016, a CWA representative facilitated a meeting among NMDH diabetes staff, National DPP master trainers, and others. Attendees agreed that focus on the Medicare population should be a priority, given that the Centers for Medicare & Medicaid Services (CMS) announced a proposal to expand the National DPP model to Medicare beneficiaries beginning in January, 2018.

As of June, 2016, foundational efforts for social marketing were underway, with focus groups being held in four areas of the state, and NMDH was awaiting branding recommendations. NMDH's goal is to have a brand in place by early 2017. After brand development, NMDH will create messaging that ensures consistency and target audience engagement.

Health Care Providers and Referral System

In addition to the target audiences previously described, NMDH has focused on health care providers, because they are key to promoting patient referrals. In 2011, NMDH developed a prediabetes online continuing medical education course and originally promoted it through New Mexico medical associations and other organizations. In 2016, NMDH decided not to update the course. Instead, NMDH will use AMA's and CDC's Prevent Diabetes STAT™ resources to educate providers about prediabetes and the National DPP.

Challenges and Facilitators

The major challenge encountered by NMDH in developing its marketing and communication plan for type 2 diabetes prevention has been limited financial resources. The small size of the public health community in New Mexico has facilitated strong networks, which has helped leverage knowledge and resources within the existing financial constraints.

Summary

NMDH's success in its marketing and communication efforts for type 2 diabetes prevention was made possible in part by forging key partnerships with organizations such as the marketing agency CWA. NMDH is now actively engaged in developing a brand to promote the National

DPP in New Mexico. Brand development will be followed by work on consistent messaging and Medicare target audience engagement.

References

1. Diabetes Prevention Program Research Group. Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin. *N Engl J Med.* 2002;346(6):393-403.
2. Diabetes Prevention Program Research Group. 10-year follow-up of diabetes incidence and weight loss in the Diabetes Prevention Program Outcomes Study. *Lancet.* 2009;374(9702):1677-1686.
3. Diabetes Prevention Program Research Group. Long-term effects of lifestyle intervention or metformin on diabetes development and microvascular complications over 15-year follow-up: the Diabetes Prevention Program Outcomes Study. *Lancet Diabetes Endocrinol.* 2015;3(11):866-875.