



Rx for the National Diabetes Prevention Program

Action Guide for
Community Pharmacists

For more information about prediabetes and the National Diabetes Prevention Program, visit the [National Diabetes Prevention Program](#) website.

This publication can be downloaded at www.cdc.gov/diabetes/prevention/pdf/pharmacists-guide.pdf

Acknowledgments

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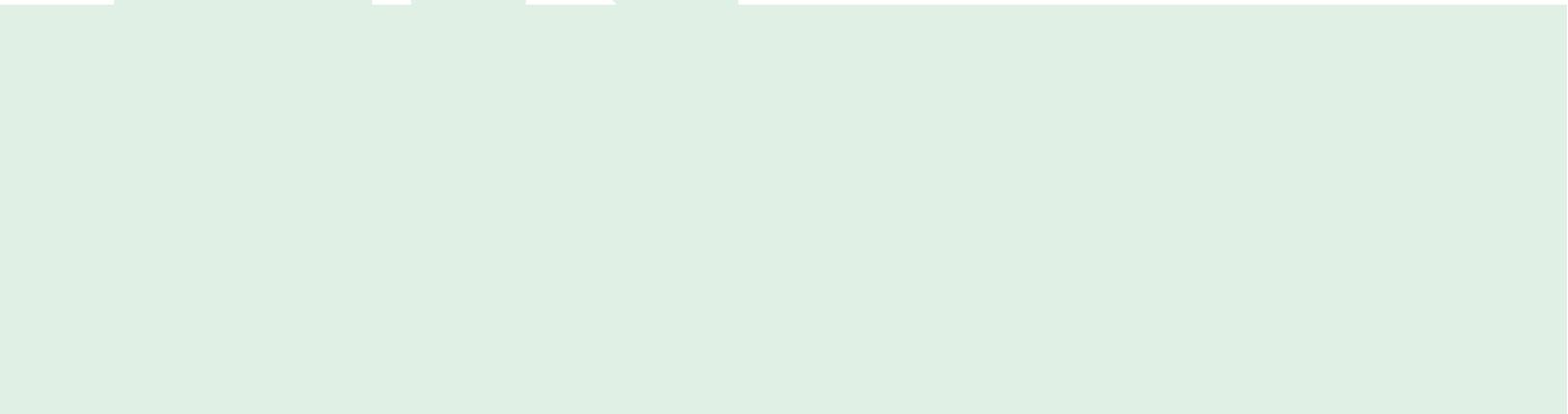


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Rx



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ABOUT THIS GUIDE

Who Should Use This Guide?

This guide is designed to help community pharmacists and members of the pharmacy workforce—including pharmacy technicians, residents, and students—reach people at high risk of developing type 2 diabetes who could benefit from the **National Diabetes Prevention Program (National DPP) lifestyle change program**. You will learn how the **National DPP**, which is led by the Centers for Disease Control and Prevention (CDC), can be applied in the pharmacy setting to maximize the unique skills and abilities of the pharmacy workforce.

How Should This Guide Be Used?

The purpose of this guide is to help pharmacists prevent new cases of **type 2 diabetes** among patients at high risk by helping to expand the reach of the National DPP. It does not provide a comprehensive overview of the program, but this information is available on CDC's [National DPP website](#). Instead, this guide outlines ways that pharmacies can:

- Raise awareness of prediabetes and the National DPP among their patients at risk.
- Screen and test for prediabetes and refer people with prediabetes to a CDC-recognized lifestyle change program participating in the National DPP.
- Deliver the National DPP lifestyle change program.

This guide also provides tips, case studies of pharmacies that have already worked with the National DPP, and links to additional resources. Key terms and phrases related to the program are **highlighted in green** in the text throughout and defined in a glossary at the end.







ABOUT THE NATIONAL DIABETES PREVENTION PROGRAM

The CDC-led National DPP is a partnership of public and private organizations working together to build the infrastructure for nationwide delivery of an evidence-based lifestyle change program to prevent or delay the onset of type 2 diabetes in adults with prediabetes. The National DPP lifestyle change program is based on the science of the **Diabetes Prevention Program** research study and several studies that followed.

These studies showed that making modest behavior changes helped people with prediabetes lose 5% to 7% of their body weight and reduced their risk of developing type 2 diabetes by 58% (71% for people older than age 60). CDC's **Diabetes Prevention Recognition Program (DPRP)** is the quality assurance arm of the National DPP. Through DPRP, CDC recognizes organizations that meet national standards and achieve the outcomes proven to prevent or delay the onset of type 2 diabetes.

What Is Prediabetes?

Prediabetes is a health condition marked by blood glucose levels that are higher than normal but not high enough to be diagnosed as type 2 diabetes. More than 84 million American adults—or 1 in 3—are estimated to have prediabetes, and 9 in 10 people with prediabetes don't know they have it. Prediabetes can lead to heart disease and stroke, and without intervention, many people with prediabetes will go on to develop type 2 diabetes.

Prediabetes is defined by one of the following measures:

- Hemoglobin A1C of 5.7% to 6.4% **or**
- Fasting plasma glucose of 100 to 125 mg/dL **or**
- Plasma glucose measured 2 hours after a 75 gm glucose load of 140 to 199 mg/dL.

What Is the National DPP Lifestyle Change Program?

The National DPP lifestyle change program:

- Is a 1-year group program offered in person, online, or through a combination of both approaches. It consists of:
 - ▶ An initial 6-month phase with at least 16 weekly sessions offered over a period of 16 to 24 weeks.
 - ▶ A second 6-month phase with at least 1 session a month (minimum of 6 sessions).
- Is taught by a trained **lifestyle coach**.
- Uses a CDC-approved curriculum.
- Includes regular interactions between the lifestyle coach and participants.
- Focuses on behavior change to improve healthy eating, increase physical activity, and manage stress.
- Provides peer support.

More information on the program can be found on CDC's [National DPP website](#).



Why Should You Participate?

Since its establishment in 2010, the National DPP has relied on a variety of public and private partners—such as community organizations, private insurers, employers, health care organizations, faith-based organizations, and government agencies—to expand the program nationwide. Pharmacists can be valuable partners in this effort for the following reasons:

Pharmacists know preventive care. As a pharmacist, you deliver preventive health care services such as giving vaccinations, helping patients stop smoking and control their blood pressure, and delivering diabetes self-management education. The National DPP lifestyle change program aligns well with this service delivery model.

Pharmacists have frequent patient encounters. You are likely to have daily encounters with patients who have prediabetes but are unaware of their condition or the risks involved. As a pharmacist, you may also play a key role in reaching populations that are underserved because of a lack of clinical or community resources.

The entire pharmacy workforce can benefit. Getting involved in the National DPP provides opportunities for you—as well as pharmacy technicians, residents, and students—to apply clinical knowledge, use **motivational interviewing** techniques, and help prevent type 2 diabetes in patients at risk.

Pharmacies are an essential part of today's health care system.

Questions or Comments?

- For more information on the National DPP, visit the [National DPP website](#).
- For questions about the DPRP and becoming a CDC-recognized organization, visit the [Requirements for CDC Recognition](#) website or e-mail dprpask@cdc.gov.





HOW YOU CAN SUPPORT THE NATIONAL DPP

Pharmacists—and the pharmacies they work in—can join the many other public and private organizations that are working to support or deliver the National DPP lifestyle change program. By helping to expand the reach of the National DPP, pharmacists can prevent new cases of type 2 diabetes among their patients at high risk. All members of the pharmacy workforce can support these efforts by getting involved at one or more of the following levels:

Tier 1. Promote Awareness of Prediabetes and the National DPP Among Patients at Risk

Tier 2. Screen, Test, and Refer Patients

Tier 3. Offer the National DPP Lifestyle Change Program

Tier 1: Promote Awareness of Prediabetes and the National DPP Among Patients at Risk

Promoting awareness of prediabetes and the National DPP is a simple, low-cost first step you can take to get involved in type 2 diabetes prevention efforts. By taking advantage of foot traffic and waiting periods within the pharmacy, you have a unique opportunity to educate patients about prediabetes and the National DPP lifestyle change program.

For example, you can:

- [Increase your patient population's awareness of prediabetes](#). This often reversible condition affects more than 84 million US adults, most of whom do not know they have it. Help your patients understand how they can prevent prediabetes from developing into type 2 diabetes.
- [Increase your knowledge of the National DPP](#). This 1-year program was developed to prevent or delay the onset of type 2 diabetes in adults who have prediabetes or who are at high risk of developing type 2 diabetes.
- [Learn about the supporting evidence](#) for the National DPP.

Promotional Materials

CDC and its partners have developed many resources to promote awareness of prediabetes and the National DPP. These resources and promotional materials can be used within your pharmacy or patient care setting. This section provides links to these resources and suggestions on how to use them.

Print Materials

Print materials can be used in the pharmacy setting in the following ways:

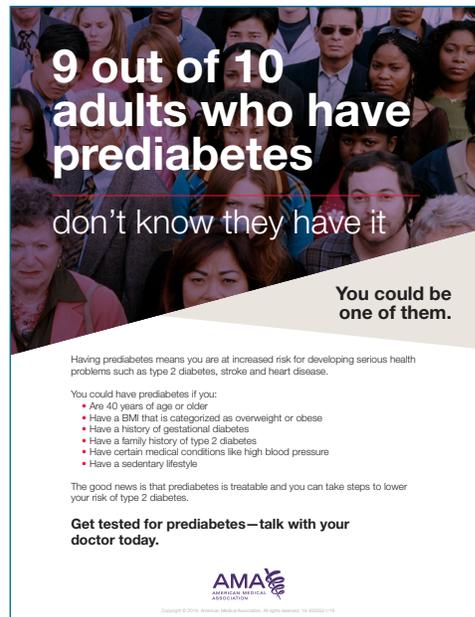
- Display on bulletin boards or walls.
- Give to patients who are picking up medications.
- Display brochures and handouts on counters and tables in waiting rooms or other areas with heavy foot traffic.
- Use flyers as “bag stuffers” when distributing medications.



AMA Promotional Materials

Health care teams can use materials developed by the American Medical Association (AMA) to help prevent type 2 diabetes by referring patients to an in-person or online CDC-recognized lifestyle change program. Several handouts are available on the [AMA Diabetes Prevention Toolkit](#) website, including:

- [“Prediabetes: Are you at risk?”](#) fact sheet
- [“So you have prediabetes...now what?”](#) fact sheet
- [“Promoting Prediabetes Awareness”](#) poster

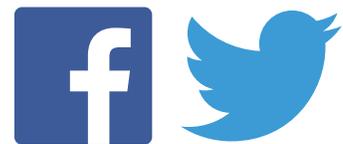


Digital Materials

Use digital platforms, such as televisions, computers, or tablets, within your pharmacy to display video content.

Social Media

Any of the promotional materials provided in this guide can be shared on social media to promote the National DPP. Consider posting these materials on special dates, such as Diabetes Alert Day® (4th Tuesday in March) or World Diabetes Day (November 14), or during Diabetes Awareness Month (November).



Follow CDC Diabetes on Twitter ([@CDCDiabetes](#)) and Facebook ([CDC Diabetes](#)) for diabetes-related updates and information. Consider retweeting or sharing these posts with your followers.

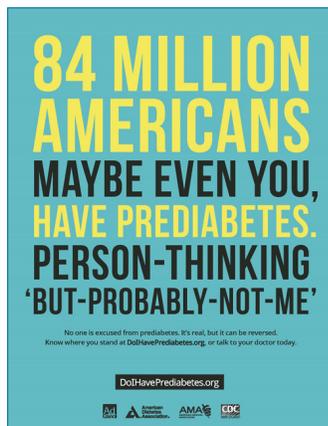


Promotional Campaigns

National Prediabetes Awareness Campaign

This campaign is a partnership between AMA, CDC, and the Ad Council. It features a humorous approach to a serious topic. Audience members are directed to an [interactive website](#) where they can learn about prediabetes and type 2 diabetes prevention. The campaign includes public service announcements (PSAs) in the form of posters that pharmacies can print and display or videos that can be embedded in digital newsletters, e-mails, and other online communication shared with customers and patients.

Pharmacies can also place PSAs in local media, but the Ad Council requires that all costs for media placement be donated. More information about the campaign and its materials can be accessed online on the [Type 2 Diabetes Prevention](#) website of the Ad Council's Digital PSA Library.



Your Health with Joan Lunden and CDC

CDC partnered with television network CBS on a campaign that features award-winning journalist Joan Lunden discussing prediabetes and diabetes in mini-interviews with leading CDC and medical experts. The interviews are presented in 2- to 3-minute segments on CBS television stations. The campaign also features 30-second spots that pharmacies can buy and customize with their own logo and call to action, including directing viewers to visit their website or call a phone number. Video segments can be placed on a pharmacy's website, on mobile devices using geofencing technology, or on televisions in doctors' offices.

To watch the segments, click on CDC's [Your Health with Joan Lunden and CDC](#) website. If your organization is interested in buying segments, e-mail John Patton at the National Association of Chronic Disease Directors at Jpatton@chronicdisease.org.



Tier 2: Screen, Test, and Refer Patients

To meet the eligibility requirements for the National DPP lifestyle change program, participants must have prediabetes or be at high risk of developing type 2 diabetes. Pharmacists can help determine eligibility by screening patients using a CDC-approved **risk assessment** test, administering a blood glucose test, or referring patients to their primary care provider for a blood glucose test. They can then refer eligible patients to a [CDC-recognized lifestyle change program](#).

Screen

Screening for prediabetes is the first step that pharmacists can take to determine if the National DPP lifestyle change program is appropriate for their patients. All pharmacists can add these screening tests to their workflow to start conversations with patients about risk factors and recommended next steps.

The [American Diabetes Association \(ADA\)/CDC Prediabetes Risk Test](#) can be completed online or [printed](#) and filled out by hand.

Test

A blood glucose test is another way to determine if a patient is at risk of developing type 2 diabetes. If you cannot offer a blood glucose test, refer patients with a high score on the paper or online risk assessment to a clinical partner or primary care provider for confirmatory blood glucose testing. Table 1 provides information about the tests used to identify prediabetes and the follow-up actions recommended depending on the results.



Tips for Screening Patients

- Use waiting time to administer the paper risk assessment.
- Consider giving the test verbally instead of giving patients a paper copy to fill out. This approach may help establish a connection with patients and make it easier to personalize your recommendations. The assessment test typically takes about 2 minutes to complete.
- It's better for participants to enroll in the National DPP on the basis of blood glucose test results. You should encourage a blood glucose test for any patient who scores high on the risk assessment.
- All adults can take a prediabetes risk assessment test. Patients who take medications or who have health conditions that may put them at higher risk of prediabetes should be given special consideration.
- Administer a blood glucose test to all patients who score high on the risk assessment, or refer them to a health care provider for blood glucose testing.



Table 1. Blood Glucose Tests Used to Identify Prediabetes and Recommended Follow-Up

Results	A1C Test	Fasting Plasma Glucose Test	Plasma Glucose Test 2 Hours After a 75 gm Glucose Load	Follow-Up Action
Normal	<5.7%	<100 mg/dL	<140 mg/dL	Encourage patient to maintain a healthy lifestyle.
Prediabetes	5.7%–6.4%	100–125 mg/dL*	140–199 mg/dL	Refer patient to a primary care provider and a CDC-recognized lifestyle change program.
Diabetes	≥6.5%	≥126 mg/dL	≥200 mg/dL	Refer patient to a primary care provider for confirmatory diagnosis, diabetes self-management education and support, and treatment if appropriate.

* The fasting plasma glucose requirement for Medicare Diabetes Prevention Program suppliers is 110–125 mg/dL.

Refer

When you screen patients with a risk assessment test and administer blood glucose testing, you will identify patients with prediabetes. Use this opportunity to apply elements of motivational interviewing, goal-setting, problem-solving, and cultural sensitivity to guide patients toward enrollment in a CDC-recognized lifestyle change program. In some cases, you may uncover new cases of diabetes. When this occurs, refer patients to a primary care physician for a confirmatory diagnosis and diabetes management services.

When patients are found to be at high risk of developing type 2 diabetes because of a risk assessment score or an elevated blood glucose level in the prediabetes range, refer them to both of the following:

- Primary care physician**
 Tell the patient’s primary care physician about screening or blood glucose test results so the diagnosis can be confirmed, documented, and managed. Refer patients to a nearby primary care physician if they do not already have one.
- CDC-recognized lifestyle change program**
 Establish relationships with one or more CDC-recognized lifestyle change programs nearby or online. Take time to understand their processes and policies so you can refer eligible patients to a program. To find a CDC-recognized lifestyle change program near you, go to the National DPP’s [Find a Class Location Near You](#) website to find programs delivered in your area. Go to the National DPP’s [Find an Online Program](#) website to find a list of online programs.

Program Costs

If you refer a patient to a program, they may ask about the cost. There is no fixed cost for the National DPP lifestyle change program. Costs depend on the organization offering the program. Some programs are free, while others charge a fee. Some employers and insurance carriers offer the program as a covered health or wellness benefit. You can recommend that your patients contact their employer or insurance provider to find out if they cover this type of program.

Who Is Eligible to Enroll in the National DPP Lifestyle Change Program?

CDC-recognized organizations can accept referrals based on the results of a risk assessment alone. However, eligibility may vary according to the individual program or the policies of the payers, as well as by whether the organization is a **Medicare Diabetes Prevention Program (MDPP)** supplier. The **Centers for Medicare & Medicaid Services (CMS)** requires blood glucose testing for the MDPP. Participant eligibility and enrollment requirements for MDPP suppliers are highlighted throughout this section. For more information about MDPP, visit the [Medicare Diabetes Prevention Program \(MDPP\) Expanded Model](#) website. See below for a summary of the criteria for enrollment in a National DPP. Note that CMS requires a blood glucose test confirming a diagnosis of prediabetes to cover payment for the program through the MDPP.

Criteria for Enrollment in a National Diabetes Prevention Program Lifestyle Change Program

<p>ALL PARTICIPANTS MUST:</p>	<ul style="list-style-type: none"> ● Be at least 18 years old and not pregnant at the time of enrollment. <p style="text-align: center;">AND</p> <ul style="list-style-type: none"> ● Be overweight, with a body mass index ≥ 25 kg/m² (≥ 23 kg/m² if Asian).
<p>A MINIMUM OF 35% OF PARTICIPANTS MUST:</p>	<ul style="list-style-type: none"> ● Have a blood glucose test result in the prediabetes range within the past year or a claim code indicating that they have prediabetes according to one of the following measures: <ul style="list-style-type: none"> ▶ Hemoglobin A1C of 5.7% to 6.4% or ▶ Fasting plasma glucose of 100 to 125 mg/dL (<i>Note: CMS eligibility requirement for MDPP suppliers is 110 to 125 mg/dL.</i>) or ▶ Plasma glucose measured 2 hours after a 75 gm glucose load of 140 to 199 mg/dL. <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> ● Have been previously diagnosed with gestational diabetes (may be self-reported). (<i>Note: A previous history of gestational diabetes is not an eligibility qualification for MDPP suppliers.</i>)
<p>A MAXIMUM OF 65% OF PARTICIPANTS MAY:</p>	<ul style="list-style-type: none"> ● Enroll on the basis of a high risk score using the ADA/CDC Prediabetes Risk Test.
<p>TO BE ENROLLED AS AN MDPP BENEFICIARY, ALL PARTICIPANTS MUST:</p>	<ul style="list-style-type: none"> ● Have a blood glucose test result in the prediabetes range within the past year indicating that they have prediabetes according to one of the following measures: <ul style="list-style-type: none"> ▶ Hemoglobin A1C of 5.7 to 6.4% or ▶ Fasting plasma glucose of 110 to 125 mg/dL or ▶ Plasma glucose measured 2 hours after a 75 gm glucose load of 140 to 199 mg/dL. <p><i>Note: This information cannot be self-reported.</i></p>

Abbreviations: CMS = Centers for Medicare & Medicaid Services; MDPP = Medicare Diabetes Prevention Program.



TIER 2 CASE STUDY

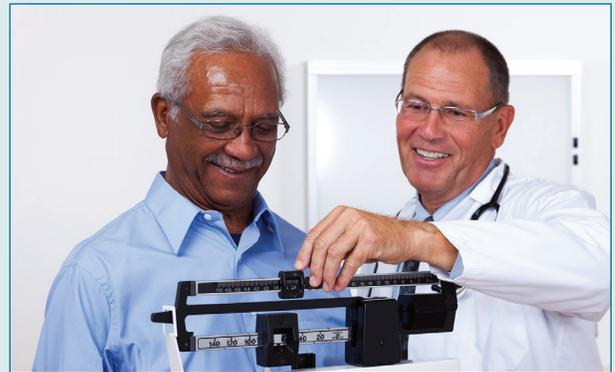
University Pharmacy Screens, Tests, and Refers Patients at Risk for Prediabetes

Duquesne University Pharmacy and Center for Pharmacy Care is a community pharmacy owned and operated by Duquesne University in Pittsburgh, Pennsylvania. It is located in a community where about 40% of residents have an annual income below the federal poverty level. Duquesne University Pharmacy was an early adopter of a pharmacy-based National DPP lifestyle change program and began working with its first group of participants in September 2015. With funding from the American Medical Association Foundation in October 2014, the pharmacy used multiple strategies to assess the prediabetes risk of its patients to identify participants for this program. These strategies included screening and testing pharmacy patients and conducting community screening events.

Tier 2 in Action: Screen, Test, and Refer Patients

Duquesne University Pharmacy began offering prediabetes screening and blood glucose testing in the pharmacy and through a mobile health clinic that it operates in underserved communities. As recommended by the National DPP, the goal was to first screen for prediabetes and then follow up with a blood glucose test if needed. Through these efforts, the pharmacy enrolled about 90% of the participants in its lifestyle change program on the basis of the results of their blood glucose test. Screening and test results were also sent to patients' health care providers.

The pharmacy also worked with Duquesne University to set up a formal referral process for all university employees. Employees are offered a financial incentive to receive an annual wellness biometric screening. Those with prediabetes are then referred to the CDC-recognized lifestyle change program offered by the Duquesne University Pharmacy. The pharmacy also works informally with five physician groups in the community, who refer patients to the program.



Keys to Success

To ensure the success of its efforts, Duquesne University Pharmacy:

- Sent screening and test results and information about the National DPP to patients' health care providers.
- Used motivational interviewing to encourage patients to make lifestyle changes.
- Worked with other CDC-recognized organizations in the area.
- Referred patients to other CDC-recognized programs when its program was full or already in session.

Results at a Glance

Of the **4,371** patients screened:

- **431** were university employees.
- **57** were referred by local doctors.
- **3,883** were contacted during community screening events.
- **90%** were enrolled in the lifestyle change program on the basis of the results of their blood glucose test.



Tier 3: Offer the National DPP Lifestyle Change Program

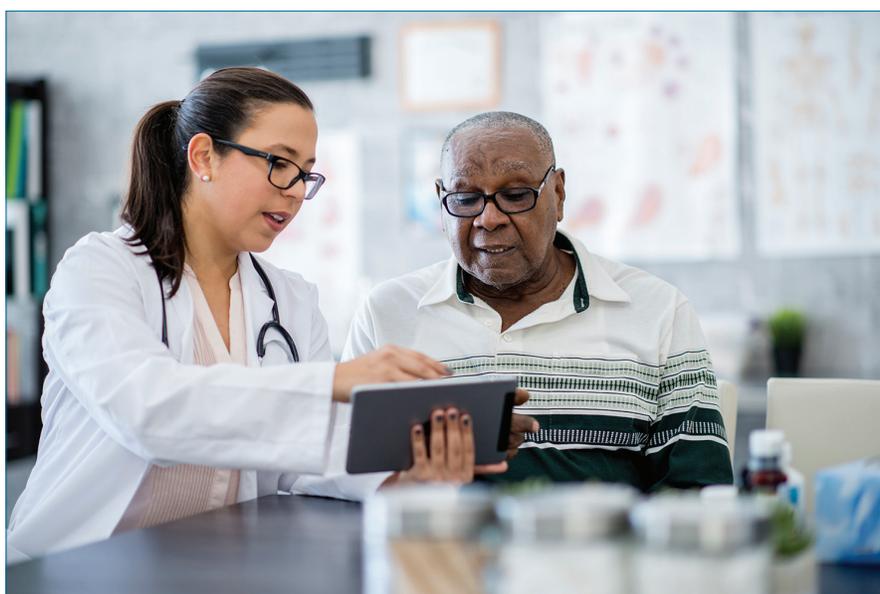
Many pharmacies already offer preventive care services like immunizations and smoking cessation clinics. The National DPP provides an opportunity to expand pharmacy-based preventive care services to improve health outcomes for patients. Joining this program will also allow pharmacies to build referral networks with primary care physicians and other health care organizations in their communities.

How Can Delivering the National DPP Lifestyle Change Program Benefit Pharmacies?

- Applying for CDC **recognition** is free. Once a pharmacy's application is accepted, it will receive pending recognition and be listed on the CDC website as part of a nationwide community of organizations working to prevent type 2 diabetes among people at risk.
- A growing number of employers and insurers, both public and private, are reimbursing for the National DPP lifestyle change program. Most insurers require CDC recognition and reimburse using a pay-for-performance model. In 2018, the program became available to eligible Medicare beneficiaries as a covered service.
- The National DPP can provide learning and professional growth opportunities for the pharmacy workforce. For example, pharmacy staff members can make good lifestyle coaches because they are familiar with patient care and motivational interviewing techniques.

How Can Pharmacies Become CDC-Recognized Delivery Organizations?

If a pharmacy decides to deliver the National DPP lifestyle change program, it will need to submit an application to become a CDC-recognized delivery organization. Page 15 presents an outline of this process. For more detailed information, see the [DPRP Standards](#). To learn more about delivering the National DPP lifestyle change program, go to the [National DPP Customer Service Center](#) website.



Diabetes Prevention Recognition Program (DPRP) Process

<p>1 Pre-Application</p>	<ul style="list-style-type: none"> • Read and understand the current DPRP Standards. • Complete CDC's Organizational Capacity Assessment tool (strongly recommended). • Address any capacity gaps identified by the assessment. • Review other materials about the National Diabetes Prevention Program and DPRP on the National DPP's Customer Service Center website.
<p>2 Application Submitted for Recognition</p>	<ul style="list-style-type: none"> • Complete the online Diabetes Prevention Recognition Program (DPRP) Application Form.
<p>3 Pending Recognition <i>Organizations can stay at this level up to 36 months. At any evaluation period during months 12 to 36, they can move to preliminary recognition if they meet DPRP Standards requirement 5 or to full recognition if they meet requirements 5 to 9.</i></p>	<p>Meet the following requirements:</p> <ul style="list-style-type: none"> • Submit a completed application. • Use a CDC-approved curriculum. • Offer a 12-month lifestyle change program that includes a minimum of 16 weekly sessions in months 1 to 6 and 6 monthly sessions in months 7 to 12. • Agree to start the first session within 6 months of effective date. • Agree to start at least 1 session every 12 months. • Agree to submit required participant data to DPRP every 6 months.
<p>4 Preliminary Recognition <i>Organizations can stay at this level up to 24 months if they continue to meet the requirements for 12 months after initially achieving preliminary recognition. At any evaluation period during the 24 months, they can move to full recognition if they meet DPRP Standards requirements 5 to 9.</i></p>	<p>Meet the following requirements:</p> <ul style="list-style-type: none"> • Submit required data every 6 months. • Start at least 1 session every 12 months. • Continue to meet the pending recognition requirements. • Submit a full 12 months of data on at least one completed group of participants. • Have a minimum of 5 participants who attended at least 3 sessions in months 1 to 6 and whose time from first session to last session was at least 9 months. • Provide evaluated data that show that at least 60% of participants attended at least 9 sessions in months 1 to 6 and at least 60% attended at least 3 sessions in months 7 to 12.
<p>5 Full Recognition <i>If an organization does not meet the requirements for full recognition 24 months after last meeting them, they will lose recognition and have to wait 6 months before reapplying.</i></p>	<p>Meet the following requirements:</p> <ul style="list-style-type: none"> • Submit required data every 6 months. • Start at least 1 session every 12 months. • Continue to meet the requirements for pending and preliminary recognition. • Body weight documentation: Participants must have had their body weight documented during at least 80% of sessions.^a • Physical activity documentation: Physical activity minutes must have been documented for participants during at least 60% of sessions.^a • Weight loss at 12 months: Average weight loss across all participants in one yearlong program must be a minimum of 5% of starting body weight.^a • Participant eligibility: A minimum of 35% of all participants in one yearlong program must be eligible on the basis of either a blood glucose test indicating prediabetes or a history of gestational diabetes. The rest must be eligible on the basis of a high score on the ADA/CDC Prediabetes Risk Test.^{a,b}

^a Evaluation for these requirements based on all participants attending at least 3 sessions during months 1 to 6 and whose time from first session to last session is at least 9 months. At least 5 participants per submission who meet this criterion are required for evaluation.

^b All Medicare Diabetes Prevention Program beneficiaries must have a blood glucose test for eligibility.

Retail Pharmacy Brings the National DPP to Patients in Kentucky

Kroger Co. is a large grocery retailer with regional affiliates that operate nearly 2,000 retail pharmacies across 31 states. Kroger's Louisville Division in Kentucky received funding from the American Association of Diabetes Educators (AADE) as part of AADE's efforts to help set up new CDC-recognized lifestyle change programs in areas where diabetes self-management education and training programs already exist. AADE's support helped the Louisville Division develop its program, train lifestyle coaches, give scholarships to participants, and develop an infrastructure for long-term sustainability.

In April 2014, the Kroger Louisville Division applied for recognition of its lifestyle change program from CDC's Diabetes Prevention Recognition Program (DPPR). The staff were confident that they could deliver the program because of their familiarity with third-party payment processing, their strong connections with local primary care physicians, their knowledge of the diabetes risk continuum, and their experience managing personal health information. They were also supported by AADE's Prevention Network, which gave them access to a data management system and a CDC-approved curriculum, as well as help with billing and reimbursement. By June 2017, the Louisville Division had achieved full recognition from CDC for its lifestyle change program.

continued on page 17



TIER 3 CASE STUDY

Tier 3 in Action: Offer the National DPP Lifestyle Change Program

The Louisville Division's program began in March 2015 with one group of four patients. It quickly expanded across five cities, with 15 groups to date. As required by the DPRP Standards, sessions are held over the course of 1 year. Sessions are typically held in Kroger grocery stores, which is convenient for most participants. This setting also enhances lessons on healthy food options because of the opportunity for cooking demonstrations and shopping tours. Sessions are held in conference rooms to incorporate physical activity components.

The lifestyle coaches who teach the program are CDEs, RDs, and PharmDs. In the future, some will be certified pharmacy, nutrition, and patient care technicians. A PharmD has typically served as program coordinator in the past, but this role will soon be filled by CDEs, RDs, registered nurses, and advanced registered nurse practitioners (ARNPs).

Keys to Success

To ensure the success of its efforts, the Kroger Louisville Division:

- Uses both in-person group sessions and online sessions to make the program more accessible and retain participants.
- Collaborates with dietitians and ARNPs to give participants more resources and improve their overall experience.
- Offers the program across a large number of stores to make it more accessible for more participants.
- Uses licensed health professionals to oversee the technicians who deliver the program in case complex clinical issues arise or referrals are needed.

Results at a Glance

- **53** participants in 15 classes.
- **6** locations in 5 cities.
- **5.2%** average weight loss achieved at 6 months.
- **6.3%** average weight loss achieved at 12 months.





HOW YOU CAN SUSTAIN YOUR PROGRAM

Pharmacists can improve the effectiveness of their lifestyle change programs and reduce costs for both the pharmacy and program participants by thinking strategically and maximizing the resources available. For example, using different members of the pharmacy workforce to deliver the program can help manage costs and provide learning opportunities for staff. See Table 2 on page 19 for more information.

Some state and public employee health plans, commercial health plans, self-insured employers, and state Medicaid agencies cover the cost of the National DPP. Pharmacists can work with their patients to determine if they are eligible for coverage.

To better understand opportunities for reimbursement of program costs, pharmacists can look at the laws on pharmacist provider status and collaborative practice agreements in their states. They can also use collaborative practice agreements and memoranda of understanding to build partnerships with health care organizations, local health departments, and other community groups to expand their scope of services and improve opportunities for reimbursement.

More information about collaborative practice agreements is available in the following CDC resources:

- [*Advancing Team-Based Care Through Collaborative Practice Agreements: A Resource and Implementation Guide for Adding Pharmacists to the Care Team*](#)
- [*Collaborative Practice Agreements and Pharmacists' Patient Care Services: A Resource for Decision Makers*](#)

In March 2016, the Centers for Medicare & Medicaid Services (CMS) certified the expansion of the National DPP into the Medicare program. This change was based on evidence from a model test sponsored by the CMS Innovation Center involving 5,969 Medicare beneficiaries who participated in the program through the YMCA of the USA. The evidence showed an average weight loss of 4.7% for those who attended at least 4 sessions and a 5.2% average weight loss for those who attended at least 9 sessions. Medicare saved \$2,650 per participant over 15 months.

CDC collaborated with the CMS Innovation Center on the model test, providing subject matter expertise, information from applied research studies, and data from the Diabetes Prevention Recognition Program. Medicare Diabetes Prevention Program (MDPP) services became available to eligible Medicare beneficiaries as of April 1, 2018. About 23 million US adults with prediabetes are aged 65 or older and could benefit directly from this expansion. For more information, go to the [MDPP Expanded Model](#) website.



The Pharmacy Workforce Call to Action

The entire pharmacy workforce—including pharmacists and pharmacy technicians, residents, and students—can get involved in supporting the National DPP’s mission to prevent type 2 diabetes. This section describes specific actions that different members of the pharmacy team can take to help expand the reach of this program. Table 2 shows which team members are best suited for which roles.

Table 2. How the Pharmacy Workforce Can Support the National DPP

Workforce Category	Tier 1: Promote Awareness of Prediabetes and the National DPP Among Patients at Risk	Tier 2: Screen, Test, and Refer Patients	Tier 3: Offer the National DPP Lifestyle Change Program
Pharmacists	Almost always suited for this role	Almost always suited for this role	Often suited for this role
Technicians	Almost always suited for this role	Almost always suited for this role	Almost always suited for this role
Residents	Almost always suited for this role	Almost always suited for this role	Often suited for this role
Students	Almost always suited for this role	Often suited for this role	Sometimes suited for this role

Pharmacists

Tier 1. Promote Awareness of Prediabetes and the National DPP Among Patients at Risk

- Educate patients about prediabetes:** Pharmacists have the knowledge to effectively communicate information on prediabetes risk to their patients. They can also use their understanding of a patient’s medical history to customize this information. They are well-positioned to educate both their patients and other pharmacy staff about prediabetes and the National DPP.
- Connect with peers and others outside of the health care system:** Pharmacists are well-connected beyond the health care system and can use these connections as an opportunity to share information about prediabetes and the National DPP. They can also help raise awareness within their peer network by sharing information at conferences or through e-mails.
- Establish relationships with local organizations:** Pharmacists can build relationships with local CDC-recognized organizations that offer the National DPP lifestyle change program. If applicable, they can ensure that local programs know that the pharmacy will be referring patients to these programs. They can support local programs by distributing or displaying their promotional materials to raise awareness among patients. Pharmacists can also look for other ways to support the specific needs of local programs.



Tier 2. Screen, Test, and Refer Patients

- **Include prediabetes screening, testing, and referral as part of disease management counseling:** Pharmacists provide disease management counseling for patients and can use this time as an opportunity to conduct prediabetes screening with a CDC-approved risk assessment test. If possible, pharmacists should administer blood glucose tests to patients who score high on the risk assessment. Patients who score high or who are found to have prediabetes should be referred to both a primary care physician for confirmatory blood glucose testing and a CDC-recognized lifestyle change program in the community or online.

Tier 3. Offer the National DPP Lifestyle Change Program

- **Serve as a lifestyle coach:** Group sessions of the National DPP lifestyle change program are led by trained lifestyle coaches, who can motivate and educate participants and significantly enrich their experience. Information on how to become a trained lifestyle coach is available on the [National DPP Staffing and Training](#) website.
- **Serve as a program coordinator:** Program coordinators collect and monitor participant data and are responsible for submitting the necessary information to receive and maintain CDC recognition. Program coordinators are encouraged to be trained as lifestyle coaches and can serve in one or both roles at the same time, depending on the size of the program and the number of sessions offered.

Pharmacy Technicians

Tier 1. Promote Awareness of Prediabetes and the National DPP Among Patients at Risk

- **Educate patients about prediabetes:** Pharmacy technicians can help patients understand their risk of type 2 diabetes by educating them about prediabetes and sharing information about the National DPP.
- **Establish relationships with local organizations:** Technicians can build relationships with local CDC-recognized organizations that offer the National DPP lifestyle change program. If applicable, they can ensure that local programs know that the pharmacy will be referring patients to these programs. They can support local programs by distributing or displaying their promotional materials to raise awareness among patients. Technicians can also look for other ways to support the specific needs of local programs.

Tier 2. Screen, Test, and Refer Patients

- **Administer risk assessment screenings:** Risk assessment tests typically take about 2 minutes to complete. Technicians can use wait times at the pharmacy to distribute or administer paper versions.

Tier 3. Offer the National DPP Lifestyle Change Program

- **Serve as a lifestyle coach:** Group sessions of the National DPP lifestyle change program are led by trained lifestyle coaches, who can motivate and educate participants and significantly enrich their experience. Having technicians serve in this role can help keep program costs down. This approach



also gives technicians professional growth opportunities and can further strengthen the skills of the pharmacy workforce. Information on how to become a trained lifestyle coach is available on the [National DPP Staffing and Training](#) website.

- **Serve as a program coordinator:** Program coordinators collect and monitor participant data and are responsible for submitting the necessary information to receive and maintain CDC recognition. Program coordinators are encouraged to be trained as lifestyle coaches and can serve in one or both roles at the same time, depending on the size of the program and the number of sessions offered.

Pharmacy Residents

Tier 1. Promote Awareness of Prediabetes and the National DPP Among Patients at Risk

- **Educate patients about prediabetes:** Pharmacy residents also have opportunities to educate patients about their risk of type 2 diabetes and share information about the National DPP.
- **Establish relationships with local organizations:** Residents can build relationships with local CDC-recognized organizations that offer the National DPP lifestyle change program. If applicable, they can ensure that local programs know that the pharmacy will be referring patients to these programs. They can support local programs by distributing or displaying their promotional materials to raise awareness among patients. Residents can also look for other ways to support the specific needs of local programs.

Tier 2. Screen, Test, and Refer Patients

- **Administer risk assessment screenings or blood glucose tests:** Risk assessment tests typically take about 2 minutes to complete. Technicians can use wait times at the pharmacy to distribute or administer paper versions. If possible, they should administer blood glucose tests for patients who score high on the risk assessment. Patients who score high or who are found to have prediabetes should be referred to both a primary care physician for confirmatory blood glucose testing and a CDC-recognized lifestyle change program in the community or online.

Tier 3. Offer the National DPP Lifestyle Change Program

- **Serve as a lifestyle coach:** Group sessions of the National DPP lifestyle change program are led by trained lifestyle coaches, who can motivate and educate participants and significantly enrich their experience. Residents can serve in this role if their residency will extend over the course of the yearlong program. Having residents serve as lifestyle coaches can help keep program costs down and give residents additional professional growth opportunities. For example, involvement in the program could be tied to a residency project, particularly projects relating to diabetes. Given the temporary nature of residency positions, pharmacies should take into account the cost associated with training. Information on how to become a trained lifestyle coach is available on the [National DPP Staffing and Training](#) website.



Pharmacy Students

Tier 1. Promote Awareness of Prediabetes and the National DPP Among Patients at Risk

- **Educate patients about prediabetes:** Pharmacy students can provide general information on prediabetes and the National DPP lifestyle change program to patients.
- **Establish relationships with local organizations:** Students can build relationships with local CDC-recognized organizations that deliver the National DPP lifestyle change program. If applicable, they can ensure that local programs know that the pharmacy will be referring patients to these programs. They can support local programs by distributing or displaying their promotional materials to raise awareness among patients.

Tier 2. Screen, Test, and Refer Patients

- **Administer risk assessment screenings:** Risk assessment tests typically take about 2 minutes to complete, and students can use wait times to distribute or administer paper versions. With training, students can provide follow-up recommendations for patients found to be at risk. Students can also refer patients to a CDC-recognized lifestyle change program in the community or online. Another way to involve students and provide additional learning opportunities is to encourage them to initiate and lead screening campaigns and projects.

Tier 3. Offer the National DPP Lifestyle Change Program

- **Support lifestyle coaches:** Group sessions of the National DPP lifestyle change program are led by trained lifestyle coaches, who can motivate and educate participants and significantly enrich their experience. Students can support program delivery by helping lifestyle coaches, for example, by performing administrative tasks and coordinating program logistics.





GLOSSARY OF KEY TERMS

CDC-Recognized Organization: An organization that offers the National Diabetes Prevention Program (National DPP) lifestyle change program and has received pending, preliminary, or full recognition from CDC's Diabetes Prevention Recognition Program (DPRP).

Centers for Medicare & Medicaid Services (CMS): The federal agency that runs the Medicare program and works with states to administer the Medicaid program.

Diabetes Prevention Program (DPP): The research study led by the National Institutes of Health that showed that making modest behavior changes helped adults with prediabetes lose 5% to 7% of their body weight and reduce their risk of developing type 2 diabetes by 58% (71% for people over age 60).

Diabetes Prevention Recognition Program (DPRP): The quality assurance arm of the National DPP charged with evaluating organizations' performance in effectively delivering the lifestyle change program with quality and fidelity. Through the DPRP, CDC awards recognition to program delivery organizations that are able to meet national standards and achieve the outcomes proven to prevent or delay the onset of type 2 diabetes.

DPRP Standards: National quality assurance standards that describe the requirements that program delivery organizations must meet to achieve CDC recognition. See the [CDC Diabetes Prevention and Recognition Program Standards and Operating Procedures](#) online.

Lifestyle Coach: A person trained to provide support and guidance to participants in a CDC-recognized lifestyle change program.

Medicare Diabetes Prevention Program (MDPP): In March 2016, CMS certified the expansion of the National DPP into the Medicare program. This program is the first preventive service model from the CMS Innovation Center to become eligible for expansion. MDPP services became available as of April 1, 2018. About 23 million US adults with prediabetes are age 65 or older and could directly benefit. For more information, visit the [MDPP website](#).

Motivational Interviewing: A counseling technique that supports patients in working through their beliefs about health issues until they actively seek change and become engaged in making behavior change.

National Diabetes Prevention Program (National DPP): A CDC-led partnership of public and private organizations working together to build the infrastructure for nationwide delivery of an evidence-based lifestyle change program for adults with prediabetes to prevent or delay onset of type 2 diabetes.

National DPP Customer Service Center (CSC): A place where organizations can access training materials, tool kits, and videos; ask questions; and receive technical assistance related to all aspects of the National DPP.

National DPP Lifestyle Change Program: The translated adaption of the DPP lifestyle intervention, which:

- Is a 1-year group program offered in person, online, or through a combination of both approaches. It consists of:
 - ▶ An initial 6-month phase with at least 16 weekly sessions offered over a period of 16 to 24 weeks.
 - ▶ A second 6-month phase with at least 1 session a month (minimum of 6 sessions).
- Is taught by a trained lifestyle coach.



- Uses a CDC-approved curriculum.
- Includes regular interactions between the lifestyle coach and participants.
- Focuses on behavior change to improve healthy eating, increase physical activity, and manage stress.
- Provides peer support.

Prediabetes: A health condition marked by blood glucose levels that are higher than normal but not high enough to be diagnosed as type 2 diabetes. People with prediabetes have an increased risk of developing type 2 diabetes, heart disease, and stroke. Prediabetes is defined by one of the following measures: hemoglobin A1C of 5.7% to 6.4%, fasting plasma glucose of 100 to 125 mg/dL, or plasma glucose measured 2 hours after a 75 gm glucose load of 140 to 199 mg/dL.

Recognition Status:

Pending Recognition Status: After an organization applies for CDC recognition, it receives this status if it agrees to the curriculum, duration, and intensity requirements listed in the [DPRP Standards](#).

Preliminary Recognition Status: To be evaluated for preliminary recognition, organizations must have submitted a full 12 months of data on at least one completed participant group. A completed group is a set of participants who entered into a lifestyle change program that has a fixed first and last session and runs for 12 months. Organizations will be awarded preliminary recognition when they meet the following criteria:

1. The 12-month data submission includes at least 5 participants who attended at least 3 sessions in the first 6 months and whose time from first session to last session was at least 9 months. (Note: DPRP uses a statistical package that automatically calculates months lapsed.)
2. Of the participants eligible for evaluation in #1, at least 60% attended at least 9 sessions in months 1 to 6 and at least 60% attended at least 3 sessions in months 7 to 12. (Note: The attendance benchmark for months 7 to 12 is assessed only after 12 months have passed from the date of the first session.)

Full Recognition Status: To be evaluated for full recognition, organizations must have submitted a full 12 months of data on at least one completed participant group. Organizations will be awarded full recognition when they meet the following criteria:

1. The 12-month data submission includes at least 5 participants who attended at least 3 sessions in the first 6 months and whose time from first session to last session was at least 9 months.
2. The requirements for pending and preliminary recognition have been met.
3. All of the additional DPRP Standards requirements for full recognition have been met.

Risk Assessment: A prediabetes screening test that can be administered [online](#) or in person using the [paper](#) test.

Type 2 Diabetes: A condition characterized by high blood glucose levels caused by either a lack of insulin or the body's inability to use insulin efficiently. Type 2 diabetes develops most often in middle-aged and older adults but can appear in children, teens, and young adults.



NATIONAL 
DIABETES
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 **PROGRAM**

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Centers for Disease Control and Prevention
National Center for Chronic Disease Prevention and Health Promotion
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