



Prediabetes Practice Module

April 2023

Implementation of Quality Improvement Initiatives
to Improve Diabetes and Hypertension



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practice module.



DELAWARE HEALTH AND SOCIAL SERVICES
Division of Public Health

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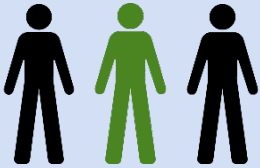
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Purpose of Module

Quality Insights provides on-site and virtual technical assistance to practices who are dedicated to decreasing rates of prediabetes across their patient population. For active participants in the [Delaware Division of Public Health's \(DE DPH\) Quality Improvement in Hypertension and Uncontrolled Diabetes](#) project, this practice module provides a high-level overview of evidence-based information related to prediabetes and referral to a Centers for Disease Control and Prevention (CDC) National Diabetes Prevention Program (National DPP).

Note: Guidelines referenced in this module are provided in brief, summary format. Full recommendations should be reviewed in the original publication(s) and utilized with physician/clinician judgment, with consideration given to a patient's unique needs and circumstances.

Prevalence: United States and Delaware



“1 in 3 American adults has prediabetes, and more than 84% of people with prediabetes don’t know they have it.”

Source: [Ad Council & CDC](#), n.d.

Prediabetes is a risk factor for the development of heart disease, stroke, and diabetes, chronic diseases which were reported as the first, fifth, and eighth leading causes of death in the United States and Delaware in 2020, respectively ([CDC, 2022a](#); [CDC, 2022b](#); [Xu et al., 2022](#)). The 2021 percentage of adult Delawareans diagnosed with diabetes (12.0%), excluding prediabetes and gestational diabetes, exceeded the nationwide percentage (10.9%), according to CDC data as reported by [America's Health Rankings](#). An additional 9.4% (more than 70,100 adults) have diagnosed prediabetes based on [2020 data](#) from the Delaware Behavioral Risk Factor Survey (BRFS).

According to the [CDC](#), based on National Health and Nutrition Examination Survey Data from January 2017 to

March 2020 and 2019 U.S. Census Bureau data, the estimated number of people in the United States with prediabetes (defined as having fasting plasma glucose values of 100 to 125 mg/dL or A1C values of 5.7% to 6.4%) among adults aged 18 years or older is as shown in Table 1.

Table 1: Prevalence of Prediabetes Among Adults, United States, 2017 to 2020

Characteristic	Prediabetes, 2019 Estimates Number in Millions	Prediabetes, 2017 to 2020 Estimates Percentage
Total	96.0	38.0
Age Group		
18-44	32.2	27.8
45-64	37.4	44.8
≥65	26.4	48.8
Sex		
Men	52.3	41.9
Women	43.7	34.3
Race/Ethnicity		
White, non-Hispanic	62.4	38.7
Black, non-Hispanic	12.4	39.2
Asian, non-Hispanic	6.0	37.3
Hispanic	14.3	34.5

Adapted from [Prevalence of Prediabetes Among Adults](#), by CDC, 2022.

“Prediabetes will progress to overt type 2 diabetes (T2DM) in approximately 25% of subjects within three to five years, and as many as 70% of individuals with prediabetes will develop overt diabetes within their lifetime” ([Hostalek](#), 2019). Obesity and being overweight are known risk factors for developing type 2 diabetes ([CDC](#), 2022). The [2020 Delaware BRFs](#) provided the following data regarding obesity prevalence among adults:

Table 2: Obesity Prevalence by County, Delaware, 2020

State	New Castle County	Kent County	Sussex County
36.5%	35.1%	39.9%	37.3%

Adapted from [More than 1 in 10 Delaware Adults Report Having Diabetes in 2020](#), by DHSS, n.d.

The [2020 Delaware BRFS](#), which did not distinguish between type 1 and type 2 diabetes or include gestational diabetes, provided the following data regarding diabetes prevalence in Delaware:

Table 3: Trend in Adult Diabetes Prevalence, Delaware, 2011-2020

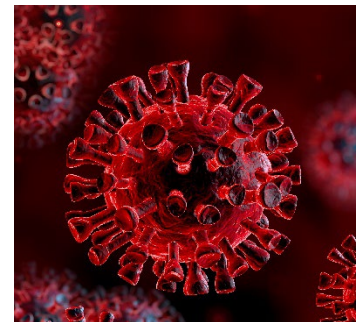
2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
9.7%	9.6%	11.1%	11.1%	11.5%	10.6%	11.3%	11.9%	12.8%	12.4%

Adapted from [More than 1 in 10 Delaware Adults Report Having Diabetes in 2020](#), by DHSS, n.d.

“Prediabetes and diabetes cost Delaware **\$1.1 billion** each year,” of which \$818 million are allocated to direct medical expenses while \$293 million are allocated to indirect costs ([DHSS DPH et al., 2021](#)). Those with diabetes amass medical expenses 2.3 times greater than those without diabetes ([ADA, 2023](#)). Prevention and management of prediabetes are key to achieving a decrease in diabetes prevalence and its associated costs.

COVID-19, Prediabetes, and Diabetes: There’s a Connection

According to the [National Association of Chronic Disease Directors](#) (2021), COVID-19 spotlighted the need for continued chronic disease prevention and management, as those with chronic conditions, including diabetes, are especially vulnerable to severe illness from the virus. Some evidence indicates the relationship between diabetes and COVID-19 could be bi-directional, with COVID-19 being connected to the onset, or new diagnosis, of prediabetes and diabetes. This is an area of continuing research.



A [study](#) (2022) published in *Frontiers in Endocrinology* found that those with prediabetes and COVID-19 had longer hospital stays and greater lung injury, but also required admission to the intensive care unit more frequently than those without diabetes. Researchers surmised that the increased risk of severe COVID-19 was associated with higher serum levels of interleukin 6. While those with prediabetes had more severe acute phases of infection with COVID-19, they did not have significant residual symptoms or alterations in their laboratory results, when compared to those without diabetes.



According to a [systematic review and meta-analysis](#) (2022) published in *Metabolism: Clinical and Experimental*, those with COVID-19 had a 64% greater risk of diabetes. Further, researchers found that there was a higher risk of developing type 2 diabetes than type 1, and men were at greater risk than women.



While the direct impacts of COVID-19 are concerning, numerous indirect impacts could worsen the condition of individuals living with diabetes and prediabetes. These impacts arise from decreased access to care, delays in seeking care, understaffed health care facilities, and economic downturns, among other factors. A number of the issues existed prior to the pandemic, were further heightened by it, and still persist. The risk of chronic disease in combination with the risk of more severe acute COVID-19 make it even more important for the health care community to do what is possible to increase the awareness of prediabetes, improve screening rates, and encourage lifestyle modification to reverse the condition or prevent resulting type 2 diabetes.

Social Determinants of Health and Prediabetes

The “[Standards of Care in Diabetes – 2023](#)” (Standards of Care), published by the American Diabetes Association (ADA) in January, emphasizes the following: “social determinants of health (SDOH) — often out of direct control of the individual and potentially representing lifelong risk — contribute to health care and psychosocial outcomes and must be addressed to improve all health outcomes.”

Expanding telehealth offerings, providing web-based portals that incorporate medication adjustment, and referral to community resources are suggestions the “Standards of Care” offers to facilitate improved care of those negatively impacted by SDOH. The [ADA](#) encourages additional “research that seeks to understand better how these social determinants influence behaviors and how the relationships between these variables might be modified for the prevention and management of diabetes.”




Referring to [Social Determinants of Health and Diabetes: A Scientific Review](#), key highlights related to prediabetes risk considerations include:

Income 	Among adults with prediabetes, there is a higher risk of progression to type 2 diabetes associated with living in neighborhood census tracts with lower educational attainment, lower annual income, and a larger percentage of households receiving Supplemental Nutrition Assistance Program benefits.
Occupation 	There is an increased risk of diabetes in those exposed to shift work, versus working normal daytime schedules, and in adults with low socioeconomic status (SES) working 55 hours or more per week, versus those with low SES working 35 to 40 hours per week.

Impacts on Health

“ Life-course exposure based on the length of time one spends living in resource-deprived environments — defined by poverty, lack of quality education, or lack of health care — significantly impacts disparities in diabetes risk, diagnosis, and outcomes. ”

Source: [Hill-Briggs et al.](#), 2020.

Environment 	<p>Populations more frequently exposed to air pollution and environmental chemicals are disproportionately at risk for developing diabetes. Homelessness is associated with increased odds of having an elevated HbA_{1c}, and placement is associated with a lower risk of a new diabetes diagnosis. Regarding neighborhoods, increased walkability and access to greenspace are associated with a lower incidence of type 2 diabetes.</p>
Food Environment 	<p>Food unavailability, inaccessibility, and insecurity demonstrate associations with an increased risk of diabetes. Those who live in areas with resources that support healthy diets and physical activity tend to have a lower incidence of type 2 diabetes and achieve glycemic control more quickly.</p>
Social Context 	<p>Increased social support is associated with better glycemic control. There is also a lower incidence of type 2 diabetes in the presence of high neighborhood social cohesion. When examining associations of discrimination experiences with diabetes, the Black Women's Health Study found that those with the highest exposure to everyday racism, in comparison to those with the lowest, had a 31% increased risk of diabetes, and those with the highest exposure to lifetime racism had a 16% increased risk; both associations were mediated by body mass index (BMI).</p>

Many health care systems and clinics are utilizing electronic health records (EHRs) and [health information exchanges \(HIEs\)](#) to capture SDOH data or employing commercially available SDOH algorithms to identify patients at social risk and trigger service referrals. Learn more about action steps you can take to leverage your EHR and address SDOH by accessing Quality Insights' [Social Determinants of Health Practice Module and Workflow Modification Guide](#).

Screening and Diagnosis Criteria

As a [Healthy People 2030 Champion](#), Quality Insights is committed to working toward achieving Healthy People 2030's vision, a society where all people can achieve their full potential for health and well-being across their lifespans. [Healthy People 2030](#) has two objectives relevant to this module, one that speaks to undiagnosed diabetes and another that addresses a new diagnosis of diabetes.



Objective D-02 targets [reducing the proportion of adults who unknowingly have prediabetes](#) to 33.2%, with 2013-2016 data reflecting 38% of adults had undiagnosed prediabetes. [Reducing the number of diabetes cases diagnosed yearly](#) is the goal of objective D-01. This particular objective is also one of 23 [Leading Health Indicators](#) (LHIs), a subset of high-priority objectives that impact major causes of death and disease in the United States. Data from 2019 to 2021 reflects 5.5 new cases of diabetes per 1,000

adults, and the target is 4.8 per 1,000. Other related objectives include: [reduce the proportion of adults with high blood pressure](#), [reduce coronary heart disease deaths](#), [improve cardiovascular health in adults](#), [reduce stroke deaths](#), and [reduce consumption of added sugars by people aged 2 years and over](#), also a LHI.

The [U.S. Preventive Services Task Force](#), in August 2021, recommended screening for prediabetes and type 2 diabetes in adults aged 35 to 70 years who have overweight or obesity. More recently, the American Diabetes Association (ADA) outlined the following criteria for testing for prediabetes and/or type 2 diabetes in asymptomatic adults in the “[Standards of Care in Diabetes - 2023](#)” (p. S24):

1	Testing should be considered in adults with overweight or obesity (BMI ≥ 25 kg/m ² or ≥ 23 kg/m ² in Asian American individuals) who have one or more of the following risk factors: <ul style="list-style-type: none"> ○ First-degree relative with diabetes ○ High-risk race/ethnicity (e.g., African American, Latino, Native American, Asian American, or Pacific Islander) ○ History of cardiovascular disease (CVD) ○ Hypertension ($\geq 130/80$ mmHg or on therapy for hypertension) ○ HDL cholesterol level <35 mg/dL (0.90 mmol/L) and/or a triglyceride level >250 mg/dL (2.82 mmol/L) ○ Individuals with polycystic ovary syndrome ○ Physical inactivity ○ Other clinical conditions associated with insulin resistance (e.g., severe obesity, acanthosis nigricans)
2	People with prediabetes (A1C $\geq 5.7\%$ [39 mmol/mol], impaired glucose tolerance [IGT], or impaired fasting glucose [IFG]) should be tested yearly.
3	People who were diagnosed with gestational diabetes mellitus (GDM) should have lifelong testing at least every three years.
4	For all other people, testing should begin at 35 years old.
5	If results are normal, testing should be repeated at a minimum of three-year intervals, with consideration of more frequent testing depending on initial results and risk status.
6	People with human immunodeficiency virus (HIV).

Adapted from “[Standards of Care in Diabetes – 2023](#),” by ElSayed et al., 2023.

Screen for prediabetes today to help prevent diabetes tomorrow.

Offer the Prediabetes Risk Test to assist patients with determining their risk for prediabetes. Available in [English](#), [Spanish](#), and [online](#), this one-minute screening tool can be completed at a medical appointment or digitally via patient portal, text, or email.

Blood testing is the most accurate way to determine if a patient has prediabetes. Any of the following results will confirm a diagnosis of prediabetes (pp. S21, S25):

Test	Prediabetes	Diabetes
A1C	5.7 to 6.4% (39-47 mmol/mol)	≥6.5% (48 mmol/mol)*
FPG (Fasting Plasma Glucose)	100-125 mg/dL (5.6-6.9 mmol/L)	≥126 mg/dL (7.0 mmol/L)*
OGTT (Oral Glucose Tolerance Test)	140-199 mg/dL (7.8-11.0 mmol/L)	≥200 mg/dL (11.1 mmol/L)*
RPG (Random Plasma Glucose)		≥200 mg/dL (11.1 mmol/L)**
*In the absence of unequivocal hyperglycemia, diagnosis requires two abnormal test results from the same sample or in two separate test samples.		
**Only diagnostic in a patient with classic symptoms of hyperglycemia or hyperglycemic crisis.		

Adapted from “[Standards of Care in Diabetes – 2023](#),” by ElSayed et al., 2023.

Gestational Diabetes Mellitus

Women who have had gestational diabetes mellitus (GDM) are at increased risk of developing type 2 diabetes ([ElSayed et al.](#), 2023). A study published in *Diabetologia* (2020) found that 5.7% of women with GDM developed type 1 diabetes, within seven years, and 50.4% of women with GDM developed type 2 diabetes during the 23.1 years of follow-up. The risk of type 1 diabetes is low after 10 years, but continued follow-up is needed due to the linear increase in the incidence of type 2 diabetes ([Auvinen et al.](#), 2020).

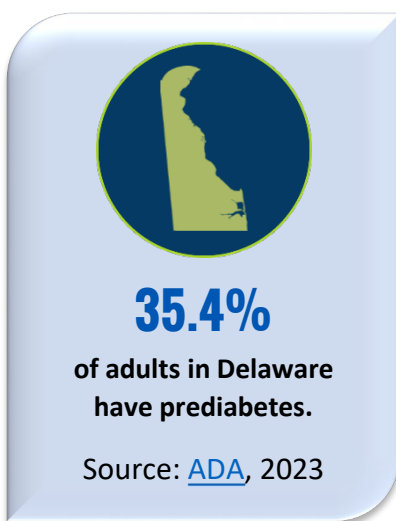
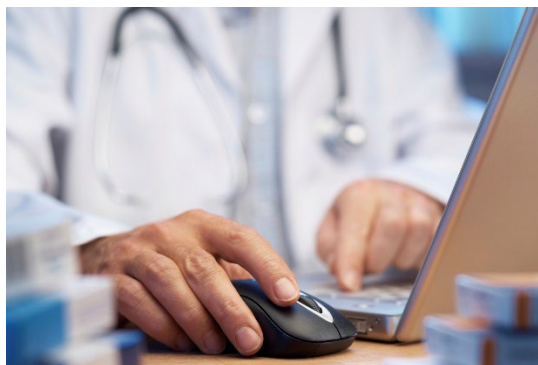
As stated in the *National Vital Statistics Reports* (2022), “Among women giving birth in 2020, the overall rate of GDM was 7.8 per 100 births, an increase of 30% from 2016.” For 2020, GDM rates rose with the increasing age of the mother, increasing plurality, and increasing maternal BMI. Non-Hispanic Black women had the lowest rates of GDM in 2020, while non-Hispanic Asian women had the highest ([Gregory & Ely](#), 2022).

In Delaware, the rate of GDM rose from 7.3 per 100 births in 2016 to 9.2 per 100 births in 2020 ([Gregory & Ely](#), 2022). As the prevalence of GDM increases, more emphasis needs to be placed on prediabetes and diabetes awareness, prevention, and screening among this population. According to the “[Standards of Care](#),” individuals with GDM should be screened for prediabetes or diabetes at four to 12 weeks

postpartum, using the 75-gram OGTT. Subsequently, they should have lifelong screening for prediabetes and diabetes every one to three years.

Prediabetes Related ICD-10 Codes

The American Medical Association (AMA) provides a [list of commonly used Current Procedural Terminology \(CPT\) and International Classification of Diseases \(ICD\) codes that are useful for prediabetes screening, answers to common CPT questions](#) related to National DPP, and [various tools for the health care team](#) to facilitate screening, patient education, prediabetes management, billing and reimbursement, and referrals to CDC-recognized lifestyle change programs.



ICD-10 diagnosis codes used to qualify National DPP lifestyle change program participants can vary, depending on the specificity and scope of the eligibility criteria. **R73.03 is an ICD-10 code specific to prediabetes.** It is anticipated that this code for prediabetes will accommodate broader eligibility criteria. In addition to R73.03, ICD-10 codes for abnormal blood glucose without diabetes can be used (e.g., R73.09, other abnormal glucose).

An important consideration to keep in mind when using ICD-10 codes is that an actual diagnosis of a disease can only be made by a licensed medical provider. If the person providing the National DPP lifestyle change program for a CDC-recognized organization is not a licensed medical provider, they should not use an ICD-10 code specifically related to a diagnosis. For more information on CPT codes for nonclinical National DPP lifestyle change program services, see the [coding and billing information](#) provided by the National Association of Chronic Disease Directors (NACDD).

It's Time to Talk: Navigating Prediabetes Conversations with Patients

Limited resources, competing priorities, or time demands may be barriers to a thorough discussion of type 2 diabetes prevention. It is important to consider that preventing type 2 diabetes will reduce burden on the patient and the health care system. Patients who successfully make the lifestyle changes necessary for type 2 diabetes prevention can experience improvements in overall health by way of improved

management of a broad spectrum of health conditions (e.g., heart disease, metabolic syndrome, hypertension, lipids, and depression).

The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) offers several resources to aid health care teams in navigating conversations with patients regarding prediabetes, including:

- [How to Talk to Patients about Their Prediabetes Diagnosis](#)
- [DOs and DON'Ts for the Initial Conversation about Prediabetes](#)
- [Use the Teach-Back Method](#)
- [Support Your Patients with Behavior Change Strategies](#)



Evidence-Based Intervention: The National DPP

The progression from prediabetes to diabetes can be prevented or delayed with modest weight loss, engagement in at least 150 minutes of physical activity per week, and improved diet. The CDC-led [National DPP](#) is a [cost-effective](#), one-year program with [proven success](#) at helping people make the lifestyle changes needed to prevent or delay type 2 diabetes. [Evidence](#) shows that program participants can reduce their risk of developing type 2 diabetes by 58%, or 71% for those 60 years of age and older.

**In the first
6 months:**

“Your patients will meet weekly for one hour to learn to:

- Eat healthy without giving up all the foods they love
- Add physical activity into their busy schedules
- Deal with stress
- Cope with challenges that can derail their hard work — like how to choose healthy food when eating out
- Get back on track if they stray from their plan — because everyone slips now and then” ([CDC](#), 2022).

In the second 6 months:

“They will meet monthly for one hour to build on the skills they’ve learned and maintain their positive changes. They will review key concepts such as setting goals, tracking food and physical activity, staying motivated, and overcoming barriers. The second six months is essential to help your patients stick with new habits” ([CDC](#), 2022).

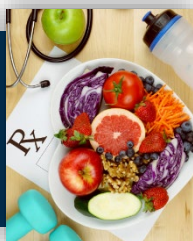
CDC-recognized lifestyle change programs provide approximately 24 hours of diabetes prevention instruction. Classes are accessible virtually or in-person. While provider referrals are not required, patients are more likely to enroll in a National DPP when they receive a recommendation from a trusted clinician.

Referring Patients to Available Online or In-Person National DPP

Table 4: National Diabetes Prevention Program Eligibility, CDC, 2022

To participate in a CDC-recognized lifestyle change program, patients will need to meet ALL FOUR of these requirements:
<ol style="list-style-type: none"> 1. Be 18 years or older. 2. Have a body mass index (BMI) of 25 or higher (23 or higher if Asian American). 3. Not be previously diagnosed with type 1 or type 2 diabetes. 4. Not be pregnant.
Patients will also need to meet ONE of these requirements (unless they are enrolling in the Medicare Diabetes Prevention Program, which has different criteria):
<ol style="list-style-type: none"> 1. Had a blood test result in the prediabetes range within the past year (includes any of these tests and results): <ul style="list-style-type: none"> • Hemoglobin A1C: 5.7 to 6.4% • Fasting plasma glucose: 100 to 125 mg/dL • Two-hour plasma glucose (after a 75 g glucose load): 140 to 199 mg/dL 2. Be previously diagnosed with gestational diabetes. 3. Received a high-risk result (score of 5 or higher) on the Prediabetes Risk Test.

Adapted from [Program Eligibility](#), by CDC, 2022.



CDC-recognized National DPPs are available statewide.

Find nearby locations by reviewing these online resources:

- [CDC National DPP Locator Tool](#)
- [YMCA National DPP website](#)

Locate an Online or In-Person National DPP

Does Your Patient Have Prediabetes?

Delaware National DPPs can be found by:

- Visiting the [CDC National DPP Locator Tool](#)
- Viewing county listings of in-person and virtual cohorts on the [DE YMCA's Diabetes Prevention website](#)
- Contacting your local Quality Insights Practice Transformation Specialist



Delaware's Newest National DPP

Focus Pharmacy, located at 117 East Glenwood Avenue in Smyrna, began offering the National DPP in March of this year. Your patients can have fun getting healthy with pharmacists Dr. Tee and Dr. Bush. For each session, classes are held one hour per week, for 22 weeks.

Interested parties may call **302-471-3046** or email info@focuspharmacyde.com to register for upcoming sessions.

Quality Insights Can Help: Connect Your Patients to National DPP and DSMES



At **no cost** to your practice, your patients with prediabetes and diabetes can receive a National DPP or Diabetes Self-Management Education and Support (DSMES) referral letter, portal message, or text encouraging them to enroll in an eligible program.

After initial contact is made, patients will receive a follow-up phone call to determine their level of interest in the program. Patient questions are addressed, and communicated barriers are documented and shared with the referring practice. Prior to initiation of the campaign, participating practices receive an overview of the benefits of the National DPP or DSMES.

For more information, contact your local Practice Transformation Specialist or [Ashley Biscardi](#) at **1-800-642-8686, ext. 137**.

National DPP as a Covered Benefit

Many health insurance companies now include the National DPP as a covered benefit. Participation in the National DPP is available at no cost for:

- State employees covered by [Highmark Delaware](#) or [Aetna](#)
- Delaware Medicaid members
- [AmeriHealth Caritas](#) members
- [Highmark Health](#) members
- Medicare consumers (see below)

Note: Members must meet all eligibility criteria to participate.

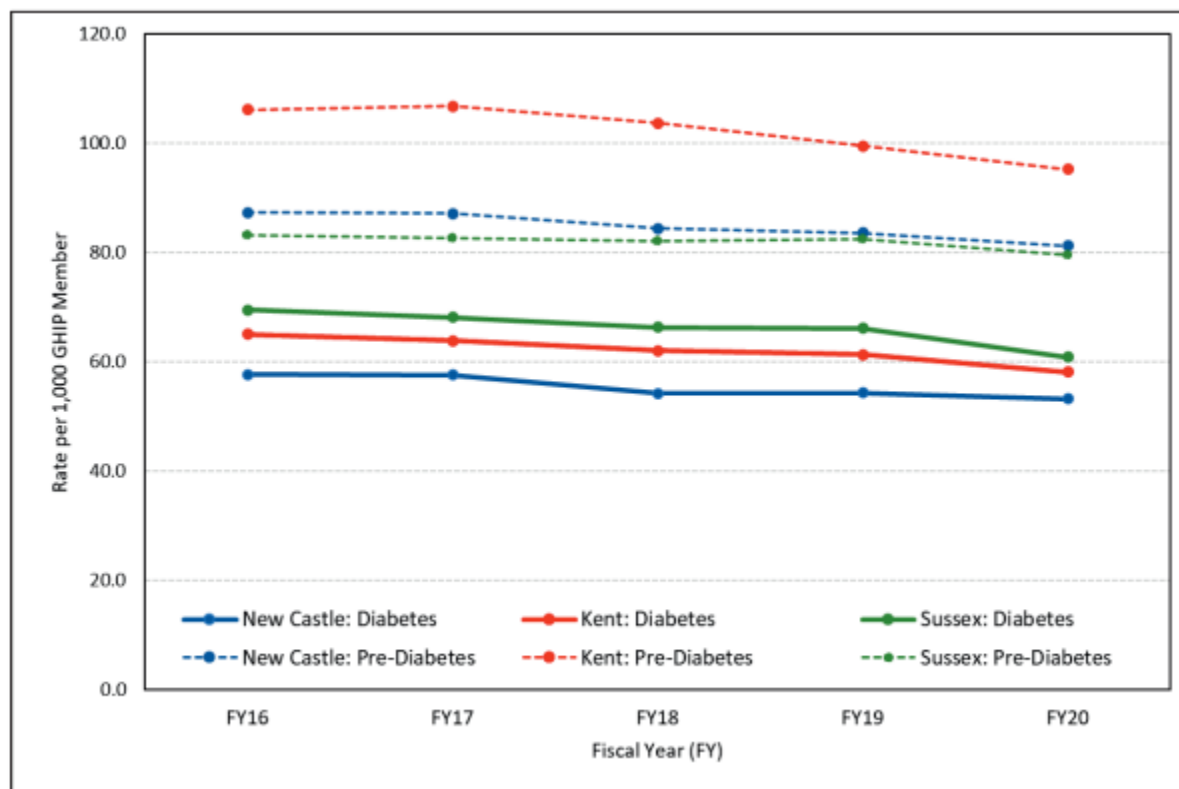
"In 2019, **13%** of all Delaware adults reported that they had been diagnosed with diabetes, including **14,672 Medicaid clients** and **12,369 Group Health Insurance Plan (GHIP) members.**"

Source: [DPH](#), 2021



Prediabetes is a growing workforce issue with serious health and cost consequences. Learn more about the link between today's workforce and prediabetes by watching this 2021 webinar from the Greater Philadelphia Business Coalition of Health (GPBCH), DE DPH, and NACDD, [Prediabetes is Affecting Your Workforce: Offering the National Diabetes Prevention Program Can Improve Health and Reduce Costs](#).

Figure 1: Diabetes and Prediabetes Prevalence Rates by County per 1,000 Active Employees and Early Retirees in the Group Health Insurance Plan (GHIP), Delaware, Fiscal Years 2016-2020



Note: Includes Active Employee and Early Retiree GHIP Members; Medicare retirees excluded due to incomplete medical and prescription costs and utilization captured through available claims.

From [The Impact of Diabetes in Delaware, 2021](#), by DHSS DPH et al., 2021.



Medicare Beneficiary Eligibility

The [Medicare Diabetes Prevention Program](#) (MDPP) allows Medicare beneficiaries to access evidence-based diabetes prevention services that aim to facilitate weight reduction, lower health care expenditures, and improve health outcomes.

The MDPP program became a one-year program beginning in 2022 ([Hoerger et al., 2022](#)).

Table 5: National DPP Eligibility Requirements for Medicare Beneficiaries, CDC, 2022

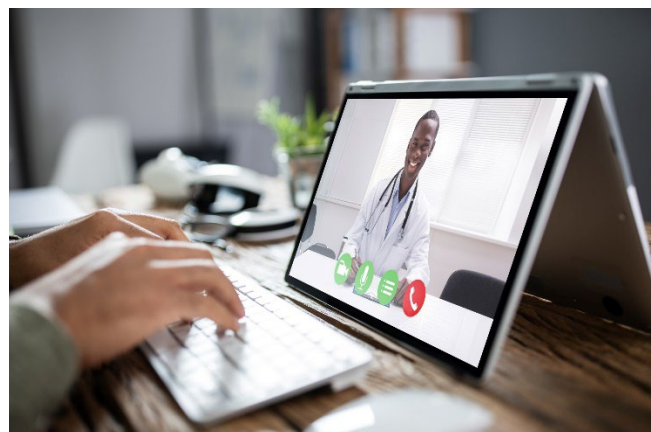
Medicare beneficiaries will need to meet these eligibility requirements to participate:
<ul style="list-style-type: none">• Enrollment in Medicare Part B through original Medicare (fee-for-service) or a Medicare Advantage (MA) plan.• Body mass index (BMI) of 25 or higher (23 or higher if you self-identify as Asian).• Results from any one of these three blood tests within a year of starting the program:<ul style="list-style-type: none">○ Fasting plasma glucose test result of 110-125 mg/dL○ Oral glucose tolerance test result of 140-199 mg/dL○ HbA1C test result of 5.7%-6.4%• No history of type 1 or type 2 diabetes (gestational diabetes is acceptable).• No current end-stage kidney disease.

Adapted from [Medicare Can Help You Prevent Type 2 Diabetes](#), by CDC, 2022.

Eligible patients may enroll in MDPP today and start making healthy changes. The in-person program is free for those with Medicare Part B ([CDC](#), 2022). Check to see if there's a program near you on this [list of providers](#), or search by [zip code](#).

Virtual Success: National DPP and Older Adults

An observational study (2017) published in the [Journal for Aging and Health](#) found that individuals in the Medicare population who were willing to attempt to use an online version of the National DPP lifestyle change program were able to meaningfully engage with the program. Participants lost 7.5% of their body weight at 12 months in addition to improving glucose control and decreasing total cholesterol. While this study is not generalizable to the entire population of older adults, it provides evidence that online delivery of the National DPP can be successful for older populations.



More recent [research](#) (2022) from the Preventing Diabetes Through Digital Coaching for Translation and Scalability Trial (PREDICTS) examined the effectiveness of a digital diabetes prevention program (d-DPP). A subgroup of participants were 65 years of age and older. Interestingly, for this subgroup, there was a [greater reduction in HbA1C and body weight](#) through d-DPP than through small-group education. The evidence showed that d-DPPs are as effective as in-person MDPP offerings and, as the researchers suggested, that d-DPPs should be considered a viable option to fill the demand for more MDPP providers.

Of note, according to the [Evaluation of the Medicare Diabetes Prevention Program: Second Evaluation Report](#), 39% of all Medicare beneficiaries live in excess of 25 miles from the nearest MDPP location. The report also suggests that there have been too few enrollees in the MDPP, since its inception in 2018, and too little time has elapsed after participation to effectively assess the impact on the incidence of diabetes and health care expenditures. However, there is sufficient data to show that MDPP beneficiaries lose weight.



YMCA of Delaware Provides National DPP

For patients at risk for type 2 diabetes, the [YMCA of Delaware's Diabetes Prevention Program](#) provides a supportive environment and small group setting in which participants will learn how to adopt healthy habits to reduce their chances of developing type 2 diabetes.

The YMCA of Delaware offers a Spanish-language National DPP virtual cohort. Spanish-language program materials and future cohort information is available by emailing healthyliving@ymcade.org or calling **302-572-9622**.

Unite Us: Connecting Patients and Providers to Community Resources

The Unite Us platform is a bi-directional system that connects providers and community-based resources including the YMCA National DPP, food banks, housing, and more through an online portal. This portal offers providers a better way to track the patients they have referred to services, and it also allows them to receive feedback about patient progress from those programs.

For those unaware of this program or without access, reach out to your Quality Insights Practice Transformation Specialist to learn more. Joining is free of cost for many organizations. For providers who already have a [Unite Us](#) login, Quality Insights encourages you to utilize it to make referrals to the National DPP and other appropriate resources.

Black Women's Health Imperative: Change Your Life. Change Your Lifestyle

[Black Women's Health Imperative](#) (BWHI) offers a CDC-approved, culturally tailored adaptation of the National DPP. *Change Your Lifestyle. Change Your Life.* or CYL² is a yearlong, virtual, evidence-based, lifestyle change program designed for Black women. Participants receive the tools and support they need to help prevent type 2 diabetes and other chronic conditions such as heart disease, high blood pressure, and high cholesterol.

Interested participants should be 18 years of age or older and have a BMI of 25 or more. They must also be diagnosed with prediabetes by a health care provider, have a history of gestational diabetes, or score at least five on the [Prediabetes Risk Test](#). For more information, download the BWHI app on the [App Store](#) or on [Google Play](#).

Pharmacy-Based National DPP

Pharmacies in your local community may offer National DPP services. Providers can locate these programs by [visiting the CDC website](#) or utilizing the search tool on website. Encourage your patients to connect with their local pharmacist to discuss enrollment in these evidence-based, lifestyle change programs by sharing the following flyers developed by the U.S. Department of Health and Human Services:

- [Could You Have Prediabetes](#) (English)
- [Could You Have Prediabetes](#) (Spanish)

Learn how pharmacists can participate and access the “[Rx for the National Diabetes Prevention Program: Action Guide for Community Pharmacists](#),” which is designed to help community pharmacists and members of the pharmacy workforce reach people at high risk of developing type 2 diabetes who could benefit from the National DPP lifestyle change program.

Let Quality Insights do the work for you!

If you need assistance locating a National DPP or MDPP in your area, contact your local Quality Insights Practice Transformation Specialist or email [Ashley Biscardi](#).



Successes and Opportunities in Delaware: Increasing National DPP Participation for Medicaid Clients

The National DPP is a covered benefit under Delaware Medicaid managed care organizations. At-risk Medicaid participants have historically underutilized the National DPP benefit, possibly missing opportunities for disease prevention. Quality Insights, in partnership with DE DPH and NACDD, has completed two of three initiatives to increase the number of individuals covered by Medicaid engaged in the National DPP and create an [Umbrella Hub](#) in Delaware.

When this work first started in 2020 there was limited access to National DPPs for Medicaid patients in Delaware. All programs were provided in-person at the YMCA locations in Delaware. At the time, access to the program was limited to those that lived in close proximity to a YMCA program. Provider

practices, MCOs, and DMMA were not well versed in the program, and many were not actively referring their patients.

Quality Insights worked to increase provider awareness and referrals to the National DPP through development of key relationships with the YMCA of Delaware, Highmark Health Options, Amerihealth Caritas of Delaware, Delaware Division of Medicare and Medicaid (DMMA), the health care systems, Federally Qualified Health Centers (FQHCs), and over 100 Delaware provider practices. During the first year of implementation (2021-2022), the number of Medicaid referrals to the DPP increased by 151% from the prior year (when no Quality Insights technical assistance was provided). Quality Insights assisted with text and call campaigns as well as letters from providers.

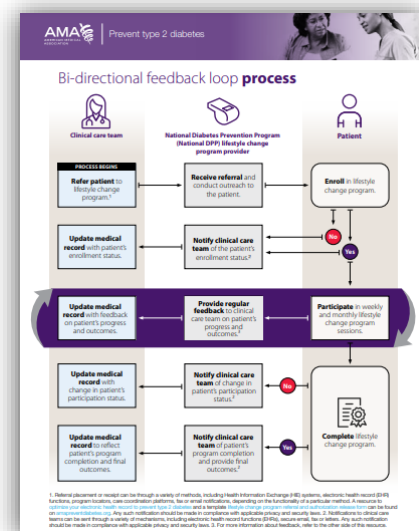


The newest iteration of the work has been the development of an Umbrella Hub organization, the goal of which is to assist in expanding the number of National DPP programs in Delaware. As the work continues in the newest grant (9/1/2022 to 7/31/2023), the Health Promotion Council (HPC) in Pennsylvania continues to be the Hub organization for Delaware. Quality Insights is committed to onboarding subsidiary organizations and facilitating efforts to further increase access to and referrals for the National DPP, with a specific focus on Medicaid patients. For more information about future opportunities for practices to receive support from the Delaware Umbrella Hub, reach out to [Eric Bumbaca](#) with the HPC.

Referral Process Improvement: Developing and Implementing a Bi-Directional Feedback Loop

A bi-directional feedback loop refers to the process by which information flows from the clinical care team to the National DPP lifestyle change program provider (referral) and from the National DPP lifestyle change program provider to the clinical team (feedback on the patient's progress).

Bi-directional feedback begins after a patient has been diagnosed with prediabetes and a clinical decision has been made to refer the patient to a National DPP lifestyle change program. Bi-directional feedback ends when the clinical team is notified by the National DPP lifestyle change program that the patient left the program early or completed the program in its entirety.



The [AMA Diabetes Prevention Toolkit](#) includes a detailed bi-directional feedback loop process and FAQ document. [Download this resource](#) to learn more about developing and implementing this process at your practice.

Tools for Your Team: Provider and Clinical Staff Resources

Becoming a CDC-Recognized National DPP

DIABETES PREVENTION IMPACT TOOLKIT



National DPPs can help improve the health and well-being of your community. [Visit the CDC website](#) for step-by-step information on building your recognized National DPP and ensuring that it receives maximum reimbursement. Also available are resources to help project the health and economic effects the National DPP lifestyle change program can have on those in your community who are at risk for diabetes, including:

- [CDC Diabetes Prevention Impact Toolkit](#): Cost-effectiveness and potential cost savings are factors to consider when contemplating the value and impact of the National DPP lifestyle change program. CDC has developed cost calculator tools to help employers, insurers, and other stakeholders estimate potential return on investment (ROI) and other cost and health outcome measures associated with offering the National DPP lifestyle change program to employees, beneficiaries, or members.
- [CDC National DPP Customer Service Center](#): Provides organizations easy access to information and resources about prediabetes and the National DPP. Organizations can access training materials, toolkits, and videos; ask questions; and receive technical assistance related to all aspects of the program.
- [National DPP Coverage Toolkit](#): Locate information about the mechanics of covering the evidence-based National DPP lifestyle change program, including an overview of coverage for Medicaid, Medicare, and commercial payers. [Curricular resources](#) and the [Discovery Session Facilitator's Guide](#) are provided to assist with program development, recruitment, and enrollment.

Quality Insights, in conjunction with the Umbrella Hub Organization, is available to support you in your journey to becoming an accredited National DPP. Learn more by reviewing our [flyer](#) or contacting [Ashley Biscardi](#) at 1-800-642-8686, Ext. 137.

AMA Diabetes Prevention Toolkit

The [AMA Diabetes Prevention Toolkit](#) provides resources for patients and members of the care team to aid in the education, promotion, outreach, and implementation associated with diabetes prevention strategies. A few toolkit resources include:

- [Optimize Your EHR to Prevent Type 2 Diabetes](#)
- [Prediabetes Identification and Management Protocols](#)
- Promoting Prediabetes Awareness to Your Patients ([English](#) and [Spanish](#))
- Sample Patient Letters ([internal](#) and [external](#)): to conduct follow-up and referral of patients who have been identified as having prediabetes



Increasing Awareness: CDC Video Series Spotlights the National DPP

A National DPP video series from the CDC (2021) is designed to increase awareness about the National DPP. There are several videos to choose from, and they highlight the benefits of National DPP participation while also addressing barriers. Featured in the videos are former program participants and a Lifestyle Coach, ready to share their experiences so as to encourage others on their journey to better health. Complementary videos serve to reinforce program content.

The [CDC](#) (2021) provides this guidance, “You can help increase awareness of the National DPP and support enrollment by sharing the videos on your available communications channels. Additional ideas include:

- Host the videos on your website. Each video can be embedded on your website at no cost to you. To embed the video, visit the video’s page and copy the embed code. You can then paste the embed code into the HTML of the page on which you’d like the video to appear.
- Include an announcement about the videos in your own newsletters and e-communications.
- Share social media posts on your available social media channels. ...
- Play the videos in waiting rooms, reception, and exhibit areas (as appropriate and available).”

[Check out the National DPP Video Series.](#)

Quality Insights EDISCO™ Online Continuing Education Courses

Quality Insights and the Delaware Division of Public Health have partnered to provide a series of interactive and engaging e-learning courses to the practices, health systems, and federally qualified health systems in Delaware. Currently, eleven online EDISCO™ courses are being offered to our participating practices at **no cost**. Some of these courses offer **continuing medical education (CME)** and **continuing nursing education (CNE) credits**.

Download this [course flyer](#) or view our [website](#) for more information. Courses designed to assist you in the diagnosis and treatment of prediabetes and the provision of value-based care include:

- [Diabetes: Awareness to Action](#)*: The purpose of this course is to increase awareness of available DSMES and National Diabetes Prevention Program (National DPP) services and increase referrals to these programs in Delaware.
- [National DPP Coverage Toolkit Overview](#): This toolkit was developed in 2017 as part of ongoing national efforts to establish Medicaid coverage for the National DPP lifestyle change program. This course provides an overview of the National DPP Coverage Toolkit resources that support increased awareness and referrals into the National DPP lifestyle change program.
- [Health Literacy](#)*: If your practice is striving to embrace diversity and reach all populations, this course is for you!
- [Medication Therapy Management](#)*: Improving medication adherence is an important way to increase quality and reduce cost. Learn how collaborating with pharmacists to provide medication therapy management can greatly impact patient adherence.
- [Motivational Interviewing](#)*: Learn how to expand the role of your team and encourage enhanced communication with patients.
- [Helping Patients Quit Tobacco](#)*: Learn how to support your patients' efforts to quit tobacco and improve their chances for success.

*Continuing Nursing Education (CNE) and Continuing Medical Education (CME) credits are offered with these courses at no cost.





We will work with your practice to develop a health coaching workflow to best meet your practice and patient needs. Access Quality Insights' health coaching [flyer](#) for more information. Your practice may contact [Ashley Biscardi](#) or your current Practice Transformation Specialist to use this service.

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Prediabetes Prevention Resources for Patients

Searching for additional materials to supplement your workflow and the education you already provide to your patients with prediabetes? Look no further.

Quality Insights has compiled a list of up-to-date resources from the ADA, CDC, AMA, NIDDK, Association of Diabetes Care and Education Specialists (ADCES), and the American Heart Association (AHA) that can be utilized to support prediabetes education in your practice.

Delaware Diabetes Resource Guide

The [Diabetes Resource Guide](#) is developed by the Delaware Diabetes Coalition with a focus on helping patients live a healthier life by assuring they receive care according to evidence-based standards. Useful information includes Delaware-based National DPP locations, diabetes support groups, and more. Patients may download this guide at no cost in [English](#) and [Spanish](#).

Patient Education Resources in Multiple Languages

- [The ADA Patient Education Library](#) provides prediabetes and diabetes education resources available for free download (after registration) in Arabic, Chinese, English, French, Haitian Creole, Korean, Portuguese, Russian, Spanish, Tagalog, and Vietnamese.
- [MedlinePlus®](#) is a service of the National Library of Medicine (NLM) and an online health information resource for patients and members of their support system. Information is offered in both English and Spanish. [Review the prediabetes resources.](#) Using the [Health Information in Multiple Languages](#) web page, one may browse the resources that are made available in a variety of other languages.
- [Public Libraries: Health Information in Multiple Languages](#) is a NLM web page containing links to health information education websites that provide information in various languages.



Delaware Emergency Medical Diabetes Fund

The [Delaware Emergency Medical Diabetes Fund](#) provides, on an emergency need basis, an allowance for prediabetes or diabetes medications, services, or supplies to residents of Delaware. Payments are made to vendors, and client assistance is capped at a maximum of \$500 per rolling year.

Table 6: Delaware Emergency Services Diabetes Fund Eligibility Requirements, Delaware

Eligibility Requirements*:
Individual has diabetes (type 1, type 2, gestational, or other) or prediabetes.
Medical need is present that could result in serious impairment of health, prolonged hospitalization, complications, or death.
Individual is without resources immediately accessible to meet his/her health needs.
Individual must not have other insurance that will provide the services requested.

**Requests are evaluated on a case-by-case basis, using established Delaware State Service Center financial screening and eligibility criteria.*

Adapted from [DE Emergency Services Diabetes Fund](#), by Delaware Diabetes Coalition, n.d.

Learn more about eligibility and referral by downloading this flyer for [providers](#) and [patients](#) (Spanish language flyers are available on the [Quality Insights website](#)). This program is administered by the Delaware Division of State Service Centers. Referrals can be made by calling the [Delaware Diabetes and Heart Disease Prevention and Control Program](#) at **302-744-1020**.

Additional Patient Resources

- [Prediabetes: Could It Be You?](#)
- [What is Prediabetes?](#) (also available in [Spanish](#))
- [So You Have Prediabetes...Now What?](#) (also available in [Spanish](#))
- [Prediabetes: What Is It and What Can I Do?](#)
- [Your Game Plan to Prevent Type 2 Diabetes](#)
- [Options for Healthier Cooking](#) (also available in [Spanish](#))
- [Shopping at the Corner Store or La Teindita](#) (also available in [Spanish](#))



Quality Insights 50th Anniversary Grant Program

To celebrate our 50th anniversary, we are giving away \$100,000 in community health grants. Quality Insights recognizes the importance of giving back to the communities we serve. For details about the program, [visit the Quality Insights website](#).