

The Impact of Diabetes in Delaware | 2025



DELAWARE HEALTH AND SOCIAL SERVICES
Division of Public Health



DELAWARE HEALTH AND SOCIAL SERVICES
Medicaid and Medical Assistance Program

The Impact of Diabetes in Delaware is published biennially to provide Delaware legislators with up-to-date information on diabetes prevalence, programming, costs, and accomplishments in the First State. The 2025 report is the fourth iteration of *The Impact of Diabetes in Delaware* and includes 2023-2024 data.

The Impact of Diabetes in Delaware, 2025 is a collaboration of the following three agencies:

- Delaware Department of Health and Social Services (DHSS), Division of Public Health (DPH)
- DHSS, Division of Medicaid & Medical Assistance (DMMA)
- Delaware Department of Human Resources (DHR), Statewide Benefits Office (SBO)

For more information, contact:
Delaware Department of Health and Social Services
Division of Public Health
Diabetes and Heart Disease Prevention and Control Program
Thomas Collins Building, Suite 11
540 S. DuPont Highway
Dover, DE 19901
Phone: 302-744-1020
Fax: 302-739-2545

<https://www.dhss.delaware.gov/dhss/dph/dpc/diabetes.html>

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Executive Summary

Diabetes in Delaware

Diabetes is a chronic disease that affects how your body turns food into energy [1]. People with diabetes have difficulty moving sugar from the bloodstream into cells to use as energy [1]. As a result, too much sugar stays in the bloodstream. Left untreated, diabetes raises the risk for heart disease, stroke, kidney disease, blindness, and nerve damage [1]. There are three main types of diabetes: type 1, type 2, and gestational (diabetes during pregnancy). In the United States, type 2 diabetes accounts for 90-95% of all diagnosed cases [1]. Prediabetes, a condition where blood glucose levels are higher than normal, but not high enough for a type 2 diabetes diagnosis, is also a recognized medical condition.

Approximately 110,000 Delaware adults, or 13.3% of residents ages 18 and older, have been diagnosed with diabetes, according to the 2023 Delaware Behavioral Risk Factor Survey [2]. Every year, an estimated 4,800 Delaware adults are newly diagnosed with the disease [3]. In 2022, among Delaware adults who did not have diagnosed diabetes, 14.5% – more than 99,000 individuals – had been diagnosed with prediabetes [2]. In total, nearly three out of every 10 Delaware adults has been diagnosed with prediabetes or diabetes. This estimate does not include adults with prediabetes or diabetes who are unaware that they have the conditions.

Diabetes prevalence is increasing in Delaware, the U.S., and globally. From 2003 to 2023, Delaware's adult diabetes prevalence nearly doubled from 7.7% to 13.3% [2]. Rising diabetes prevalence reflects multiple factors, including increases in the number of new diabetes cases diagnosed each year, advances in clinical diabetes care, declines in diabetes mortality, and increases in the size of the older population.

Some subpopulations of Delaware adults are more likely to be impacted by diabetes compared to others. The following groups of Delaware adults are considered high risk populations because they systematically experience a greater diabetes burden compared to others:

- Adults with overweight/obesity
- Adults ages 55 and older
- Non-Hispanic Black adults
- Kent County residents
- Adults with hypertension
- Adults with uncontrolled diabetes.

Economic Impact

Diabetes is usually a lifelong condition and requires consistent, long-term, and comprehensive management. As the disease progresses, a person with diabetes requires constant and vigorous intervention to keep their blood glucose levels in check [4]. The high cost of diabetes care reflects the many medications, services, and supplies required to treat the disease, as well as any diabetes-related complications and comorbidities that arise from diabetes.

The U.S. spent \$412.9 billion on diabetes in 2022, including \$306.6 billion in direct medical costs and \$106.3 billion in indirect costs attributable to diabetes [5]. One in four health care dollars spent in the U.S. in 2022 represented care for people diagnosed with diabetes, 61% of which were directly attributable to the disease [5]. On average, people with diabetes have medical expenditures 2.6 times higher than those without diabetes [5]. The American Diabetes Association (ADA) estimates that in 2017, Delaware spent \$982 million on diabetes, \$703 million of which represented direct medical expenses [3]. Also in 2017, Delaware spent nearly \$279 million on indirect costs attributable to lost productivity due to diabetes [3].

In Fiscal Year (FY) 24, Delaware Medicaid Managed Care Organizations (MCOs) directly reimbursed providers \$57.6 million for diabetes-related care for an estimated 19,996 Medicaid members with diabetes. An additional \$3.3 million was paid directly to providers via fee-for-service claims for diabetes-related care. Diabetes is the leading cost driver when grouped by episode of care among State of Delaware Group Health Insurance Plan (GHIP) members. In FY24, an estimated 15,494 GHIP members had diabetes, reflecting a prevalence rate of 108.3 per 1,000 GHIP members. In the same fiscal year, the total allowed amount for diabetes, reflective of net payments from the GHIP as well as member costs, reached \$112.5 million – an increase of over \$27 million compared to FY23.

Reducing Diabetes Risk

For adults with prediabetes or who are otherwise at risk for diabetes, lifestyle change is a powerfully effective first-line approach to prevent progression to diabetes [6]. Although healthy lifestyle changes may not be enough to overcome strong genetic risk factors for diabetes, lifestyle changes can prevent or delay diabetes in many adults with prediabetes.

One of the most effective ways to lower diabetes risk is to participate in the National Diabetes Prevention Program, or the National DPP. The National DPP is a year-long lifestyle change program created by the CDC in 2010. Long-term studies show that the participation in the lifestyle-modification program is even more effective at reducing the risk of developing type 2 diabetes compared to taking metformin, a commonly prescribed medication to lower blood glucose levels [7].

In Delaware, the National DPP is a covered benefit for Delaware Medicaid and GHIP members. Delawareans at risk for diabetes are strongly encouraged to check if the National DPP is a covered benefit through their employer or insurance carrier. Delaware adults also have access to complementary healthy lifestyle programs like the Healthy Heart Ambassador-Blood Pressure Self-Monitoring Program (HHA-BPSM). HHA-BPSM is a free, four-month CDC-approved program for people with high blood pressure, a known diabetes risk factor.

Managing Diabetes

To help stay healthy and prevent complications following a diabetes diagnosis, doctors recommend lifestyle changes and medication management. These strategies help reduce high blood glucose and keep it in a healthy range. Lifestyle changes and medication management also help control high blood pressure and high cholesterol levels, two common diabetes comorbidities.

Many Delaware adults with diabetes struggle to achieve diabetes control. In FY24, 57.4% of Delaware Medicaid members with diabetes had a Hemoglobin A1C (A1C) value of less than 8.0%, indicating that their diabetes was under control. In contrast, nearly 38% of Delaware Medicaid members had an A1C value greater than 9.0%, indicative of uncontrolled diabetes. Among Delaware Medicaid members with diabetes in FY24, 32.6% had uncontrolled blood pressure and 34.6% were not compliant with prescribed statin medication at least 80% of the time. Elevated blood glucose, blood pressure, and blood cholesterol are independent risk factors for negative health outcomes; when they co-occur, an individual is at even greater risk for health complications.

One of the most effective ways to build diabetes self-management skills and improve medication adherence is to enroll in a lifestyle change program designed for people with diabetes. These programs help people with diabetes navigate daily challenges while they work to adopt healthy, sustainable behaviors. People who participate in diabetes management lifestyle change programs experience improved glucose levels, improved management of blood pressure and cholesterol, and fewer and less-severe diabetes-related complications compared to people who do not participate in these programs [8]. Despite this, participation in lifestyle change programs is low among adults diagnosed with diabetes. In 2023, less than half (45.6%) of Delaware adults with diagnosed diabetes had ever taken a course or class to learn how to manage the condition, and just 26.1% had taken such a course within the past five years [2].

Delawareans with diabetes have access to multiple evidence-based lifestyle change programs including Diabetes Self-Management and Education Support (DSMES) services and the Diabetes Self-Management Program (DSMP). State of Delaware GHIP members also have access to the Transform Diabetes Care® and Livongo® diabetes management programs. DPH, DMMA, and SBO work year-round to promote awareness of, and increase referrals to, diabetes self-management lifestyle change programs.

Delaware Diabetes Plan

Reducing the burden of diabetes in Delaware requires a coordinated, sustained approach by stakeholders. Efforts must incorporate aspects of diabetes education, prevention, early diagnosis, and effective disease management. The Delaware Diabetes Plan developed by DPH, DMMA, and SBO is a blueprint to provide stakeholders with direction and focus for achieving Delaware's four long-term diabetes goals:

- **Goal 1:** Reduce the incidence of diabetes in Delaware.
- **Goal 2:** Improve clinical outcomes for adults with diabetes.
- **Goal 3:** Advance health equity and reduce diabetes-related disparities.
- **Goal 4:** Reduce diabetes-related health care costs.

Recommendations

To help realize the vision of the Delaware Diabetes Plan and to continue progress already made, DPH, DMMA, and SBO make the following recommendations:

- **Recommendation 1:** Continue to promote diabetes risk reduction through healthy lifestyle behaviors.
- **Recommendation 2:** Increase referrals to the nationally recognized and evidence-based National Diabetes Prevention Program (National DPP) for Delawareans at risk for diabetes.
- **Recommendation 3:** Reduce the proportion of Delawareans with uncontrolled high blood pressure through improved medication adherence and/or referrals to lifestyle change programs like the Healthy Heart Ambassador – Blood Pressure Self-Monitoring Program (HHA-BPSM).
- **Recommendation 4:** For Delawareans diagnosed with diabetes, increase referrals to evidence-based lifestyle change programs including Diabetes Self-Management and Education Support (DSMES), the Diabetes Self-Management Program (DSMP), Transform Diabetes Care® (for GHIP members covered by Aetna), and Livongo® (for GHIP members covered by Highmark Delaware).
- **Recommendation 5:** Promote a team-based care approach to diabetes to improve clinical outcomes and reduce health care costs.
- **Recommendation 6:** Use high-quality electronic health record data and claims data to inform outreach and policy.

Introduction: Collaborating Agencies

The Impact of Diabetes in Delaware, 2025 is a collaboration between the Delaware Department of Health and Social Services (DHSS), Division of Public Health (DPH) and Division of Medicaid & Medical Assistance (DMMA), and the Delaware Department of Human Resources (DHR), Statewide Benefits Office (SBO).

DPH oversees diabetes activities and programming statewide. DMMA provides medical assistance to Delaware Medicaid members through a variety of programs; most activities related to diabetes are administered through contracted Medicaid Managed Care Organizations (MCOs). SBO administers health benefits to State Group Health Insurance Plan (GHIP) members and works directly with health plan vendors Aetna and Highmark Delaware to provide resources tailored to meet the needs of members with diabetes and those at risk for the disease. The agencies work together and with stakeholders to achieve the long-term goals outlined in the Delaware Diabetes Plan.

Division of Public Health (DPH)

- Population Served: All Delawareans, an estimated 1,045,328 individuals in 2025 [9]

Diabetes activities are carried out by the DPH Diabetes and Heart Disease Prevention and Control Program (DHDPCH). DHDPCH is funded by a cooperative agreement with the Centers for Disease Control and Prevention (CDC) with support from the Delaware Health Fund.

DHDPCH is tasked with decreasing the emotional, physical, and financial burden of diabetes among all Delawareans. DHDPCH programs target Delaware's most vulnerable populations, including minority populations, people of lower socioeconomic status (SES), older adults, people with disabilities, and those with diabetes risk factors. Certain diabetes resources are in place for those who do not meet health insurance qualifiers and/or whose insurance does not cover needed diabetes services and supplies.

Division of Medicaid & Medical Assistance (DMMA)

- Population Served: Eligible Delawareans whose incomes are insufficient to meet the costs of necessary medical services; approximately 252,000 individuals in 2024 [10]

DMMA ensures that Delaware's most vulnerable populations receive high-quality medical services in a cost-effective manner. DMMA oversees multiple programs under the umbrella category of the Delaware Medical Assistance Plan (DMAP). Medicaid is the largest DMAP program and provides medical assistance to eligible, low-income individuals and families whose incomes are insufficient to meet the costs of necessary medical services. Approximately 90% of Delaware Medicaid clients are enrolled in the

Diamond State Health Plan (DSHP), Delaware's Medicaid managed care program. DMMA contracts with MCOs AmeriHealth Caritas Delaware, Delaware First Health, and Highmark Health Options to provide services to clients covered through the DSHP.

Statewide Benefits Office (SBO)

- Population Served: More than 142,000 individuals covered under the GHIP

The DHR, SBO is responsible for the strategic planning, daily administration, and financial management of all health and related benefit programs available to eligible members covered under the GHIP. In FY24, there were a total of 101,533 members in the active employee population (including employees, their spouses and their dependent children), 11,256 members in the early retiree population (including non-Medicare retirees, their spouses, and their dependent children), and 29,506 Medicare retirees at some point during the fiscal year.

Chapter 1: Diabetes in Delaware

What is Diabetes?

Diabetes is a chronic disease that affects how your body turns food into energy [1]. People with diabetes have difficulty moving sugar from the bloodstream into cells to use as energy [1]. As a result, too much sugar stays in the bloodstream. Left untreated, diabetes raises the risk for heart disease, stroke, kidney disease, blindness, and nerve damage [1]. There are three main types of diabetes: type 1, type 2, and gestational (diabetes during pregnancy). In the United States, type 2 diabetes accounts for 90-95% of all diagnosed cases [1]. Prediabetes, a condition where blood glucose levels are higher than normal, but not high enough for a type 2 diabetes diagnosis, is also a recognized medical condition.

How Many Delawareans Have Diabetes?

Diabetes prevalence represents the proportion of a population with diabetes at a given point in time. In 2023, 13.3% of Delaware adults over the age of 18 reported that they had been diagnosed with diabetes. An additional 14.5% of Delaware adults reported that they had been diagnosed with prediabetes, also referred to as borderline diabetes. Based on these statistics, more than 209,000 Delaware adults have received a diagnosis of prediabetes or diabetes. In 2023, Delaware’s diagnosed diabetes prevalence and diagnosed prediabetes prevalence were both higher than the national median (Table 1).

Table 1. Prevalence of Diagnosed Diabetes and Prediabetes, United States and Delaware, 2023

Prevalence	National Median (States and DC)	Delaware
Diagnosed Diabetes	11.3%	13.3%
Diagnosed Prediabetes	12.7%	14.5%

Source: National data: Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data, 2023. Delaware data: Delaware Department of Health and Social Services, Division of Public Health, Behavioral Risk Factor Survey, 2003-2023.

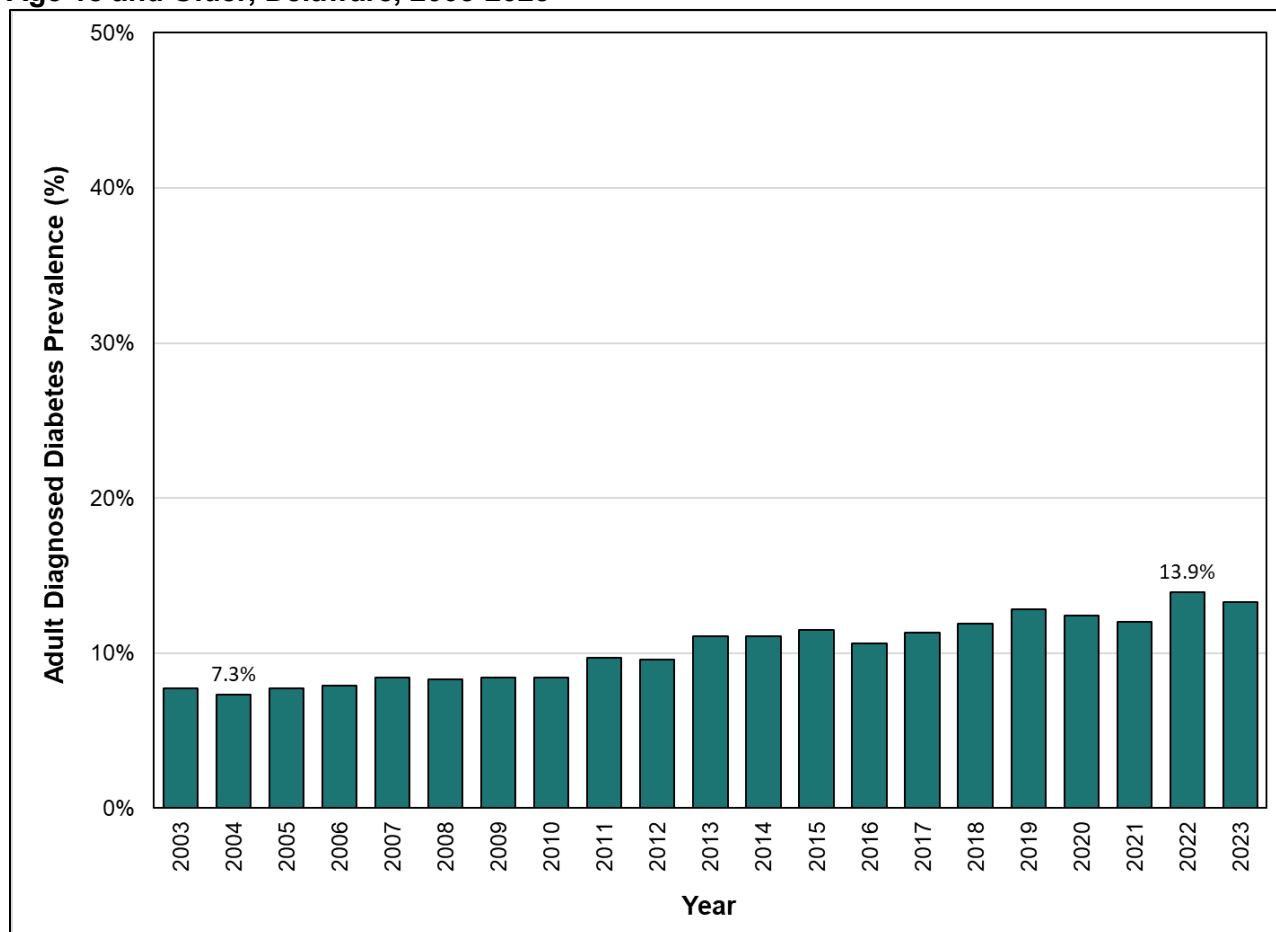
Prevalence rates in Table 1 do not include adults with undiagnosed prediabetes and diabetes. Undiagnosed prediabetes is especially common because people with prediabetes often experience no symptoms. For 2017-2020, 38.0% of all U.S. adults aged 18 and over had prediabetes, but only 19.4% reported being told by a health professional that they had this condition [11]. The exact number of Delaware adults with undiagnosed prediabetes is unknown. A person with undiagnosed diabetes has blood glucose levels that satisfy the established criteria for a diabetes diagnosis but has not received a diabetes diagnosis by a medical provider. In 2021, 38.1 million adults in the United States had diabetes; 29.4 million of these adults (77.2%) had diagnosed

diabetes and the remaining 8.7 million (22.8%) had undiagnosed diabetes [11]. The exact number of Delaware adults with undiagnosed diabetes is unknown.

How Has Diabetes Prevalence Changed Over Time?

From 2003 to 2023, Delaware's diagnosed diabetes prevalence nearly doubled, increasing from 7.7% to 13.3% among adults ages 18 and older (Figure 1).

Figure 1. Adult Diagnosed Diabetes Prevalence as a Percentage of the Total Population Age 18 and Older, Delaware, 2003-2023



Source: Delaware Department of Health and Social Services, Division of Public Health, Behavioral Risk Factor Survey, 2003-2023.

Increasing diabetes prevalence reflects many factors, including the following:

- **Increases in diabetes incidence.** In recent decades, the annual number of newly diagnosed cases of diabetes has grown, leading to an overall increase in diabetes prevalence. From 1990 to 2008, the number of new diabetes cases diagnosed each year in the U.S. doubled from 3.2 cases per 1,000 persons to 8.3 per 1,000 persons before plateauing [12]. Diabetes screening and early diagnosis efforts also

contribute to increases in diabetes incidence and prevalence by identifying people with diabetes who may not have otherwise received a diagnosis until much later.

- **Improvements in diabetes management.** Thanks to advances in early diagnosis, self-management, and clinical care, people with diabetes can live healthy lives for many years following a diabetes diagnosis. Over time, these advances have reduced the occurrence of many diabetes complications. For example, in the U.S., there was a 26% decline in end-stage renal disease related to diabetes between 1998 and 2008, a 65% decline in incidence of lower extremity amputation among adults with diabetes between 1999 and 2009, and a 19% decline in reported visual impairment in those with diagnosed diabetes between 2000 and 2010 [13].
- **Aging population.** From 2025 to 2040, the size of Delaware's 65+ population is expected to increase 17.7%, increasing from 238,324 to 280,414 [9]. By 2040, adults aged 65 and older will make up 24.8% of Delaware's total population [9]. Because age is a strong risk factor for diabetes, an aging population will contribute to increases in diabetes incidence and prevalence.

Is Diabetes Prevalence Different Among Groups?

Diabetes prevalence varies among different groups of people. Some differences in diabetes prevalence estimates reach a threshold of statistical significance. A statistically significant difference is one that is not attributed to chance. Other differences in diabetes prevalence do not reach the threshold of statistical significance. If a difference is not statistically significant, chance cannot be ruled out as an explanatory factor for the difference.¹

In 2023, diagnosed diabetes prevalence among Delaware males (13.9%) and females (12.8%) was not significantly different (Table 2). The prevalence of diagnosed diabetes among non-Hispanic Black Delawareans (19.1%) was significantly higher than the prevalence among non-Hispanic White Delawareans (12.5%). Diagnosed diabetes prevalence among Delawareans ages 18 to 44 (3.1%) was significantly lower than among those ages 55 to 64 (21.0%) and those ages 65 and older (23.7%). In 2023, diagnosed diabetes prevalence did not differ significantly by educational level. Delawareans with household incomes of \$15,000 to \$24,999 had a significantly higher diabetes prevalence (23.6%) compared to those with household incomes of \$50,000 to \$99,999 (12.0%) and \$100,000 to \$199,999 (8.4%). In 2023, diabetes prevalence in Kent County (15.6%) was higher than in New Castle (12.9%) and Sussex (12.5%) counties, though the difference did not reach a level of statistical significance.

¹ Significant differences between prevalence estimates were identified by non-overlapping 95% confidence intervals.

Table 2. Adult Diagnosed Diabetes Prevalence by Demographic Characteristics, Delaware, 2023

Delaware, 2020

	Diagnosed Diabetes Prevalence	Statistical Significance
Total, All Adults	13.3%	
Sex		
Male	13.9%	There is no significant difference in diagnosed diabetes prevalence between males and females.
Female	12.8%	
Race		
Non-Hispanic White	12.5%	The prevalence of diagnosed diabetes is significantly higher among non-Hispanic Black Delawareans compared to non-Hispanic White Delawareans.
Non-Hispanic Black	19.1%	
Age		
18-44	3.1%	Diagnosed diabetes prevalence for adults ages 55-64 and 65+ is significantly higher than for adults ages 18-44.
45-54	13.7%	
55-64	21.0%	
65+	23.7%	
Education		
< High School	13.6%	Diagnosed diabetes prevalence does not differ significantly by educational level.
High School or GED	12.8%	
Some Post-High School	16.6%	
College Graduate	10.7%	
Household Income		
<\$15,000	19.0%	Diagnosed diabetes prevalence is significantly higher among Delawareans with a household income of \$15,000 to \$24,999 compared to those with household incomes of \$50,000 to \$99,999 and \$100,000 to \$199,999.
\$15,000 - \$24,999	23.6%	
\$25,000 - \$34,999	18.1%	
\$35,000 - \$49,999	14.9%	
\$50,000 - \$99,999	12.0%	
\$100,000 - \$199,999	8.4%	
≥\$200,000	10.9%	
County		
New Castle County	12.9%	Diagnosed diabetes prevalence does not differ significantly by county of residence.
Kent County	15.6%	
Sussex County	12.5%	

Note: Significant differences between prevalence estimates were identified by non-overlapping 95% confidence intervals. Source: Delaware Department of Health and Social Services, Division of Public Health, Behavioral Risk Factor Survey, 2023.

Who is at Risk for Diabetes?

A person with one or more diabetes risk factors is more likely to develop diabetes than a person with no risk factors. The more diabetes risk factor a person has, the more likely they are to develop the disease. Some diabetes risk factors can be modified through healthy lifestyle behaviors. Other risk factors are non-modifiable, meaning that they cannot be changed. The CDC and the American Diabetes Association (ADA) recognize modifiable and non-modifiable diabetes risk factors (Table 3).

Table 3. Modifiable and Non-Modifiable Diabetes Risk Factors

Risk Factor Category	Diabetes Risk Factor
Modifiable Diabetes Risk Factors	• Overweight/obesity
	• Prediabetes
	• Hypertension
	• Elevated cholesterol (lipid) levels
	• Heavy alcohol intake
	• Tobacco use
	• Poor dietary intake
	• Sedentary lifestyle
	• Excessive stress
	• Insufficient sleep
Non-Modifiable Diabetes Risk Factors	• Have a parent, brother, or sister with type 2 diabetes
	• Are 45 years or older
	• Are a Black, Latino, American Indian, or Alaskan Native person. Some Pacific Islanders and Asian American people are also at higher risk for diabetes.
	• Have ever had gestational diabetes or previously given birth to a baby who weighed over 9 pounds

Source: Centers for Disease Control and Prevention, 2022; American Diabetes Association, 2021.

What are the Common Symptoms of Diabetes?

Type 1 diabetes symptoms often develop in a few weeks or months and can be severe, whereas type 2 diabetes symptoms can take years to develop. Gestational diabetes is not typically associated with symptoms, and pregnant women are usually tested for it between 24 and 28 weeks of pregnancy as part of their regular prenatal care.

The CDC recommends that individuals with any of the following diabetes symptoms visit their health care provider to get a blood glucose test [14]:

- Frequent urination, especially at night
- Constant, excessive thirst
- Weight loss without trying
- Feeling very hungry
- Blurry vision
- Numbness or tingling in the hands or feet
- Feeling very tired
- Having very dry skin
- Having sores that heal slowly
- Developing more infections than usual.

Chapter 2: Delaware’s High Risk Populations

Certain populations of Delawareans are at higher risk for developing diabetes and experiencing diabetes-related complications (Table 4):

Table 4. Populations at Higher Risk for Diabetes and Diabetes-Related Complications, Delaware, 2025

Delawareans at Higher Risk for Diabetes and Diabetes-Related Complications
1. Adults with overweight/obesity
2. Adults ages 55 and older
3. Non-Hispanic Black adults
4. Kent County residents
5. Adults with hypertension
6. Adults with uncontrolled diabetes

Source: Delaware Department of Health and Social Services, Division of Public Health and Division of Medicaid & Medical Assistance, and Delaware Department of Human Resources, Statewide Benefits Office, 2025.

1. Adults with Overweight/Obesity

Overweight and obesity greatly increase a person’s risk of developing diabetes. Even among adults at low genetic risk for the disease, obesity increases the risk of developing type 2 diabetes by at least 6 times [15]. Lifetime diabetes risk among males increases from 7% to 70% when body mass index (BMI) increases from underweight (than 18.5 kg/m) to very obese (35.5 kg/m) [16]. Similarly, the lifetime diabetes risk for females increases from 12% to 74% with the same BMI values [16]. Overweight and obesity are such strong diabetes risk factors that the ADA recommends universal prediabetes and diabetes screening for all adults with overweight or obesity with one or more risk factors, regardless of age [17].

From 1992 to 2023, obesity prevalence among Delaware adults more than doubled, increasing from 13.0% to 35.7%. Concurrently, from 1991 to 2023, the prevalence of diagnosed diabetes among Delaware adults more than doubled, increasing from 5.0% to 13.3%. One-fifth (20.3%) of Delaware adults who report being obese have been diagnosed with diabetes compared to 5.9% of adults who report being normal weight [2]. Nearly nine out of 10 Delaware adults (87.4%) with diagnosed diabetes also report being overweight or obese [2].

2. Adults Ages 55 and Older

Age increases the risk for diabetes. In 2023, just 3.1% of Delaware adults ages 18 to 44 had been diagnosed with diabetes compared to 23.7% of Delaware adults ages 65 and older (Table 5). In 2025, over one-third (35.8%) of Delaware adults are 55 years or older [9], making them more vulnerable to diabetes and its complications.

Table 5. Adult Diagnosed Diabetes Prevalence by Age Group, Delaware, 2023

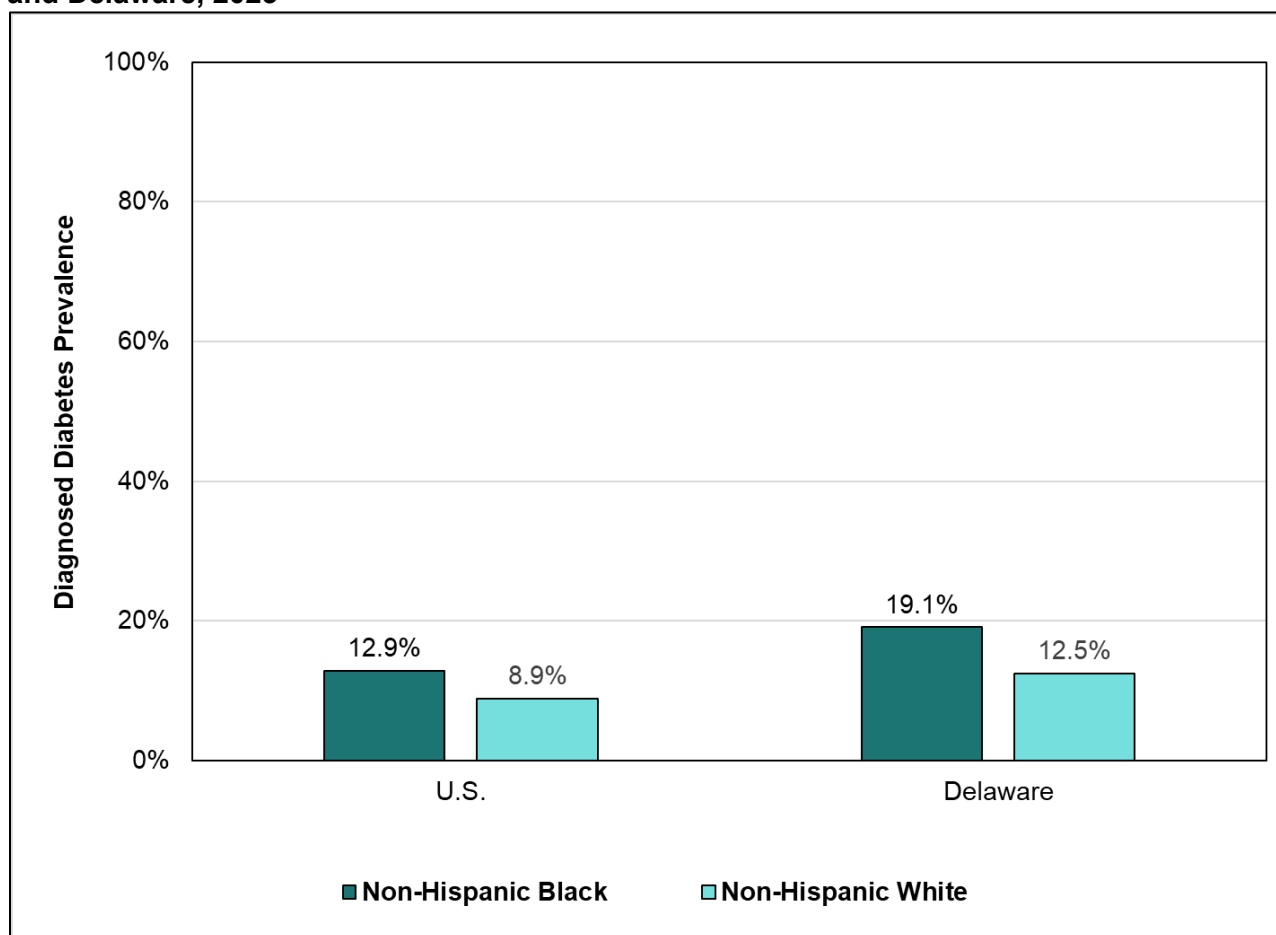
Age Group	Diagnosed Diabetes Prevalence	Statistical Significance
18-44	3.1%	Diagnosed diabetes prevalence for adults ages 55-64 and 65+ is significantly higher than for adults ages 18-44.
45-54	13.7%	
55-64	21.0%	
65+	23.7%	

Note: Significant differences between prevalence estimates were identified by non-overlapping 95% confidence intervals.
Source: Delaware Department of Health and Social Services, Division of Public Health, Behavioral Risk Factor Survey, 2023.

3. Non-Hispanic Black Adults

In the U.S. and in Delaware, non-Hispanic Black adults are more likely than non-Hispanic White adults to be diagnosed with diabetes [18]. The racial disparity in diagnosed diabetes prevalence is higher in Delaware compared to the U.S. (Figure 2). Nationally, diagnosed diabetes prevalence for non-Hispanic Black adults is 44.9% greater than for non-Hispanic White adults (12.9% vs. 8.9%, respectively) [18]. In Delaware, diabetes prevalence for non-Hispanic Black adults is 52.8% higher than for non-Hispanic White adults (19.1% vs. 12.5%, respectively) [2]. For both non-Hispanic Black and non-Hispanic White adults, Delaware’s diagnosed diabetes prevalence estimates were higher than the U.S. in 2023.

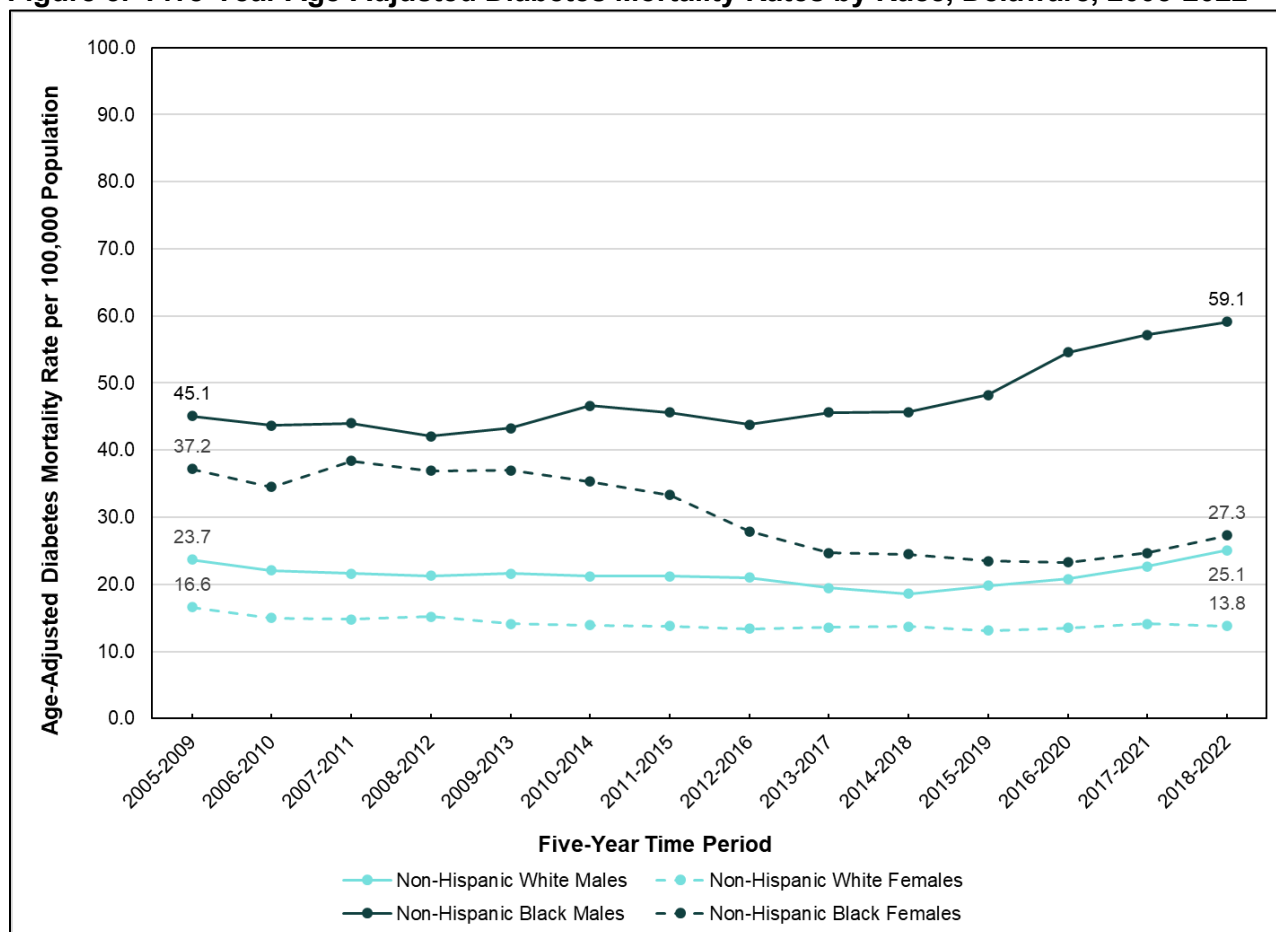
Figure 2. Diagnosed Diabetes Prevalence Among Adults Age 18 and Over by Race, U.S. and Delaware, 2023



Source: Centers for Disease Control and Prevention, National Center for Health Statistics, 2025. Delaware Behavioral Risk Factor Survey (BRFS), 2023.

In addition to higher diabetes prevalence, non-Hispanic Black adults in Delaware are more likely to die from diabetes compared to non-Hispanic White adults (Figure 3). During the last two decades, Delaware's diabetes mortality rates for non-Hispanic White males and females have remained relatively stable [19]. Delaware's diabetes mortality rate for non-Hispanic Black females declined 26.6% from 2005-2009 to 2018-2022, falling from 37.2 deaths per 100,000 population to 27.3 deaths per 100,000 population [19]. Despite this progress, racial disparities in diabetes mortality still exist in Delaware. For 2018-2022, Delaware's diabetes mortality rate for non-Hispanic Black females (27.3 deaths per 100,000 population) was 97.8% higher than the rate for non-Hispanic White females (13.8 per 100,000 population) [19]. Since the early 2000s, Delaware's diabetes mortality rate for non-Hispanic Black males has increased, making worse an existing racial disparity among Delaware males. For 2018-2022, Delaware's diabetes mortality rate for non-Hispanic Black males (59.1 deaths per 100,000 population) was 135.4% higher than the rate for non-Hispanic White males (25.1 deaths per 100,000 population) [19].

Figure 3. Five-Year Age-Adjusted Diabetes Mortality Rates by Race, Delaware, 2005-2022



Source: Delaware Department of Health and Social Services, Division of Public Health, Delaware Health Statistics Center, 2025.

4. Kent County Residents

In 2023, 15.6% of Kent County adults had been diagnosed with diabetes compared to 12.9% of New Castle County adults and 12.5% of Sussex County adults (Table 6). While this difference did not reach a level of statistical significance in 2023, other diabetes metrics also suggest that Kent County residents are at increased risk for diabetes and poorer diabetes-related outcomes compared to New Castle and Sussex County residents.

Although elevated diabetes prevalence in a geographic area may reflect better access to diabetes screening services or improved disease management, it is likely that Kent County's elevated diabetes prevalence reflects higher risk factor prevalence among residents. Support for this theory comes from county-level obesity prevalence data. In 2023, 41.3% of Kent County adults ages 18 or older were living with obesity, compared to 35.2% of New Castle County adults and 33.0% of Sussex County adults.

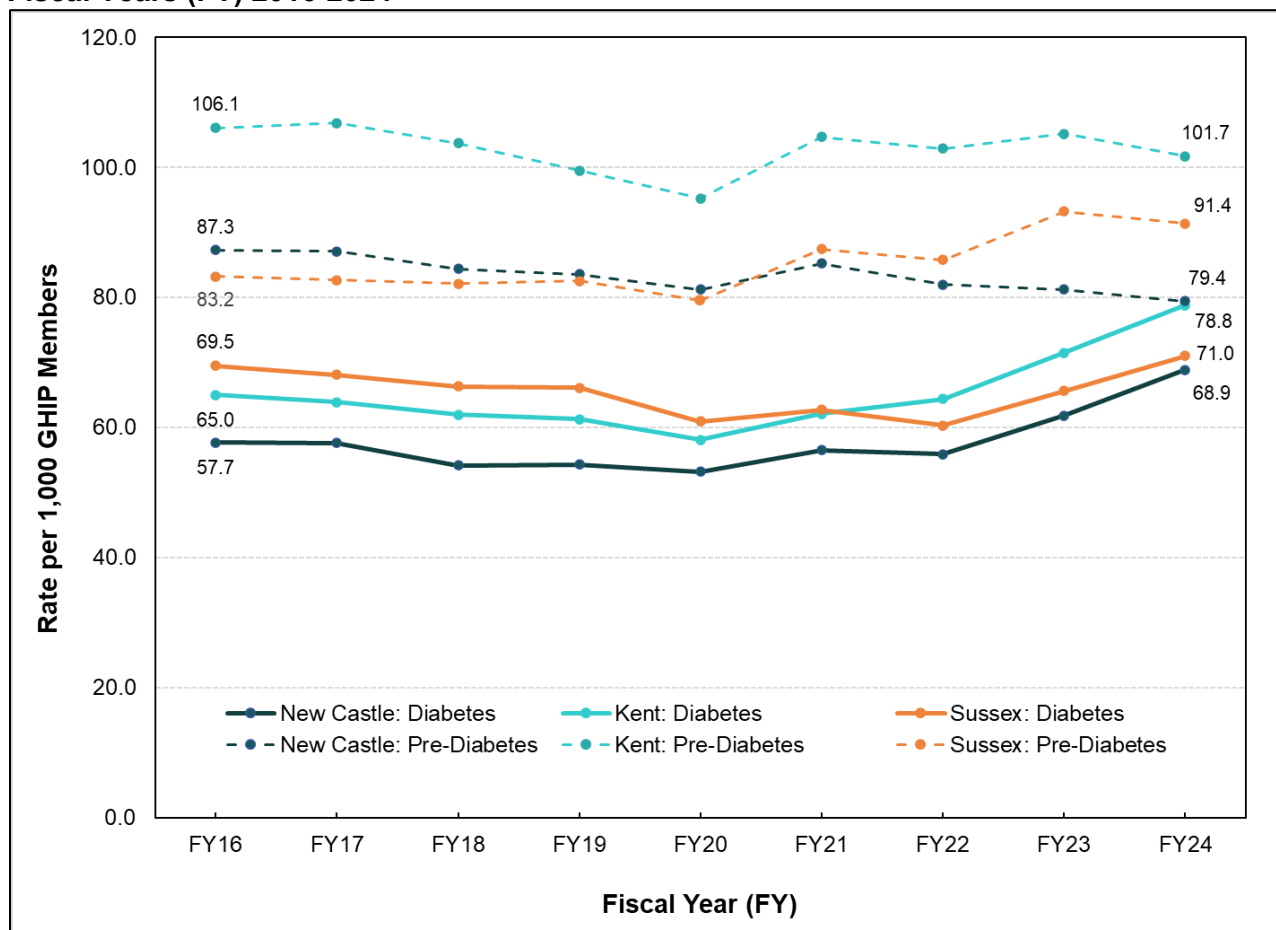
Table 6. Adult Prevalence of Diagnosed Diabetes and Reported Obesity by Age Group, Delaware, 2023

County	Diagnosed Diabetes Prevalence	Reported Obesity Prevalence
New Castle County	12.9%	35.2%
Kent County	15.6%	41.3%
Sussex County	12.5%	33.0%

Source: Delaware Department of Health and Social Services, Division of Public Health, Behavioral Risk Factor Survey, 2023

Trend data among GHIP members confirm higher diabetes and prediabetes prevalence in Kent County compared to New Castle and Sussex Counties (Figure 4). In FY24, the diabetes prevalence rate among GHIP members in Kent County (78.8 per 1,000 GHIP members) was 14.4% higher than the diabetes prevalence rate among GHIP members in New Castle County (68.9 per 1,000 GHIP members) and 11.0% higher than the diabetes prevalence rate among GHIP members in Sussex County (71.0 per 1,000 GHIP members). Similarly, the prediabetes prevalence rate among GHIP members in Kent County (101.7 per 1,000 GHIP members) was 28.1% higher than the prediabetes prevalence rate among GHIP Members in New Castle (79.4 per 1,000 GHIP members) and 11.3% higher than the prediabetes prevalence rate among GHIP members in Sussex County (91.4 per 1,000 GHIP members).

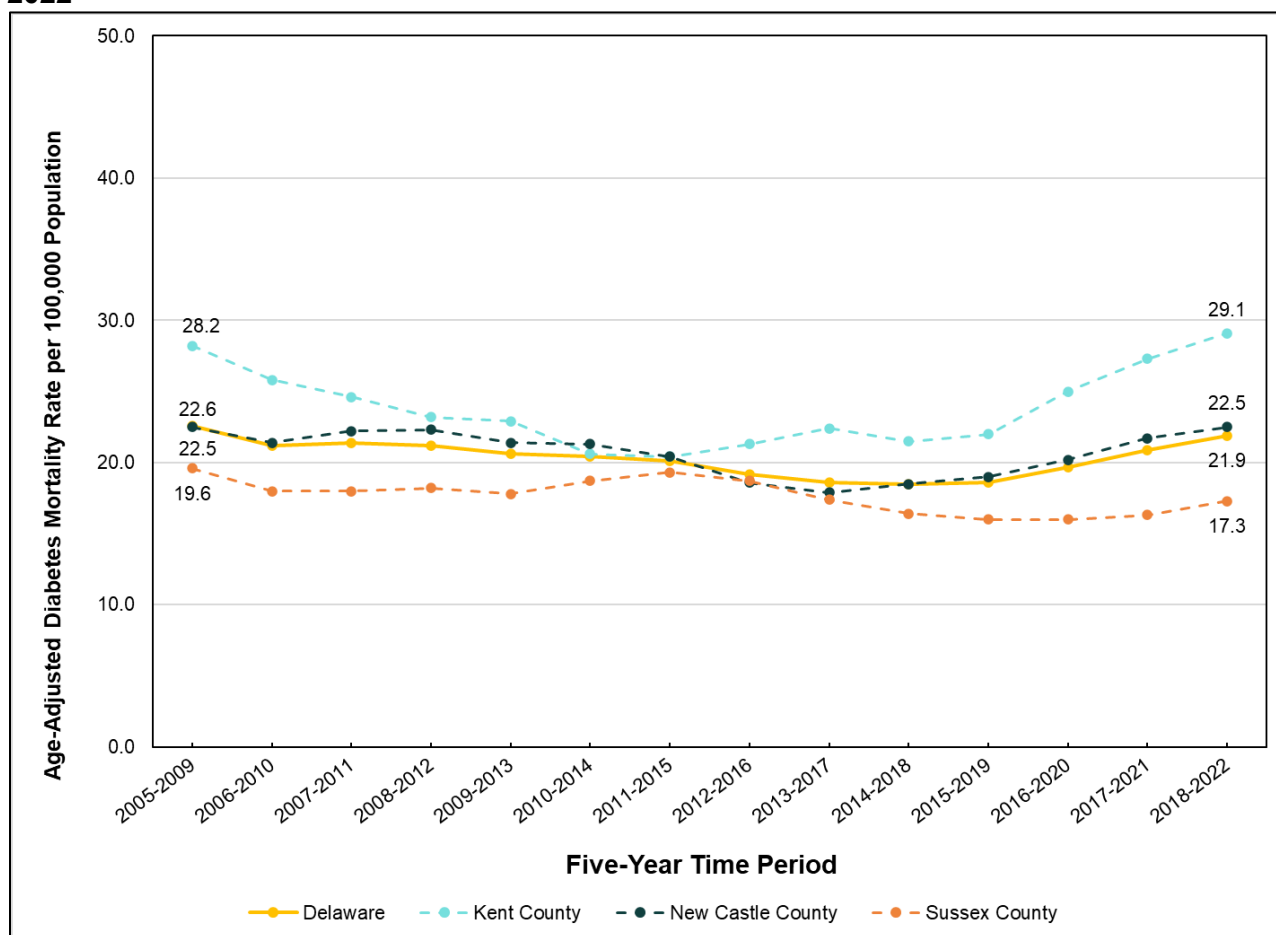
Figure 4. Diabetes and Pre-Diabetes Prevalence Rates by County per 1,000 Active Employees and Early Retirees in the Group Health Insurance Plan (GHIP), Delaware, Fiscal Years (FY) 2016-2024



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. Source: Delaware Department of Human Resources, Statewide Benefits Office, 2024.

Kent County also ranks highest among Delaware counties in diabetes mortality (Figure 5). For 2018-2022, the age-adjusted diabetes mortality rate in Kent County (29.1 deaths per 100,000 population) was 25.8% higher than for New Castle County (21.7 deaths per 100,000 population) and 67.5% higher than for Sussex County (16.3 deaths per 100,000 population). Delaware's overall diabetes mortality rate has increased in recent years, largely driven by increases in rates in Kent and New Castle Counties. From 2014-2018 to 2018-2022, diabetes mortality rate increased 35.3% in Kent County, compared to 21.6% in New Castle County and 5.5% in Sussex County.

Figure 5. Five-Year Age-Adjusted Diabetes Mortality Rates by County, Delaware, 2005-2022



Source: Delaware Department of Health and Social Services, Division of Public Health, Delaware Health Statistics Center, 2025.

5. Adults with Hypertension

Hypertension, or high blood pressure, is closely associated with diabetes. Having hypertension makes a person more likely to develop diabetes [20]. The reverse association is also true: having diabetes makes a person more likely to develop hypertension [21]. The close association between hypertension and diabetes stems from similar risk factors such as sedentary lifestyle, obesity, inflammation, and high cholesterol. Independently, hypertension and diabetes promote vascular damage, increasing the risk of cardiovascular disease. Vascular damage is amplified when a person has both diabetes and hypertension [22].

The American Heart Association categorizes blood pressure status using systolic and diastolic readings as shown in Table 7 [23]. Systolic blood pressure measures the pressure with which your blood pushes against your artery walls when your heart beats.

Diastolic blood pressure measures the pressure with which your blood pushes against your artery walls while your heart rests between beats [23].

Table 7. Healthy and Unhealthy Blood Pressure Ranges

Blood Pressure Category	Systolic mm Hg (upper number)	and/or	Diastolic mm Hg (lower number)
Normal	Less than 120	and	Less than 80
Elevated	120-129	and	Less than 80
High Blood Pressure (Hypertension) Stage 1	130-139	or	80-90
High Blood Pressure (Hypertension) Stage 2	140 or higher	or	90 or higher
Hypertensive Crisis (seek medical care immediately)	Higher than 180	and/or	Higher than 120

Source: American Heart Association, 2024.

In 2023, 37.8% of Delaware adults (about 312,000 people) reported that they had been told by a health care professional that they have high blood pressure [2]. This prevalence is likely underestimated because hypertension is underdiagnosed. In the U.S., nearly 14 million people are unaware that they have hypertension and as a result, are not engaged in any interventions to lower their risk for cardiovascular disease, diabetes, and other negative health outcomes [24]. Individuals with undiagnosed hypertension are more likely to be older, Black/African American, uninsured, and classified as having obesity [25]. Like diabetes prevalence, hypertension prevalence increases with age among Delaware adults (Table 8).

Table 8. Adult Prevalence of Diagnosed Hypertension by Age Group, Delaware, 2023

Age Group	Diagnosed Hypertension Prevalence
18-34	10.5%
35-44	24.0%
45-54	41.7%
55-64	50.9%
65+	61.8%

Source: Delaware Department of Health and Social Services, Division of Public Health, Behavioral Risk Factor Survey, 2023.

In FY24, 67.4% of Delaware Medicaid members with diabetes had adequately controlled blood pressure, defined as blood pressure less than 140/90 mm Hg. This aligns with national data showing that among U.S. adults with diabetes, hypertension

control prevalence decreased from 74.2% from 2011-2014 to 70.4% for 2015-2018 [26]. In contrast, nearly one-third (32.6%) of Delaware Medicaid members with diabetes had uncontrolled blood pressure in FY24. For adults with hypertension – including those with or at risk for diabetes – participating in a lifestyle change program like Delaware’s Healthy Heart Ambassador-Blood Pressure Self-Monitoring Program (HHA-BPSM) is a powerful tool for learning skills to help control high blood pressure through medication management and healthy lifestyle behaviors.

6. Adults with Uncontrolled Diabetes

An effective treatment plan can help people with diabetes achieve control. Diabetes control is synonymous with glycemic control or successfully getting blood glucose levels as close to target as safely possible. Achieving diabetes control helps prevent blood glucose levels from dropping too low (a condition known as hypoglycemia) or rising too high (a condition known as hyperglycemia).

The hemoglobin A1C (A1C) blood test is one of the main tests used to diagnose diabetes and measure glycemic control.² The A1C test reflects average blood glucose level for the past three months, and results are reported as percentages (Table 9). For people without diabetes, a normal A1C is below 5.7%. A1C values from 5.7% to 6.4% indicate prediabetes, and an A1C value of 6.5% or greater indicates diabetes. The higher a person’s A1C value rises above 6.5%, the more likely they are to experience diabetes-related complications [27]. People with diabetes should have an A1C test two or more times per year to see how well their diabetes management plan is working [27]. The ADA recommends an A1C goal between 7.0% and 8.0% for people with diabetes, depending on patient characteristics [28].

Table 9. Hemoglobin A1C Percentages and Clinical Interpretation

A1C Percentage	Clinical Interpretation
Below 5.7%	Normal blood glucose
5.7 – 6.4%	Prediabetes
6.5% or above	Diabetes

Note: Any test used to diagnose diabetes requires confirmation with a second measurement, unless there are clear symptoms of diabetes [29]. Source: National Institute of Diabetes and Digestive and Kidney Health, 2022.

Data show that a large proportion of Delaware adults with diabetes have not achieved control. In FY24, 57.4 % of Delaware Medicaid members with diabetes had an optimal

² Other tests used to diagnose diabetes may include the fasting plasma glucose test, the random plasma glucose test, the glucose challenge test, and the oral glucose tolerance test [29].

A1C level of less than 8%. In contrast, over one-third (37.4%) of Delaware Medicaid members with diabetes had an A1C greater than 9%. Reducing the proportion of Delaware adults with uncontrolled diabetes will yield improved health outcomes while reducing health care costs.

Chapter 3: The Financial Impact of Diabetes

Diabetes is usually a lifelong condition and requires consistent, long-term, and comprehensive management. As the disease progresses, a person with diabetes requires constant and vigorous intervention to keep their blood glucose levels in check [4]. The high cost of diabetes care reflects the many medications, services, and supplies required to treat the disease, as well as any diabetes-related complications and comorbidities that arise following a diabetes diagnosis.

In 2022, the total estimated cost of diabetes in the U.S. was \$412.9 billion, including \$306.6 billion in direct medical costs and \$106.3 billion in indirect costs attributable to diabetes [5]. Care for people diagnosed with diabetes accounted for one in four health care dollars spent in the U.S. in 2022, 61% of which were directly attributable to diabetes [5]. People with diabetes have medical expenditures that are 2.6 times higher on average than those without diabetes [5]. In 2022, diabetes was directly responsible for 19.1% of all hospital inpatient days and 5.6% of all ER visits in the U.S. [5].

In Delaware, annual diabetes costs reached \$982 million in 2017 [3]. Nearly three-quarters of these costs – \$703 million – represented direct medical expenses [3]. Total indirect costs stemming from lost productivity due to diabetes totaled \$279 million in 2017 [3].

Cost of Diabetes Care for Delaware Medicaid Members

DMMA administers benefits to Medicaid members via managed care plans and on a fee-for-service (FFS) basis. Under a managed care model, DMMA pays a fee to a Managed Care Organization (MCO) for each member enrolled in the plan; the MCO reimburses providers for services provided that are included in the plan's contract with the State of Delaware. Approximately 90% of Delaware Medicaid members receive services through a Medicaid MCO. Under an FFS model, DMMA reimburses providers directly for each covered service received by a Medicaid member.

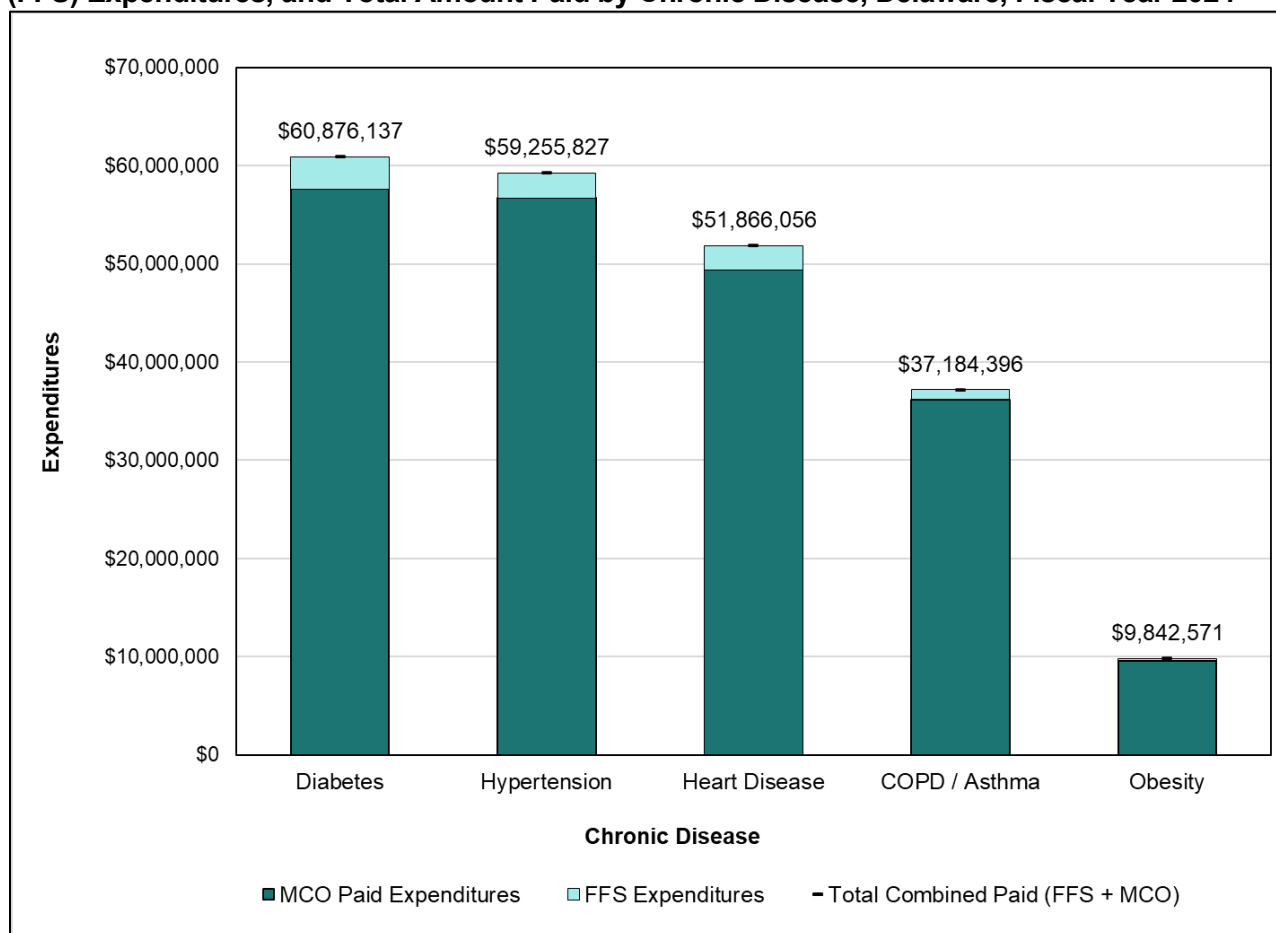
An estimated 19,996 Delaware Medicaid members had diabetes in FY24. In the same fiscal year, Delaware Medicaid MCOs directly reimbursed providers \$57.6 million for diabetes-related care³; an additional \$3.3 million was paid directly to providers via FFS claims for diabetes-related care.⁴ FY24 total diabetes-related expenditures (\$60.9 million) represent an 18.0% increase relative to FY22 total diabetes-related

³ These payments, referred to as "MCO Paid amounts" are payments made by MCOs to service providers. Medicaid MCOs are paid a monthly capitation payment for which they accept financial responsibility for most services provided to a client during the month. Actuaries set monthly capitation rates using MCO paid amounts; as MCO paid amounts increase, monthly capitation rates – paid using State and/or Federal Medicaid funds – increase accordingly.

⁴ FFS expenditures reflect direct payments from the State of Delaware and/or Federal Medicaid funds.

expenditures (\$51.6 million). MCO-paid amounts and FFS expenditures related to diabetes exceeded those of other chronic diseases among Delaware Medicaid clients in FY24 (Figure 6).

Figure 6. Medicaid Managed Care Organization (MCO) Paid Expenditures, Fee-for-Service (FFS) Expenditures, and Total Amount Paid by Chronic Disease, Delaware, Fiscal Year 2024



Source: Delaware Department of Health and Social Services, Division of Medicaid & Medical Assistance, 2025.

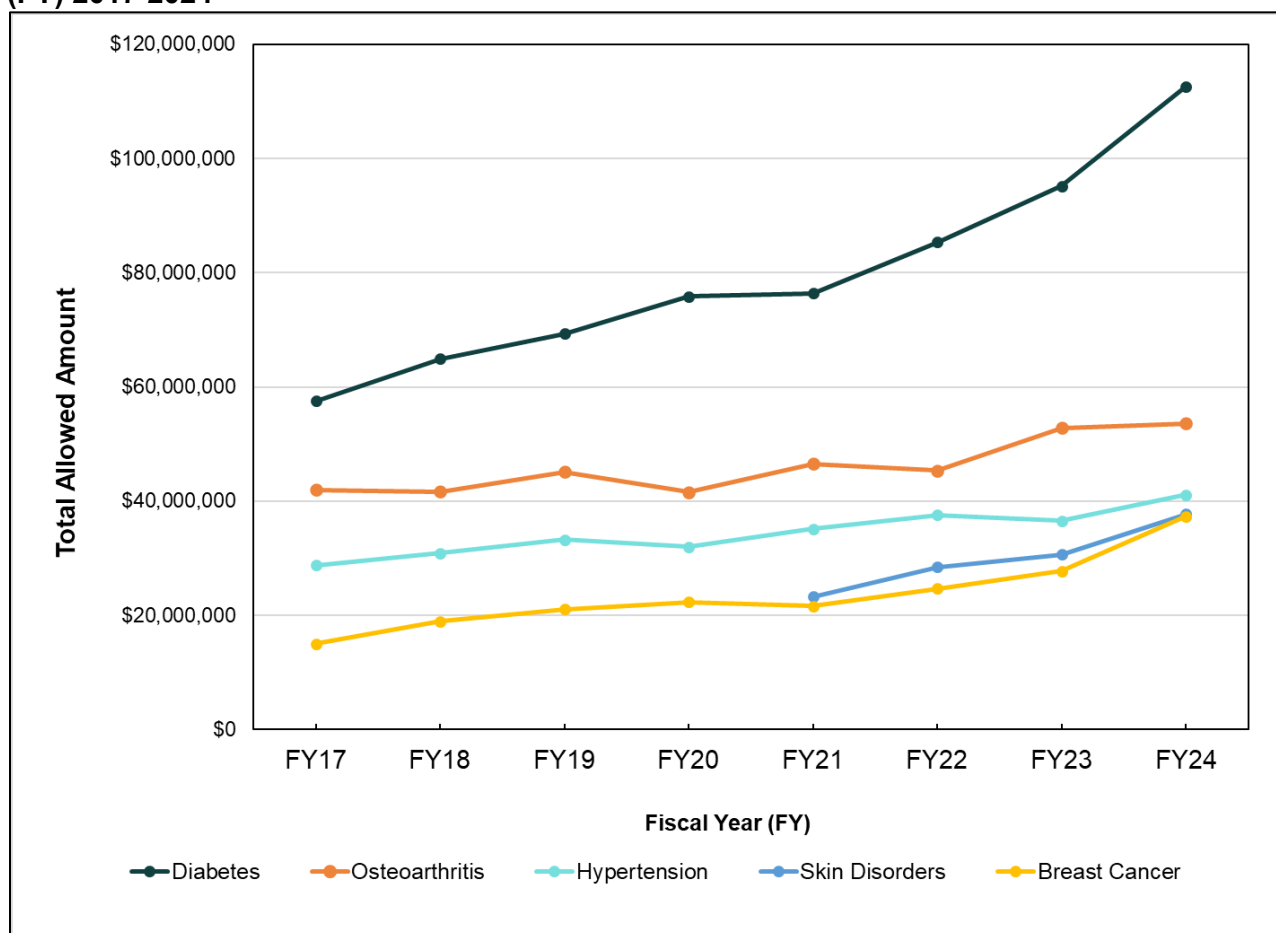
Cost of Diabetes Care Among GHIP Members

In FY24, approximately 15,494 GHIP members had diabetes, reflecting a prevalence rate of 108.3 per 1,000 GHIP members. This rate is 19.7% higher than the diabetes prevalence rate among GHIP members in FY22. SBO hypothesizes that this increase in diabetes prevalence is due in part to members delaying medical care and annual health screenings during the Coronavirus 2019 (COVID-19) public health emergency, resulting in an artificially low diabetes prevalence estimate for FY22. In FY24, an additional 11,222 GHIP members were identified as having prediabetes (78.4 per 1,000 GHIP members). Because prediabetes is often underreported, it is likely that the true prediabetes prevalence rate among GHIP members is even higher.

Diabetes is the leading cost driver when grouped by episode of care among GHIP members, inclusive of Medicare population (Figure 7). An episode of care is a summary of care, or a group of claims, related to a condition or disease. Diabetes episodes of care reflect a combination of inpatient, outpatient, and prescription drug treatment for a GHIP member with diabetes.

The FY24 total allowed amount for diabetes, reflective of net payments from the GHIP as well as member costs (including copays, coinsurance, and deductibles), reached \$112.5 million, an increase of over \$27 million compared to FY23. The total allowed amount for diabetes care was 90.9% more than for osteoarthritis, the second costliest condition by episode of care. In FY24, costs related to diabetes episodes of care represented 5.7% of all GHIP net payments made on behalf of active employees and early retirees.

Figure 7. Total Allowed Amount in Millions for the Five Costliest Episode Disease Categories among Group Health Insurance Plan (GHIP) Members, Delaware, Fiscal Years (FY) 2017-2024



Note: Includes data for Active Employee, Early Retiree, and Medicare Retiree GHIP Members. FY17-FY20 data unavailable for Skin Disorders. Source: Delaware Department of Human Resources, Statewide Benefits Office, 2025.

As diabetes progresses, the costs of treating the disease and its complications increases dramatically. SBO categorizes each diabetes episode of care into one of three disease stages, ranging from Stage 1 (uncomplicated) to Stage 3 (most complicated). In FY24, GHIP payments for Stage 1, Stage 2, and Stage 3 diabetes episodes were \$16.1 million, \$30.4 million, and \$5.4 million, respectively (Table 10). Stage 3 diabetes episodes accrued the lowest total payments of all episode stages but resulted in the highest average per-episode costs. The average per-episode payment for a Stage 3 diabetes episode (\$20,728) was 155% higher than the average per-episode payment for a Stage 2 diabetes episode (\$8,128) and 423% higher than the average per-episode payment for a Stage 1 diabetes episode (\$3,961).

Table 10. Group Health Insurance Plan (GHIP) Total and Average Payments among Active Employees and Early Retirees with a Diabetes Episode by Disease Stage, Delaware, Fiscal Year 2024

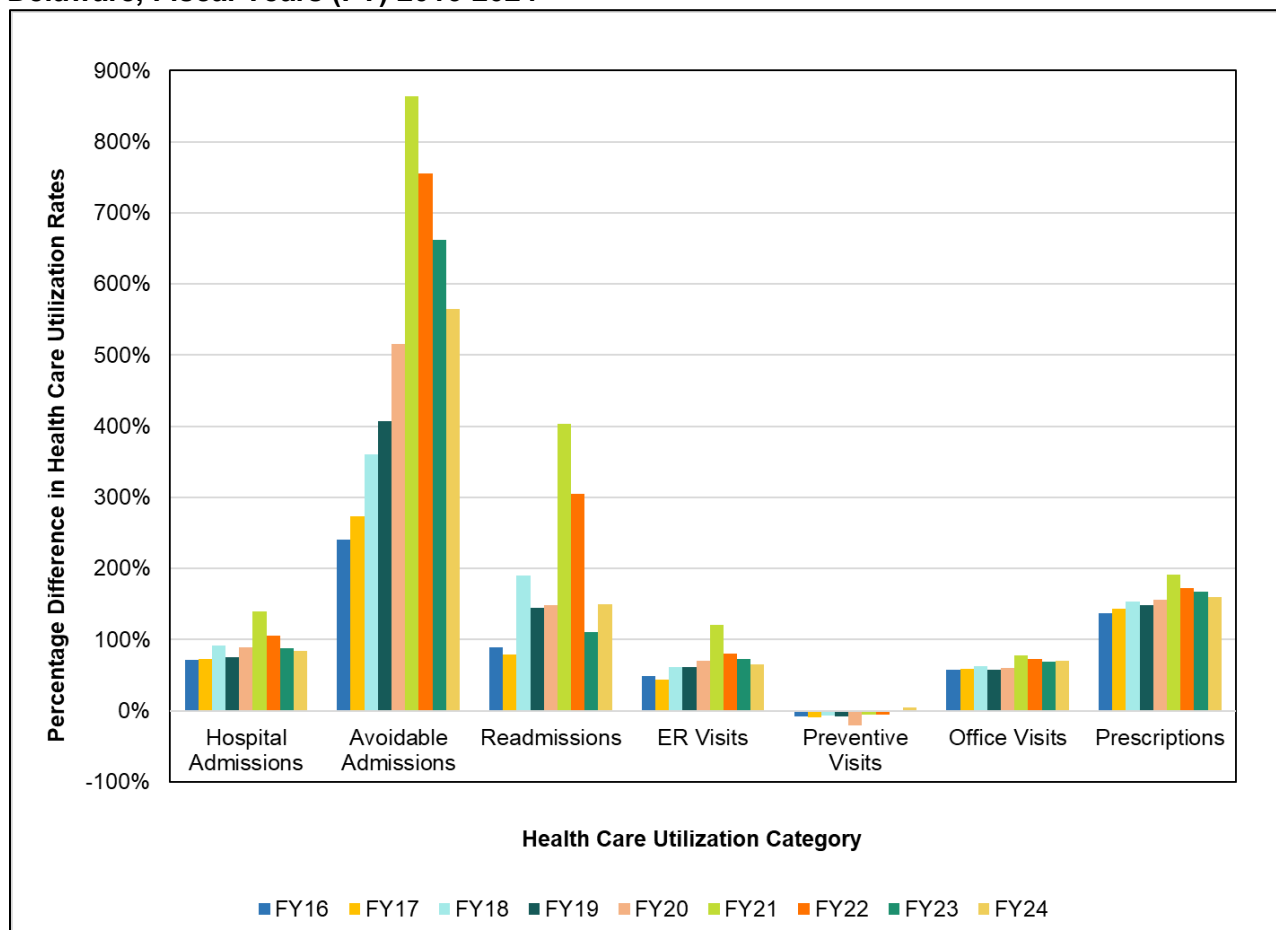
Diabetes Episode Stage	Total Payments	Average Payment Per Episode
Stage 1 (uncomplicated)	\$16,084,945	\$3,961
Stage 2 (some complications)	\$30,380,750	\$8,128
Stage 3 (most complicated)	\$5,389,179	\$20,728

Source: Delaware Department of Human Resources, Statewide Benefits Office, 2025.

Active employee and early retiree GHIP members with diabetes had higher rates of hospital admissions, avoidable admissions, readmissions, emergency room (ER) visits, preventive visits, office visits, and prescriptions compared to the total active employee and early retiree GHIP population (Figure 8). For some utilization categories like office visits and prescriptions, higher utilization rates among members with diabetes may reflect improved quality of and access to care and self-management efforts. In contrast, higher rates for hospital admissions, avoidable admissions, readmissions, and ER visits highlight opportunities for improvement in diabetes management among active employee and early retiree GHIP members.

Except for preventive visits, the percentage difference in utilization rates between members with diabetes compared to all members peaked in FY21 for all utilization categories. This may be due in part to increased service utilization among members with diabetes during the COVID-19 pandemic. A different explanation involves lower utilization rates among members without diabetes during the COVID-19 pandemic; this would result in higher percentage differences in utilization rates among GHIP members with diabetes relative to the total member population. From FY22 to FY24, the difference in utilization rates between members with diabetes relative to all GHIP members declined for hospital admissions, avoidable admissions, ER visits, and prescriptions. This may reflect improved diabetes management efforts among GHIP members with diabetes.

Figure 8. Percentage Differences in Health Care Utilization Rates among Members with Diabetes Compared to the Group Health Insurance Plan (GHIP) Member Population, Delaware, Fiscal Years (FY) 2016-2024

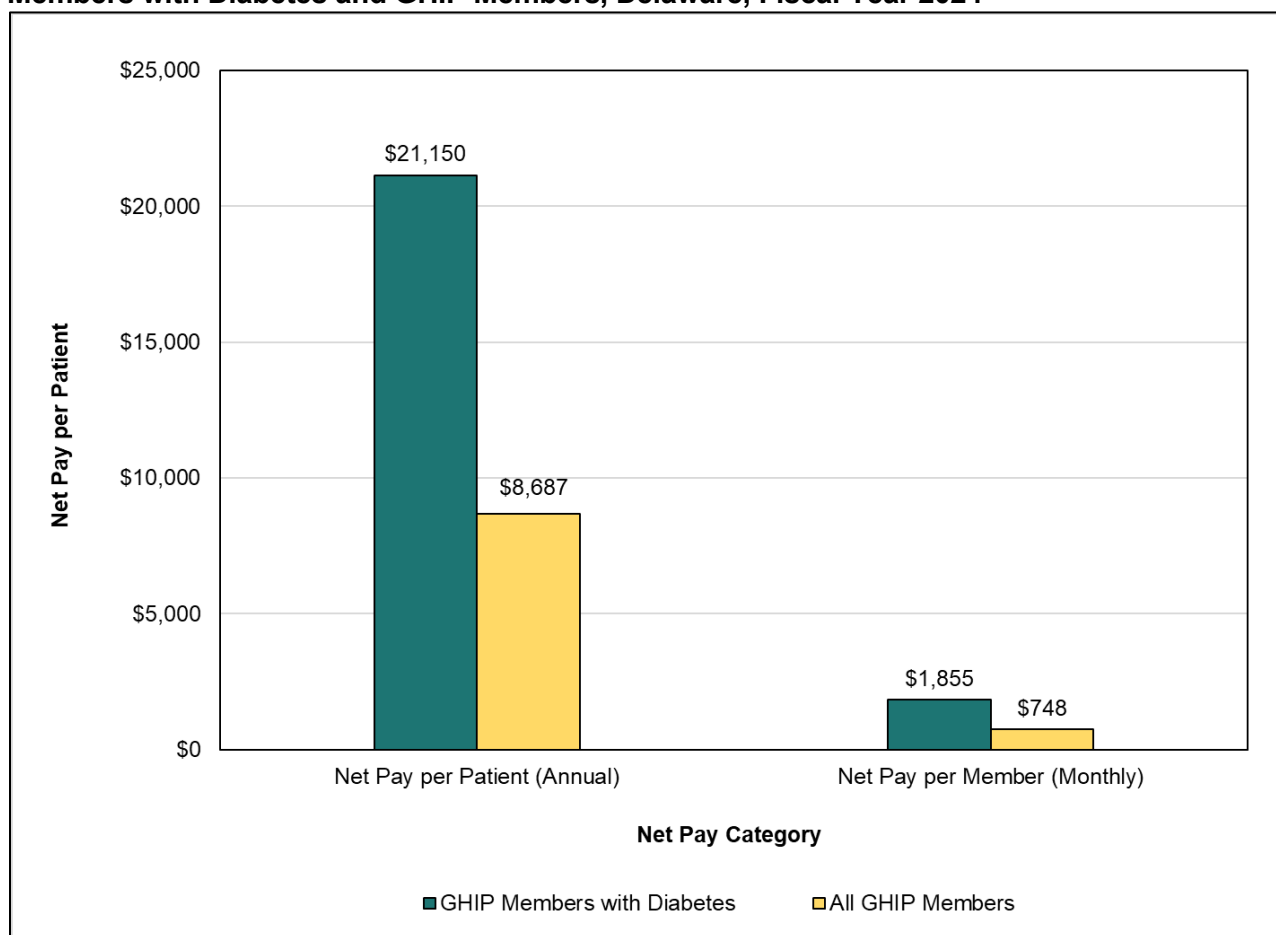


Note: Includes Active Employee and Early Retiree GHIP Members; Medicare retirees excluded due to incomplete medical and prescription costs and utilization captured through available claims.

Source: Delaware Department of Human Resources, Statewide Benefits Office, 2022

Higher health care utilization among members with diabetes yield higher per member costs. In FY24, the annual net payment per patient (NPPP) was higher for active employee and early retiree GHIP members with diabetes (\$21,150) relative to the total active employee and early retiree GHIP population (\$8,687) (Figure 9). On a per member per month (PMPM) basis, non-Medicare GHIP payments averaged \$1,855 per member with diabetes compared to \$748 per member among all non-Medicare GHIP members.

Figure 9. Annual and Monthly Net Pay per Patient, Group Health Insurance Plan (GHIP) Members with Diabetes and GHIP Members, Delaware, Fiscal Year 2024



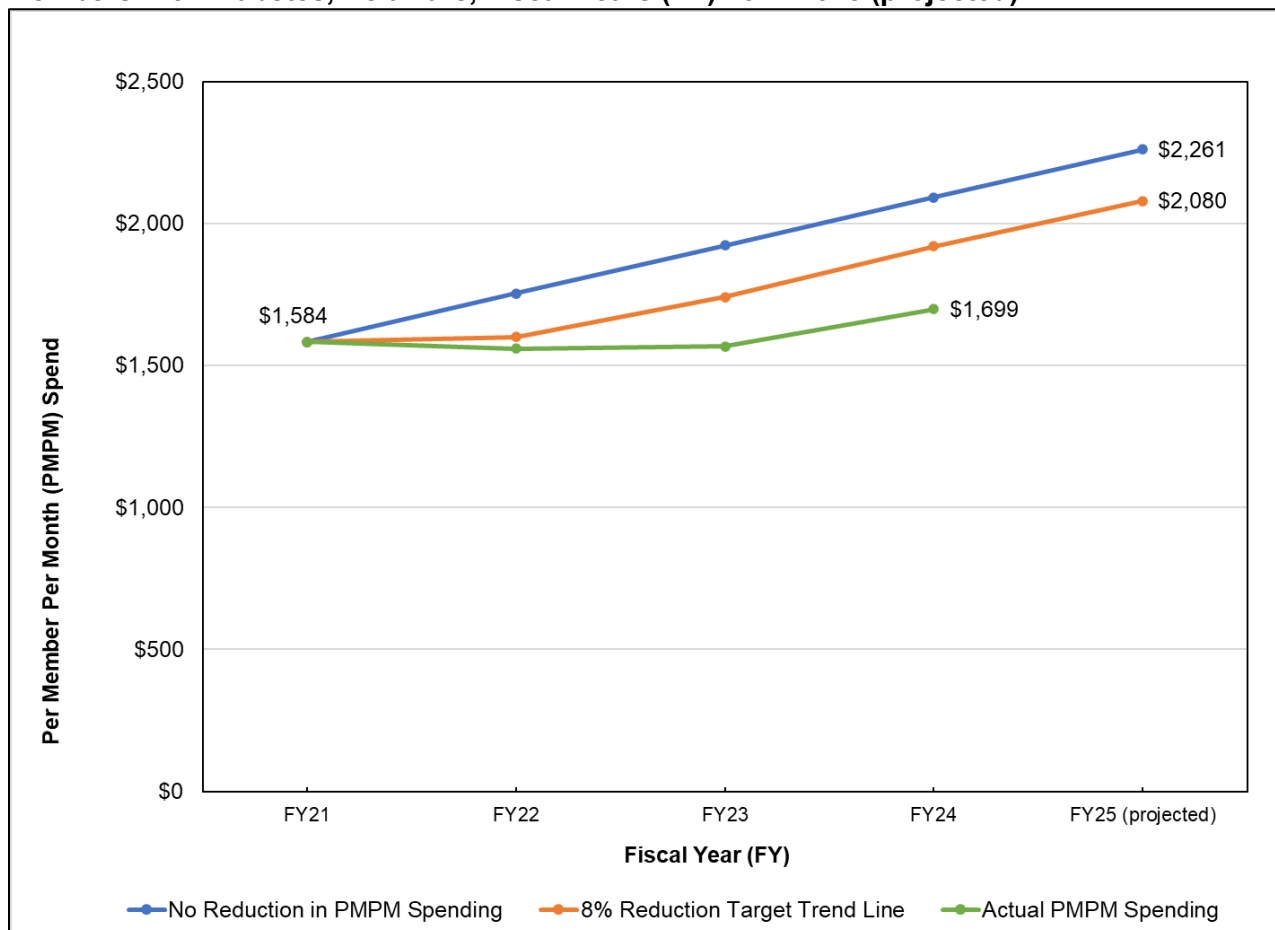
Note: Includes Active Employee and Early Retiree GHIP Members; Medicare retirees excluded due to incomplete medical and prescription costs and utilization captured through available claims.

Source: Delaware Department of Human Resources, Statewide Benefits Office, 2025.

Diabetes prevention and management is an important area of focus for the State of Delaware. The 2023/2024 State Employee Benefits Committee (SEBC) GHIP Strategic Framework included a goal to reduce diabetes costs per member per month (PMPM) by 8% by the end of FY23, using FY21 spending as a baseline. To achieve this goal and continue progress, SBO regularly measures diabetes prevalence and service utilization costs, continues to provide a wide range of prediabetes and diabetes resources, and tailors messaging to promote utilization of diabetes resources among GHIP members.

FY21 baseline spending for GHIP members with diabetes was \$1,584 PMPM. PMPM targets were based on an 8% overall reduction in projected PMPM costs, with an annual inflationary trend of 9.2% for medical and prescription drug claims. As shown in Figure 10, SBO exceeded target PMPM spending for FY22-FY24 with actual PMPM costs well below the 8% reduction target trend line. From FY23 to FY24, actual PMPM spending increased \$130, rising from \$1,568 to \$1,699. While this figure was still below target, SBO continues to monitor reasons for the increase from FY23 to FY24.

Figure 10. Per Member Per Month (PMPM) Spending, Group Health Insurance Plan (GHIP) Members with Diabetes, Delaware, Fiscal Years (FY) 2021-2025 (projected)



Source: Delaware Department of Human Resources, Statewide Benefits Office, 2025.

Chapter 4: Improving Diabetes Outcomes through Lifestyle Change

Continued emphasis on diabetes prevention, early diagnosis, and effective self-management is key to improving diabetes outcomes. For adults with prediabetes, making small, healthy, and sustainable changes can delay, or even prevent, the progression to diabetes. For adults diagnosed with diabetes, learning practical steps to help manage the condition can help prevent or delay diabetes health problems.

Delaware has invested substantial resources into strengthening its statewide network of lifestyle-change resources. DPH, DMMA, and SBO work to increase awareness of, and access to, these evidence-based resources among their target populations. The following sections provide an overview of lifestyle change programs in Delaware, often available at no out-of-pocket cost to eligible adults.

Reducing Diabetes Risk

Making Healthy Lifestyle Changes

A prediabetes diagnosis can be a wake-up call to make immediate changes to protect one's health. Prediabetes can often be reversed; however, without action, many people with prediabetes develop diabetes within five years [30]. For adults with prediabetes or who are otherwise at risk for diabetes, lifestyle change is a first-line approach to prevent progression to diabetes [6]. Although healthy lifestyle changes may not be enough to overcome strong genetic risk factors for diabetes, making healthy changes can prevent or delay diabetes in many adults with prediabetes.

The National Diabetes Prevention Program

The National Diabetes Prevention Program (National DPP) is a structured, evidence-based lifestyle change program developed by the CDC and endorsed by the Centers for Medicare and Medicaid Services (CMS). Over the course of a year, National DPP participants work to reduce body weight by 5%-7% and to gradually increase physical activity to at least 150 minutes per week.

The National DPP is the gold standard for slowing or preventing the progression of prediabetes to diabetes. Randomized, controlled research trials show that three years after participating in the National DPP, participants had lowered their chances of developing diabetes by 58% compared with those who took a placebo diabetes medication and by 31% compared to those who had been prescribed metformin [7]. The National DPP was effective for all racial groups and for both men and women [7]. Benefits of the National DPP were even greater for older adults; participants ages 60 and older lowered their risk of developing diabetes by 71%. Impressively, the health

advantages conferred by the National DPP are measurable even 15 years after participating in the program [31].

In Delaware, adults eligible for the National DPP are referred to the program through a health care provider or community-based organization. The National DPP is a covered benefit for Delaware Medicaid members and State of Delaware GHIP members at no additional cost. Table 11 includes a current list of National DPP providers in Delaware. Delawareans at risk for diabetes are strongly encouraged to check if the National DPP is a covered benefit through their employer or insurance carrier.

Table 11. National Diabetes Prevention Program (National DPP) Providers in Delaware, 2025

National Diabetes Prevention Program (National DPP) Providers in Delaware	
• Beebe Healthcare	• Healthier Teachers / SLD Coaching, LLC
• ChristianaCare Health System	• Nutrisense
• Delaware Community Care	• University of Delaware
• Focus Pharmacy	• YMCA of Delaware

Source: Delaware Department of Health and Social Services, Division of Public Health, 2025.

In addition to the National DPP, Delaware adults at risk for diabetes have access to complementary lifestyle change programs designed to equip them with skills to live healthy lives. One example is the Healthy Heart Ambassador – Blood Pressure Self-Monitoring Program (HHA-BPSM), managed by the DPH Diabetes and Heart Disease Prevention and Control Program (DHDPCCP). HHA-BPSM is a free, four-month virtual program that includes eight one-on-one coaching sessions, four 1.5-hour nutrition education session, and four one-hour Simple Cooking with Heart interactive cooking classes. Participants learn how to take at-home blood pressure readings and report their readings to their provider using a Bluetooth-enabled blood pressure device and virtual platform. Program graduates receive a free graduation kit with additional resources.

Achieving Diabetes Control: Diabetes Self-Management Practices

Following the Diabetes Care Schedule

For people diagnosed with diabetes, it is important to stay on schedule with recommended self-checks, exams, and appointments. Doing so can help adults with diabetes make progress toward achieving diabetes control while reducing the risk of complications. The CDC Diabetes Care Schedule (Table 12) summarizes diabetes care tasks and their recommended frequency [32].

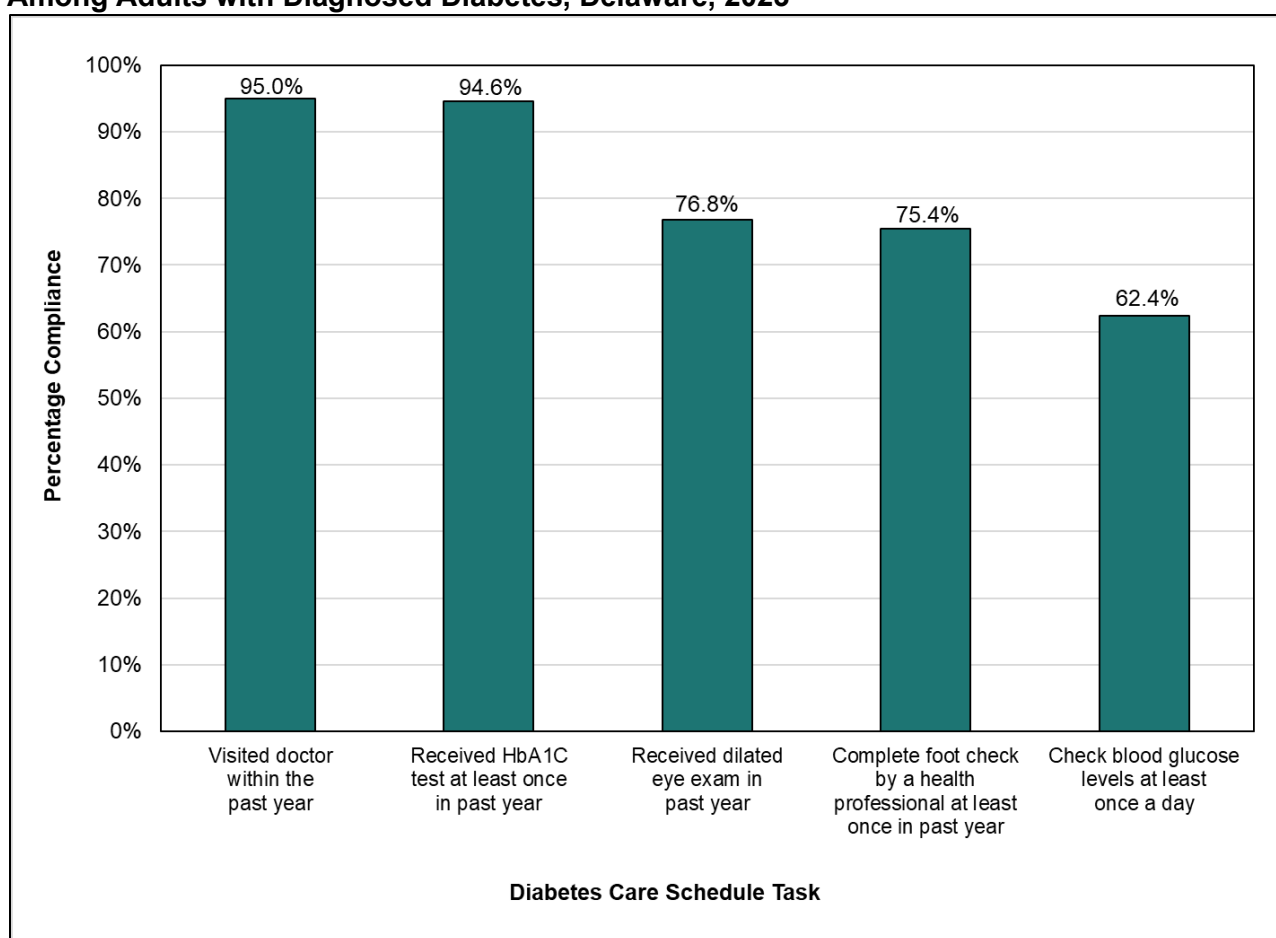
Table 12. Centers for Disease Control and Prevention (CDC) Diabetes Care Schedule

Diabetes Care Task	Recommended Frequency
• Check blood glucose levels	• Daily (at least once per day)
• Self-administered foot check	• Daily
• Proper medication use	• Daily
• Moderate physical activity	• Daily (on most days, get 30 minutes of moderate activity such as brisk walking or riding a bike. Aim for at least 150 minutes per week)
• Healthy eating	• Daily
• Hemoglobin A1C (A1C) test	<ul style="list-style-type: none"> • Every 3 months for those having trouble achieving blood glucose control goals • Every 6 months for those meeting blood glucose goals
• Doctor visit	<ul style="list-style-type: none"> • Every 3 months for those having trouble achieving blood glucose control goals • Every 6 months for those meeting blood glucose goals
• Dental exam	• Every 6 months
• Flu shot	• Once a year
• Kidney function test	• Once a year
• Cholesterol test	• Once a year
• Dilated eye exam	• Once a year
• Complete foot check by a medical professional	• Once a year
• Pneumonia vaccine	• Just once
• Hepatitis B vaccine	• Just once
• Mental health screening and support	• As needed

Source: Centers for Disease Control and Prevention, 2023.

Most Delaware adults with diabetes comply with recommended CDC Diabetes Care Schedule tasks (Figure 11). In 2023, 95.0% of Delaware adults with diabetes reported visiting their doctor within the past year, and 94.6% reported receiving an A1C test at least once during the past year [2]. Three-quarters of Delaware adults with diabetes reported that they received a dilated eye exam within the past year and a complete foot check by a health care professional at least once in the past year. In 2023, 62.4% of Delaware adults with diabetes reported checking their blood glucose levels at least once a day [2]. This finding is concerning because regular blood glucose monitoring is the most important tool for managing diabetes [33]. Daily monitoring allows a person with diabetes to get real-time feedback about what causes their blood glucose numbers to go up and down.

Figure 11. Percentage of Self-Reported Compliance with Diabetes Care Schedule Tasks Among Adults with Diagnosed Diabetes, Delaware, 2023



Source: Delaware Department of Health and Social Services, Division of Public Health, Behavioral Risk Factor Survey, 2023.

Diabetes Self-Management Education and Support (DSMES) Services

Regardless of how long a person has been living with diabetes, it is never too late to learn or improve self-management skills. Participating in an evidence-based self-management program helps people with diabetes work toward blood glucose targets and reduce the risk of diabetes complications. Diabetes education programs that meet rigorous National Standards for Diabetes Self-Management Education and Support [34] can apply for and receive accreditation through the ADA. These services – known as Diabetes Self-Management Education and Support (DSMES) services – are interactive programs designed to support people with diabetes as they make changes to better manage their diabetes over the course of their lifetimes.

DSMES classes are facilitated by Certified Diabetes Care and Education Specialists (CDCES), and program content is tailored to an individual’s specific needs, goals, and life circumstances. DSMES services incorporate goal setting, shared decision-making, and ongoing support [35]. Participants can attend DSMES classes in-person or virtually to best meet their needs. In Delaware, adults, caregivers, and family members who are eligible for DSMES are referred to an outpatient or hospital-affiliated DSMES provider (Table 13).

Table 13. American Diabetes Association (ADA)-Accredited Diabetes Self-Management Education and Support (DSMES) Providers in Delaware, 2025

DSMES Providers in Delaware	
• 9 am Health	• Focus Pharmacy
• Nemours Children’s Hospital	• Good Measures, LLC
• American Surgery Center	• I&O Diabetes Consultants
• Bayhealth	• Livongo®
• Beebe Healthcare	• TidalHealth™
• ChristianaCare Health System	• United Medical
• Christiana Institute of Advanced Surgery	• US Diabetes Care
• Department of Veterans Affairs	

Source: Delaware Department of Health and Social Services, Division of Public Health 2025.

Diabetes Self-Management Program (DSMP) and Chronic Disease Self-Management Program (CDSMP)

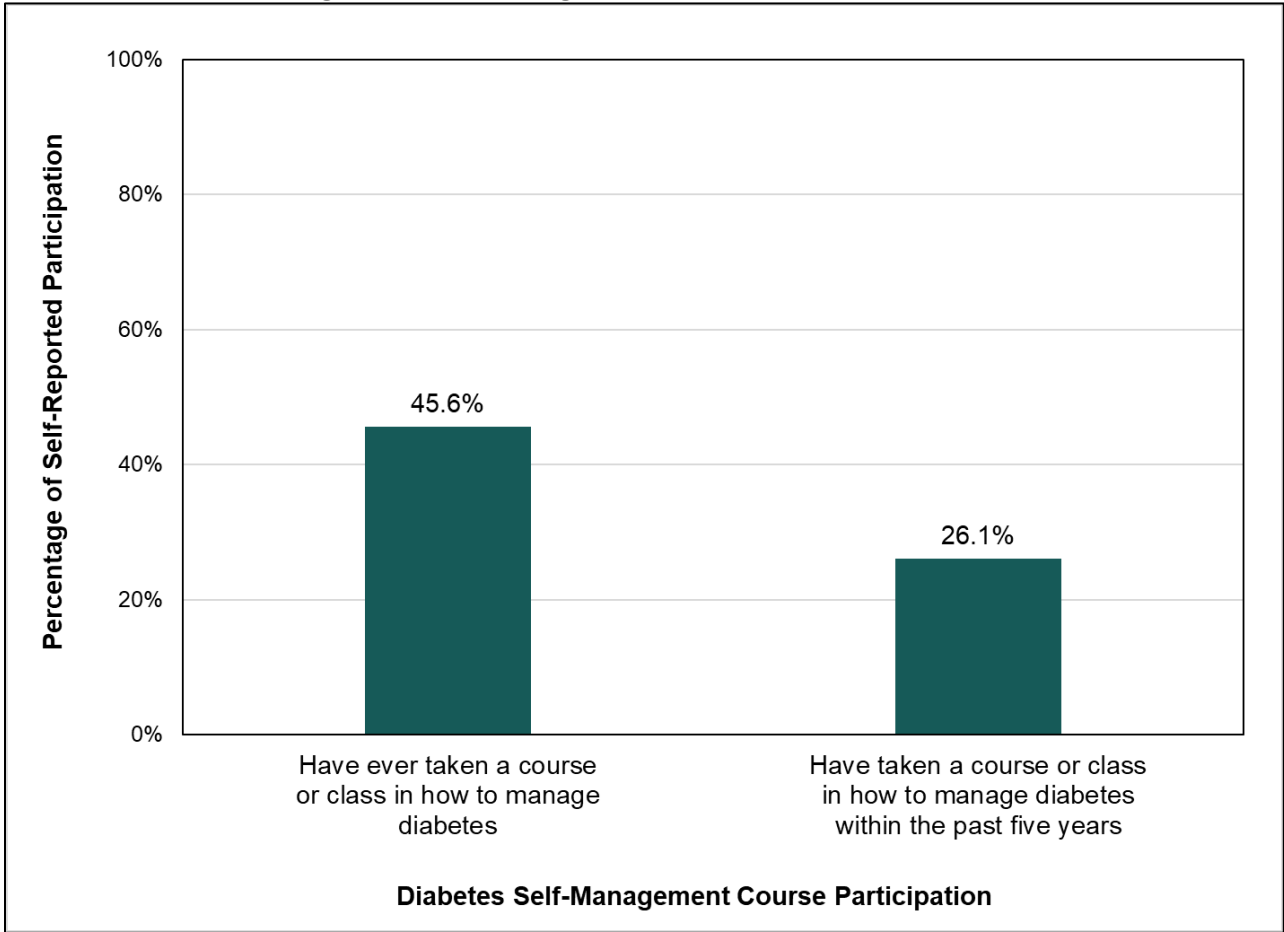
In addition to DSMES services, Delaware adults with diabetes have access to other self-management programs designed to help them meet their blood glucose goals. DHDPCH manages the Self-Management Resource Center’s Diabetes Self-Management Program (DSMP), a free, six-week program developed by Stanford

University to help people with diabetes manage their physical, mental, and emotional health. DSMP curriculum is taught using standardized program manuals and delivered by trained lay-leaders, at least one of whom is living with diabetes. Participants attend sessions in groups of eight to 16. The DSMP is offered in-person and virtually.

Adults with diabetes can also enroll in the DPH Chronic Disease Self-Management Program (CDSMP), a free, six-week program that includes six 2.5-hour sessions focusing on techniques for dealing with frustration, fatigue, and isolation, appropriate exercises, medication management, effective communication, and nutrition. The CDSMP is offered in-person and virtually.

Diabetes self-management and education programs like DSMES and the DSMP are powerful tools to help people with diabetes achieve blood glucose control. Despite this, participation rates are low compared to other CDC-recommended diabetes care tasks. In 2023, less than half (45.6%) of Delaware adults with diagnosed diabetes had ever taken a course or class to learn how to manage the condition (Figure 12), and just 26.1% of Delaware adults with diabetes had taken such a course within the past five years [2].

Figure 12. Percentage of Self-Reported Participation in a Diabetes Self-Management Course or Class Among Adults with Diagnosed Diabetes, Delaware, 2023



Source: Delaware Department of Health and Social Services, Division of Public Health, Behavioral Risk Factor Survey, 2023.

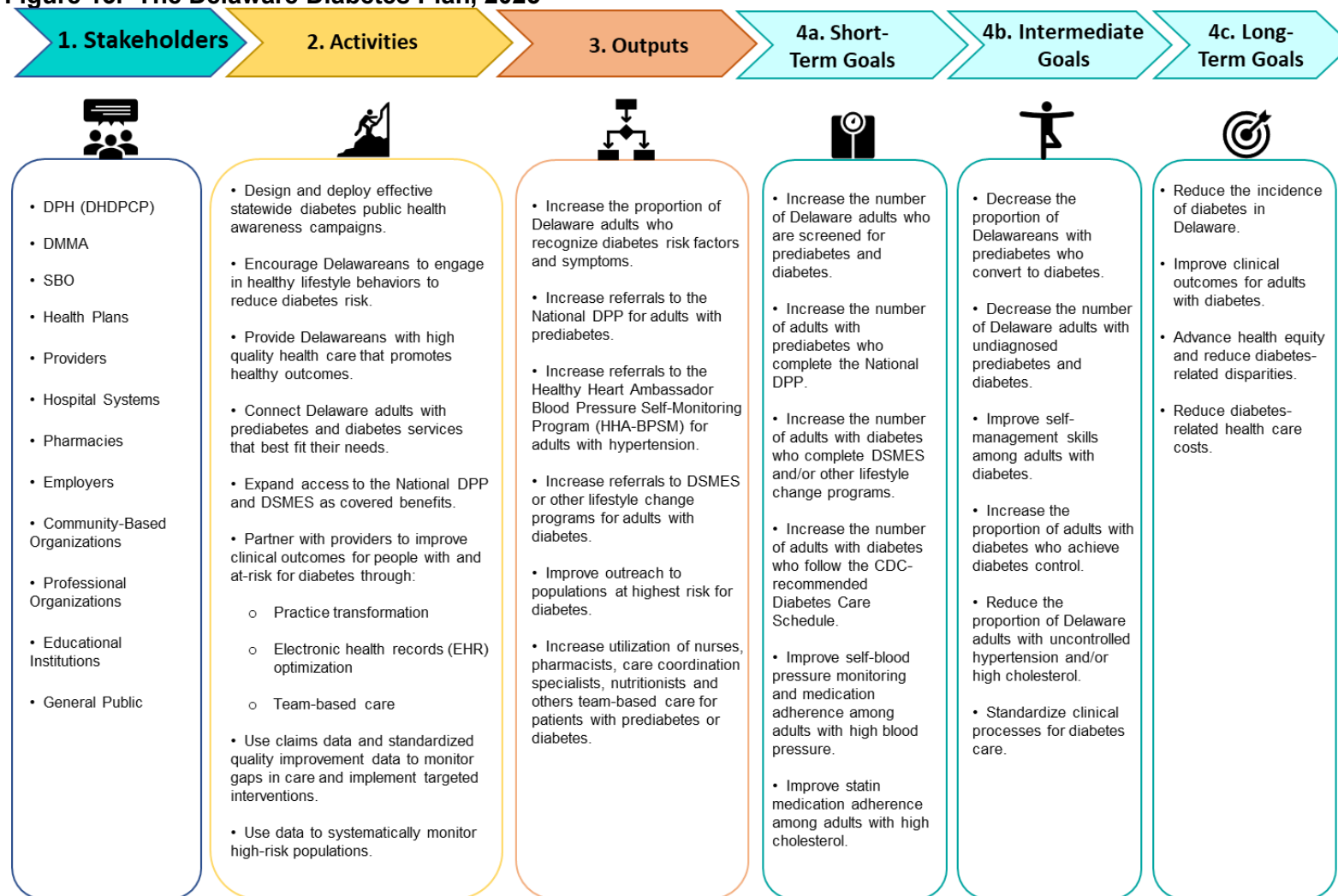
Chapter 5: The Delaware Diabetes Plan

Reducing the burden of diabetes in Delaware requires a coordinated, sustained approach by stakeholders. Efforts must focus on diabetes education, prevention, early diagnosis, and effective disease management. DPH, DMMA, and SBO developed the Delaware Diabetes Plan (Figure 13), a blueprint that provides direction and focus for achieving four long-term diabetes goals:

- **Goal 1:** Reduce the incidence of diabetes in Delaware.
- **Goal 2:** Improve clinical outcomes for adults with diabetes.
- **Goal 3:** Advance health equity and reduce diabetes-related disparities.
- **Goal 4:** Reduce diabetes-related health care costs.

The Delaware Diabetes Plan aligns with national CDC recommendations [36] and Healthy People 2030 objectives [37]. For stakeholders, the Plan is a call to action to coordinate activities and resources to support all Delawareans in their efforts to live healthy, thriving lives unburdened by the impacts of diabetes.

Figure 13. The Delaware Diabetes Plan, 2025



Source: Delaware Department of Health and Social Services, Division of Public Health (DPH), Diabetes and Heart Disease Prevention and Control Program (DHDPCP) and Division of Medicaid & Medical Assistance (DMMA); and the Delaware Department of Human Resources, Statewide Benefits Office (SBO), 2025

Stakeholders

The Delaware Diabetes Plan is made actionable through the coordinated efforts of engaged stakeholders. DPH, DMMA, and SBO work alongside partner stakeholders to implement diabetes activities and resources across Delaware (Table 14).

Table 14. Delaware Diabetes Plan Partner Stakeholders, 2025

Delaware Diabetes Plan Partner Stakeholders, 2025	
Administration for Community Living	Delaware State Police
AbleTo, Inc.	Department of Human Resources, Statewide Benefits Office
Aetna	Easter Seals
American Diabetes Association	EyeMed
CDC	Faith-based organizations
CHEER Foundation	Federally Qualified Health Centers (FQHCs)
ComPsych® Guidance Resources®	Greater Philadelphia Business Coalition on Health
CVS	Highmark Delaware
Delaware Aging Network	Livongo®
Delaware Department of Corrections	Medicaid Managed Care Organizations (MCOs)
Delaware Department of Education	Million Hearts®
Delaware Department of Health and Social Services (DHSS) Aging and Disability Resource Center	National Association of Chronic Disease Directors
Delaware Department of Labor, Division of Vocational Rehabilitation	National Council on Aging
Delaware DHSS, Division for the Visually Impaired	Quality Insights
Delaware DHSS, Division of Services for Aging and Adults with Physical Disabilities	Rent-assisted senior housing facilities
Delaware DHSS, Division of Medicaid & Medical Assistance	RespondDE
Delaware DHSS, Division of Public Health	Rite-Aid
Delaware DHSS, Division of Social Services	Self-Management Resource Center
Delaware Diabetes Coalition	Solera
Delaware hospital systems	University of Delaware
Delaware Hypertension Control Network	Walgreens
Delaware Pharmacists Society	YMCA of Delaware
Delaware providers	

Source: Delaware Department of Health and Social Services, Division of Public Health, Diabetes and Heart Disease Prevention and Control Program and Division of Medicaid & Medical Assistance; and Delaware Department of Human Resources, Statewide Benefits Office, 2025

Activities and Resources

DPH, DMMA, and SBO have built an infrastructure of diabetes activities and resources to meet the needs of their specific target populations. The agencies also work with each other to extend programmatic reach and amplify impact. Whenever possible, DPH, DMMA, and SBO coordinate with partner stakeholders to improve efficiency and connect Delawareans to the specific resources they need.

- DPH diabetes activities and resources reach the general population with additional emphasis on at-risk populations (e.g., uninsured and underinsured Delawareans, Black and Hispanic adults, older adults, those with low socioeconomic status (SES), and adults who are otherwise at elevated risk for prediabetes and diabetes).
- DMMA works with contracted Medicaid MCOs to deliver a broad range of diabetes activities and resources to Delaware Medicaid members. Through continuous quality improvement, DMMA monitors how well diabetes activities and resources are meeting the needs of its member population.
- SBO partners with contracted health plan vendors Aetna and Highmark Delaware to empower State of Delaware GHIP members to adopt healthy behaviors and effectively manage prediabetes, diabetes, and other chronic conditions. SBO continually monitors and adjusts activities and resources to ensure that GHIP members have access to the resources they need to live their healthiest lives.

DPH Diabetes Activities and Resources

Within DPH, the Diabetes and Heart Disease Prevention and Control Program (DHDPCP) coordinates diabetes activities and resources for the entire state (Table 15).

Table 15. Diabetes Activities and Resources, Delaware Department of Health and Social Services (DHSS), Division of Public Health (DPH), Diabetes and Heart Disease Prevention and Control Program (DHDPCP)

Diabetes and Heart Disease Prevention and Control Program (DHDPCP)	
Diabetes Activities	
1.	Educate all Delawareans about diabetes risk factors, symptoms, and ways to reduce risk through healthy lifestyle behaviors.
2.	Promote and expand access to the National Diabetes Prevention Program (National DPP) and Diabetes Self-Management Education and Support (DSMES) services, evidence-based lifestyle change programs designed for adults with prediabetes and diabetes.
3.	Reduce the proportion of Delaware adults with uncontrolled hypertension by increasing referrals to the Healthy Heart Ambassador-Blood Pressure Self-Monitoring Program (HHA-BPSM).
4.	Coordinate delivery of the Diabetes Self-Management Program (DSMP) and Chronic Disease Self-Management Program (CDSMP).
5.	Partner with Delaware providers to improve clinical outcomes for Delawareans with prediabetes and diabetes through practice transformation, EHR optimization, and team-based care.
6.	Partner with pharmacists to improve medication adherence among adults with hypertension and/or diabetes.
7.	Ensure access to the Emergency Medical Diabetes Fund (EMDF) for high-risk adults with diabetes who do not have medical insurance or whose medical insurance does not cover diabetes medications, testing supplies, or other diabetes services.
8.	Provide infrastructure and support for the Delaware Diabetes Coalition.
Diabetes Resources Available to All Delawareans	
•	Healthydelaware.org
•	Healthy Heart Ambassador-Blood Pressure Self-Monitoring Program (HHA-BPSM)
•	Diabetes Self-Management Program (DSMP)
•	Chronic Disease Self-Management Program (CDSMP)
•	Emergency Medical Diabetes Fund

Source: Delaware Department of Health and Social Services, Division of Public Health, Diabetes and Heart Disease Prevention and Control Program, 2025.

DHDPCP diabetes activities and resources are described in detail below:

1. Educate all Delawareans about diabetes risk factors, symptoms, and ways to reduce risk through healthy lifestyle behaviors.

Public awareness campaigns spread important health messages throughout large populations. Effective public awareness campaigns have clearly defined goals, reach their intended audience, promote key messages effectively, and undergo continual evaluation and updating [38]. DHDPCP's diabetes public awareness campaigns are designed to reach all Delawareans with greater message saturation among identified high-risk groups. DHDPCP continually evaluates messaging strategies to extend reach and improve effectiveness.

DPH also manages Healthydelaware.org, an online resource for Delawareans, employers, community partners, and providers. Through healthydelaware.org, adults can access information and tools related to healthy living, diabetes, heart health, tobacco cessation, and cancer. The website includes links to local National DPP and DSMES providers, as well as enrollment options for the Healthy Heart Ambassador-Blood Pressure Self-Monitoring Program (HHA-BPSM), the Diabetes Self-Management Program (DSMP), and the Chronic Disease Self-Management Program (CDSMP).

2. Promote and expand access to the National DPP and DSMES, evidence-based lifestyle change programs designed for adults with prediabetes and diabetes.

DHDPCP works with patients, providers, employers, and insurers to promote awareness of and access to the National DPP and DSMES. Activities related to this core function include the following:

- Through Healthydelaware.org, promote enrollment information for National DPP and DSMES classes.
- Conduct focus groups with National DPP and DSMES providers and members of priority populations to collect data related to participation barriers. Explore ways to remove participation barriers (e.g., by offering childcare and/or transportation to National DPP and DSMES classes).
- Engage community- and health care-based National DPP and DSMES champions to work within their communities and identify and refer high-risk individuals.
- Directly support the YMCA of Delaware, a certified National DPP provider.
- Support National DPP Umbrella Hub Arrangements that enable more organizations to offer and obtain reimbursement for the National DPP.

- Advocate for increased Medicaid and Medicare beneficiary enrollment into the National DPP and DSMES.
- Work directly with employers to expand the National DPP and DSMES as covered benefits for employees enrolled in health plans.
- Conduct worksite wellness initiatives to identify employees at high risk for prediabetes, diabetes, and/or hypertension; equip employees with self-monitoring skills; and connect employees to the National DPP and DSMES.
- Partner with Delaware providers to identify and refer high-risk patients to the National DPP and DSMES.

3. Reduce the proportion of Delaware adults with uncontrolled hypertension by increasing referrals to the Healthy Heart Ambassador-Blood Pressure Self-Monitoring Program (HHA-BPSM).

Since June 2021, DHDPCH is responsible for implementing Delaware's Healthy Heart Ambassador-Blood Pressure Self-Monitoring Program (HHA-BPSM). HHA-BPSM is a free, four-month virtual program that includes eight one-on-one coaching sessions, four 1.5-hour nutrition education session, and four one-hour Simple Cooking with Heart interactive cooking classes. Participants learn how to take at-home blood pressure readings and report their readings to their provider using a Bluetooth-enabled blood pressure device and virtual platform. Program graduates receive a free graduation kit with additional resources.

4. Coordinate delivery of the Diabetes Self-Management Program (DSMP) and Chronic Disease Self-Management Plan (CDSMP).

DPH manages the Self-Management Resource Center's Diabetes Self-Management Program (DSMP), a free, six-week program developed by Stanford University to help people with diabetes manage their physical, mental, and emotional health. DSMP curriculum is taught using standardized program manuals and delivered by trained lay-leaders, at least one of whom is living with diabetes. Participants attend sessions in groups of eight to 16. The DSMP is offered in-person and virtually.

Adults with diabetes can also enroll in the Chronic Disease Self-Management Program (CDSMP), a free, six-week program that includes six 2.5-hour sessions focusing on techniques for dealing with frustration, fatigue, and isolation, appropriate exercises, medication management, effective communication, and nutrition. The CDSMP is offered in-person and virtually.

5. Partner with Delaware providers to improve clinical outcomes for Delawareans with prediabetes and diabetes.

Strategies related to this activity include practice transformation, optimization of EHRs, and team-based care:

- **Practice transformation** is an evidence-based process that supports providers as they develop strategies to optimize practice efficiencies and improve patient outcomes [39]. Elements of practice transformation include piloting patient text messaging to notify patients of upcoming opportunities to participate in the National DPP and DSMES and empowering at-risk patients to report at-home blood pressure readings through a secure patient portal.
- **EHR optimization** leverages the sophisticated capabilities of electronic health record systems to capture diabetes quality care metrics, personalize treatment goals, and manage clinical care for patients with diabetes [40]. EHR optimization allows providers to see real-time snapshots of their patient population impacted by prediabetes and diabetes, including the subset of patients with uncontrolled diabetes. With this knowledge, providers are better equipped to intervene early and connect patients with community-based resources, including referrals to the National DPP and DSMES.
- **Team-based care** uses a multidisciplinary team of providers, pharmacists, community health workers, behavioral health professionals, and others (e.g., registered dietitians, patient navigators) to help patients manage their health conditions and thrive. Team-based care is grounded in the idea that each team member offers a unique set of skills and expertise, thus increasing care efficiency and patient outcomes. EHR optimization directly complements a team-based care approach by supporting multi-directional e-referral systems to allow back-and-forth exchange of information between providers and community-based organizations. DHDPCH supports team-based care for people with diabetes and advocates for sustainable payment models that prioritize patient-centered care and improve care quality and outcomes [41].

6. Partner with pharmacists to improve medication adherence among adults with hypertension and/or diabetes.

Integrating pharmacists into the team-based care approach improves support for people with prediabetes and diabetes, especially around medication management. Members of the Delaware Pharmacists Society provide coaching sessions to patients with cardiovascular disease and make referrals to community-based resources for patients in need of additional assistance. DHDPCH also offers licensed pharmacists the opportunity to complete the Medication Therapy Management Services Certificate Training Program and the Patient-Centered Diabetes Care Program. Training includes case studies and hands-on skill building related to blood glucose readings, medication regimens, and lifestyle counseling.

7. Ensure access to the Emergency Medical Diabetes Fund (EMDF) for high-risk adults with diabetes who do not have medical insurance or whose medical insurance does not cover diabetes medications, testing supplies, or other diabetes services.

Delaware's EMDF is managed by the DPH and administered by staff in the DHSS Division of State Service Centers. The EMDF provides Delawareans in emergency need with prediabetes and diabetes services, medications, testing supplies, and funds for non-reimbursable items to alleviate or eliminate their emergency condition.

8. Provide infrastructure and support for the Delaware Diabetes Coalition.

DHPCP supports the Delaware Diabetes Coalition (DDC), a statewide nonprofit organization comprised of health care organizations. The DDC provides professional development training for Delaware school nurses and staff members who may be called upon to assist a student with diabetes. The DDC also hosts Delaware's annual Diabetes Wellness Expo. The Expo is free to the public and attracts 250 to 400 Delawareans each year. More than 30 exhibitors and educational seminars provide information about diabetes management, nutrition, exercise, medication adherence, and mental health. Attendees also have access to free services such as blood pressure screenings, hearing screenings, stress assessments, COVID-19 testing, and vaccinations.

DMMA Diabetes Activities and Medicaid MCO Member Resources

DMMA's commitment to diabetes prevention and management is reflected through contracted MCO activities and resources which collectively aim to promote healthier lifestyles, enable diabetes monitoring efforts, improve quality of care, and reduce diabetes complications among Delaware's Medicaid population (Table 16).

Table 16. Delaware Department of Health and Social Services (DHSS), Division of Medicaid & Medical Assistance (DMMA), Diabetes Activities and Resources Available to Delaware Medicaid Members, 2025

Division of Medicaid & Medical Assistance (DMMA) Diabetes Activities	
1.	Contract with Medicaid MCOs to provide Delaware Medicaid members with access to high quality health care that promotes healthy lifestyles.
2.	Increase member engagement by encouraging Delaware's Medicaid population to take action to help manage their health.
3.	Address underlying social determinants of health as a critical component of improving diabetes outcomes among Delaware Medicaid members.
4.	Increase referrals to evidence-based prediabetes and diabetes lifestyle change programs, including the National DPP and DSMP.
5.	Support MCOs' use of high-quality data to identify Delaware Medicaid members at high risk for diabetes and related complications. <ul style="list-style-type: none"> a. MCOs collect and analyze five standardized diabetes-specific Healthcare Effectiveness Data and Information Set (HEDIS) measures to evaluate dimensions of diabetes clinical care and guide quality improvement efforts. b. MCOs use risk stratification models and predictive analyses to identify high-risk members. Results enable targeted interventions related to diabetes prevention and self-management.
6.	Collaborate with providers to encourage the adoption of evidence-based diabetes care guidelines, including statin therapy medication management and referrals to diabetes prevention and management lifestyle change programs.
Diabetes Resources Available to Delaware Medicaid MCO Members	
•	Access to the National Diabetes Prevention Program (National DPP) and the Diabetes Self-Management Program (DSMP)
•	CARE Card reward program
•	Care coordination support
•	Care transition support
•	Diabetes education for members
•	Food as Medicine Program
•	Medication Therapy Management (MTM) services
•	Nutritional counseling
•	Remote health monitoring
•	Targeted outreach for specific populations
•	Transportation assistance
•	Two-way text messaging
•	Wellness events

Source: Delaware Department of Health and Social Services, Division of Medicaid & Medical Assistance, 2025.

Diabetes resources available to Medicaid MCO members are described in detail below:

- **Access to the National Diabetes Prevention Program (National DPP) and the Diabetes Self-Management Program (DSMP).** Medicaid MCOs connect members with these evidence-based programs to build patient engagement, manage their health, and reduce their risk of diabetes-related complications.

While DSMES is not a covered benefit under Delaware Medicaid, DMMA encourages its MCOs to provide alternative education and support programs through community-based resources. MCOs also refer members to educational materials and programs offered by the ADA and local health systems.

- **CARE Card Reward Program.** This program provides rewards for Medicaid members with diabetes as they successfully complete recommended Diabetes Care Schedule exams and screenings and achieve results indicative of effective diabetes management.
- **Care coordination support.** Care coordinators work one-on-one with Medicaid members to develop person-centered care plans, provide diabetes education, and assist with scheduling and referrals to lifestyle change programs.
- **Care transition support.** These programs provide discharge planning and follow-up support for Medicaid members hospitalized due to diabetes-related conditions.
- **Diabetes education for members.** Medicaid MCOs provide newsletters, mailers, social media campaigns, and website content to educate members on diabetes prevention and care. Topics include proper nutrition, physical activity, medication adherence, and the importance of preventive screenings. Resources are culturally and linguistically appropriate to ensure accessibility for all Delaware Medicaid members. When indicated, direct outreach methods include personalized mailings, telephone-based engagement, and one-one-one meetings designed to provide personalized education opportunities.
- **Food as Medicine Program.** Medicaid MCOs provide nutritional counseling and resources to members, particularly those recently discharged from the hospital with certain diagnoses including diabetes. This program directly addresses food insecurity among high-risk members and facilitates access to healthy meal options.
- **Medication Therapy Management (MTM) services.** Through a collaboration with the Delaware Pharmacists Society, Delaware Medicaid members have access to assessments and counseling by pharmacists to encourage medication adherence and address patient concerns. Medicaid MCOs also provide members with tools such as medication pillboxes and refill reminder programs to encourage medication adherence. MTM services are available to Medicaid members with prescribed hypertension and statin medication, and medications for other chronic conditions.

- **Nutritional counseling.** DMMA supports nutritional counseling efforts that reduce barriers to healthy eating while supporting members in achieving wellness goals. Medicaid MCOs offer diabetes-friendly meal planning resources for members with and at risk for diabetes.
- **Remote health monitoring.** Medicaid MCOs offer members options for remote monitoring of health conditions, including at-home blood pressure monitoring, with virtual provider follow-ups and care management to support diabetes control. Members receive free blood pressure cuffs as part of the remote health monitoring initiative.
- **Targeted outreach for specific populations.** Medicaid MCOs conduct targeted outreach to specific populations including expectant mothers and members with co-occurring chronic conditions. Targeted outreach efforts also extend to members at high-risk for uncontrolled diabetes. Within the population, MCOs address care gaps, such as A1C testing, eye exams, kidney health evaluations, and blood pressure screenings.
- **Transportation assistance.** Medicaid MCOs ensure members have transportation access to wellness programs and essential health care services.
- **Two-way text messaging.** Medicaid MCOs utilize two-way text messaging platforms that allow for real-time communication with members and reminders for appointments, screenings, and follow-up care. Text messaging also allows MCOs to communicate with members about the benefits of evidence-based lifestyle change programs like the National DPP, DSMES, and DSMP.
- **Wellness events.** DMMA supports and participates in community events like ChristianaCare's Diabetes and Heart Health days. At these events, DMMA provides on-site risk factor screening and A1C testing to promote early detection of prediabetes and diabetes among Delaware Medicaid members.

SBO and SEBC Diabetes Activities and Resources for GHIP Members

The SBO and the State Employee Benefits Committee (SEBC) offer a variety of wellness, diabetes prevention, and diabetes management resources, many of which are available at no cost to GHIP members (Table 17). The SBO contracts with health plan vendors Highmark Delaware and Aetna to provide services to members.

Table 17. Diabetes Activities and Resources, Delaware Department of Human Resources (DHR), Statewide Benefits Office (SBO) and State Employee Benefits Committee (SEBC) Diabetes Activities and Resources Available to Group Health Insurance Plan (GHIP) Members, by Plan, 2025

Statewide Benefits Office (SBO) and State Employee Benefits Committee (SEBC) Activities		
1. Provide State of Delaware employees, retirees, and their dependents with access to high quality health care that promotes healthy lifestyles.		
2. Increase patient engagement by encouraging Group Health Insurance Plan (GHIP) members to make informed decisions about their overall health.		
3. Partner with health plan vendors Aetna and Highmark Delaware to promote diabetes awareness, prevention, self-management, and compliance with care recommendations.		
4. Use data to inform decisions around clinical care quality and reduce overall health care costs, including costs related to prediabetes and diabetes.		
Diabetes Resources Available to GHIP Members, by Plan		
Resource	Aetna	Highmark Delaware
• 24/7 Informed Health Line *	✓	
• AbleTo, Inc. *	✓	
• Aetna One Advisor (A1A) *	✓	
• Customer Care Management Unit (CCMU) *		✓
• Diabetic Education	✓	✓
• Diabetic Medications & Supplies Program (as part of the CVS Caremark Prescription Plan) *	✓	✓
• Employee Assistance Program (administered by ComPsych® GuidanceResources®)	✓	✓
• Livongo® (Diabetes Monitoring Program)		✓
• Member Website *	✓	✓
• National Diabetes Prevention Program (National DPP) *	✓	✓
• Nutritional Counseling	✓	✓
• Transform Diabetes Care® Program	✓	✓
• Wellness Discounts *	✓	Medicare retirees enrolled in the Special Medicfill Supplement plan with prescription drug coverage

*Available at no cost to members.

Notes: Group Health Insurance Plan members enrolled in the State Vision Plan administered by EyeMed also have access to the Diabetic Eye Care Benefit.

Source: Delaware Department of Human Resources, Statewide Benefits Office, 2025.

Diabetes resources available to GHIP members are described in detail below:

- **24/7 Informed Health Lines (Aetna).** Members have continuous access to a 24/7 Informed Health Line staffed by Registered Nurses (RNs). RNs answer members' health questions and provide medical guidance on specific health conditions, including diabetes.
- **AbleTo, Inc. (Aetna).** AbleTo, Inc. provides behavioral health treatment to members diagnosed with certain medical conditions, including diabetes, or those who are going through certain life changes. AbleTo, Inc. offers virtual therapy programs, motivational and behavioral coaching, and customized treatment plans.
- **Aetna One Advisor (Aetna).** Aetna One Advisor (A1A) is a care management program that uses a team-based care approach to help members manage their health conditions, coordinate care, and achieve health goals. The support team includes social workers, behavioral health specialists, dietitians, pharmacists, and nurses.
- **Customer Care Management Unit (Highmark).** Highmark's Customer Care Management Unit (CCMU) is a care management program that uses a team-based approach to help members manage their health conditions, coordinate care, and achieve health goals. Dedicated CCMU Advocates create tailored care plans, ensure members receive appropriate diabetes services, connect members with diabetes management resources, and assist with scheduling appointments. When appropriate, CCMU Advocates connect members with an RN or health coach who serves as a point of accountability for ongoing health management and improvement.
- **Diabetic Education (Aetna and Highmark).** Diabetic education provides instruction on diabetes self-management skills including foot care, daily glucose monitoring, medication management, and nutrition counseling. Diabetic education is performed in individual or group settings and is facilitated by physicians or Certified Diabetes Care and Education Specialists (CDCES), health care professionals who specialize in teaching people with diabetes to develop the necessary skills and knowledge to manage their chronic condition.
- **Diabetic Eye Care Benefit (GHIP members enrolled in the State Vision Plan administered by EyeMed).** EyeMed members with diabetes are eligible to receive additional services from their vision provider. With EyeMed's Diabetic Eye Care benefit, members can obtain a vision evaluation every six months to monitor for signs of diabetes complications. Some members may also be eligible to receive retinal imaging, extended ophthalmoscopy, gonioscopy, or laser scanning.
- **Diabetic Medications & Supplies Savings Program (as part of the CVS Caremark Prescription Plan) (Aetna and Highmark).** Under the State of Delaware

prescription plan administered by CVS Caremark, diabetes supplies (including lancets, test strips, and syringes/needles) are provided at no cost (e.g., \$0 copay) when the prescription is filled at a retail participating pharmacy or via mail-order-based CVS Caremark Home Delivery. Multiple diabetes medications may be obtained for just one copay when the prescriptions are filled at the same time at a 90-day participating pharmacy or the mail-order-based CVS Caremark Pharmacy.

- **Employee Assistance Program (administered by ComPsych®GuidanceResources®) (Aetna and Highmark).** Members are provided confidential access to the State of Delaware's Employee Assistance Program (EAP) administered by ComPsych®GuidanceResources®. Through the EAP, members receive confidential emotional support from highly trained clinicians for issues including anxiety, depression, stress, grief, and relationship or marital conflicts. Members also have access to online support, webinars, interactive digital tools, work-life solutions (including finding child and elder care), legal and financial consultation, and more.
- **Livongo® Diabetes Monitoring Program (Highmark).** Livongo® is a free diabetes monitoring program available to employees, pensioners, and their covered spouses and dependent children living with diabetes. Livongo® provides members with access to Certified Diabetes Care and Education Specialists (CDCES) who assist with diabetes management decisions via the Livongo® meter, mobile app, and text messaging. Livongo® Expert Coaches are available 24/7 to answer diabetes questions and provide real-time acute interventions. Upon enrollment, members receive a welcome kit and a blood glucose meter, strips, and lancet free of charge. When members run out of strips and lancets, they are shipped directly to the member at no cost. If a member needs a replacement meter, they receive one through the mail free of charge. Diabetes management information can be shared with members' primary care providers, enhancing team-based care.
- **Member Websites (Aetna and Highmark).** Through the Highmark Delaware Member website and Aetna Member website, members can access discounts on gym memberships, health and wellness products and services, weight loss programs, and alternative health services. Member websites also include an extensive library of articles, recipes, and videos created to inspire members to live happier, healthier lives.
- **National Diabetes Prevention Program (National DPP) (Aetna and Highmark).** The National DPP is available to employees, spouses, dependent children, and early retirees (non-Medicare) with prediabetes or elevated diabetes risk and who meet eligibility criteria. Highmark Delaware members access the National DPP through Livongo® National DPP (for a virtual format) or the YMCA (for an in-person format). Aetna members access National DPP services through Solera (for a virtual format) or the YMCA (for an in-person format). As an added benefit, participants who complete the National DPP through the YMCA receive up to four free months of

family membership. Aetna members who complete at least four weeks of the National DPP through Solera receive a Fitbit® at no additional cost.

- **Nutritional Counseling (Aetna and Highmark).** Nutritional counseling is available to members with eligible diagnoses, including diabetes and cardiovascular disease. Nutritional counseling is also available for members at nutritional risk due to dietary history, current dietary intake, medication use, or chronic illness.
- **Transform Diabetes Care® Program (Aetna and eligible Highmark members).** Transform Diabetes Care® (TDC) is a 12-month program that provides customized diabetes guidance based on members' specific needs. Participants receive reminders about medication refills, doctor appointments, preventive screenings, and nutrition plans. Through an app, participants monitor glucose and blood pressure, track and share readings, and more. To stay on track, members can get personalized support from Certified Diabetes Care and Education Specialist nurses. TDC® is available to all Aetna members and eligible Highmark Special Medicfill Medicare Plan members with prescription coverage through SilverScript.
- **Wellness Discounts (Aetna and Highmark).** Members save on gym memberships, eyeglasses and contacts, weight loss programs and meal plans, massage therapy, and more with the discount programs and services offered through Highmark and Aetna.

Chapter 6: Funding for Diabetes Activities

DPH, DMMA, and SBO use different funding arrangements to deliver diabetes resources and activities to their specific target populations.

Funding for DPH Diabetes Activities

In FY24, DPH's DHDCPCP received \$2.14 million in total funding to implement activities to reduce the impact of diabetes, hypertension, and shared chronic disease risk factors among all Delawareans. The majority (86%) of DHDCPCP funding represented federal dollars. In FY24, the DHDCPCP received \$292,200 in funding from the Delaware Health Fund to support statewide diabetes programming activities (Table 18).

Table 18: Division of Public Health, Diabetes and Heart Disease Prevention and Control Program (DHDCPCP) Funding Sources and Amounts, Delaware, Fiscal Year (FY) 2024

Funding Source	Funding Type	Amount Funded
Delaware Health Fund	State	\$292,200
CDC 2320 Grant (Diabetes)	Federal	\$850,000
CDC 2304 Grant (Heart Disease)	Federal	\$949,314
National Association of Chronic Disease Directors (NACDD) DSMES Medicaid Project	Federal	\$50,000
Total FY24 DHDCPCP Funding		\$2,141,514

Source: Delaware Department of Health and Social Services, Division of Public Health, 2025.

Funding for DMMA and SBO Diabetes Activities

DMMA and SBO do not allocate specific funds for the prevention and treatment of prediabetes and diabetes among Delawareans; rather, DMMA and SBO build the cost of prediabetes and diabetes programs and resources into health plan vendor contracts.

SBO makes payments to health plan vendors Aetna and Highmark Delaware using funds from the State of Delaware Group Health Fund. Health plan vendors submit to SBO monthly administration invoices that include the cost of the National DPP, Livongo®, and Transform Diabetes Care® (for Aetna members and eligible Medicare retirees). The amount billed for monthly administration fluctuates based on the number of GHIP members enrolled per month. In FY24, the GHIP paid \$2,212,172.66 for diabetes prevention and management programs for the GHIP member population (Table 19).

Table 19: Total Costs Paid by the Group Health Insurance Program (GHIP) for Diabetes Prevention and Management Programs, Delaware, Fiscal Year (FY) 2024

Diabetes Program	FY24 Cost Paid by GHIP
• Diabetes Prevention Programs	
National Diabetes Prevention Program (National DPP)	
○ Solera (Aetna)	\$188,817.30
○ Livongo® (Highmark)	\$4,048.00
○ YMCA (Aetna and Highmark)	\$56,301.00
Total Cost Paid for Diabetes Prevention Programming	\$249,166.30
• Diabetes Self-Management Programs	
○ Livongo® Diabetes Management (Highmark)	\$740,066.00
○ Transform Diabetes Care® (Aetna)	\$269,879.85
○ Transform Diabetes Care® (CVS SilverScript for Medicare Retirees)	\$953,060.51
Total Cost Paid for Diabetes Management Programming	\$1,963,006.36
• Total Cost Paid for Diabetes Prevention and Management Programming	\$2,212,172.66

Source: Delaware Department of Human Resources, Statewide Benefits Office, 2025.

Chapter 7: Celebrating Achievements

Recent Achievements

DPH, DMMA, and SBO are effectively implementing activities outlined in the Delaware Diabetes Plan and making strides to reduce the burden of diabetes in Delaware. The agencies are pleased to share a curated selection of accomplishments achieved since the previous (2023) edition of *The Impact of Diabetes in Delaware*.

Division of Public Health (DPH), Diabetes and Heart Disease Prevention Program (DHDPCP) Achievements, 2023-2024

- ✓ Collaborated with Quality Insights to assist primary care providers in referring patients with clinical indicators of uncontrolled diabetes to DSMES resources.
- ✓ Supported the YMCA of Delaware as it hosted 111 National DPP cohorts during FY23 and FY24. During this period, more than 635 participants completed 12 or more program sessions.
- ✓ Hosted 24 Diabetes Self-Managed Program (DSMP) workshops throughout the state with 326 individuals completing at least one program session.
- ✓ Expanded the capacity of the Healthy Heart Ambassador—Blood Pressure Self-Monitoring (HHA-BPSM) program to include 15 program facilitators.
- ✓ Since June 2021, successfully determined eligibility for 942 Delawareans and enrolled 624 participants in HHA-BPSM. A total of 306 participants successfully completed HHA-BPSM since June 2021.
- ✓ Developed and implemented a prediabetes and diabetes prevention marketing campaign specifically targeted to Black men, a population of Delaware adults at higher risk for diabetes and diabetes-related complications.
- ✓ Piloted multidirectional referrals to DSMES using the Unite US e-referral platform. Community Health Workers referred five patients to the Bayhealth Diabetes Wellness Center for additional diabetes management services. When scaled, this strategy will help connect high-risk patients in underserved areas with diabetes resources.
- ✓ Collaborated with community-based organizations in underserved areas to display DSMES information and promote services.

- ✓ Assisted 65 Delawareans through the Emergency Medical Diabetes Fund (EMDF).

Division of Medicaid and Medical Assistance (DMMA) Managed Care Organization Achievements, 2023-2024

- ✓ Established partnerships with the Delaware YMCA, the Health Promotions Council, and Beebe Healthcare to provide local and accessible opportunities for Delaware Medicaid members to participate in the National DPP.
- ✓ Used two-way text messaging to communicate with members about the benefits of the National DPP and DSMP. Since 2020, these efforts have contributed to steady increases in program enrollment and participation. A growing number of Delaware Medicaid members are attending sessions regularly, achieving weight loss milestones, and demonstrating progress in diabetes prevention outcomes.
- ✓ Advocated for expanded coverage of DSMES and supported Delaware Medicaid members in accessing these resources.
- ✓ Collaborated with Quality Insights to provide MCO clinical staff with tools to help guide Medicaid members toward diabetes prevention and management resources that best fit their needs and preferences.
- ✓ Partnered with DPH and other statewide partners to leverage resources, grants, and programs aimed at improving diabetes care for Delaware Medicaid members.
- ✓ Integrated emerging technologies such as remote health monitoring and telehealth services to better manage diabetes care for members in rural and/or underserved areas.

Statewide Benefits Office (SBO) Achievements, 2023-2024

- ✓ Provided State agencies with annual scorecard reviews detailing benchmark and organizational specific data on key metrics related to their employee population's service utilization patterns, health risk, and adherence with recommended treatments.
- ✓ Analyzed claims data and generated regular reports on the prevalence of prediabetes and diabetes in the GHIP member population.

- ✓ Began covering weight loss medications (including Glucagon-like peptide-1 medications (GLP-1s) for weight loss) effective July 1, 2023.
- ✓ Regularly provided the public and the SEBC with utilization and outcome data related to GLP-1 drugs, diabetes, prediabetes, obesity, and other metabolic conditions impacting the GHIP member population.
- ✓ Maintained an online webpage on the SBO website linking GHIP members to Delaware-specific diabetes resources and resources from the American Diabetes Association.
- ✓ Communicated the availability of diabetes services available to GHIP members via advertising, monthly “Get the Facts on What’s Happening” resource documents, and targeted communications via email and US mail.
- ✓ Worked in partnership with Aetna and Highmark Delaware to send regular communications to members via email and U.S. mail advertising the National DPP.
- ✓ Promoted the Diabetes Self-Management Program (DSMP), as well as health classes/events offered by local hospitals.
- ✓ Collaborated with health plan care management programs Aetna One Advisor (A1A) and Highmark’s Custom Care Management Unit (CCMU) to perform the following:
 - Refer members at risk for diabetes directly to the National DPP when clinically indicated.
 - Refer members diagnosed with diabetes directly to diabetes management programs when clinically indicated.
 - Proactively reach out to members with diabetes to ensure they follow the recommended CDC diabetes care schedule.
 - Proactively reach out to members with high blood pressure and/or high cholesterol to assist with medication adherence and optimization.
 - Assess and address social determinants of health and barriers to care among GHIP members.

- ✓ Developed the data-informed FY24 and FY25 strategic plan that SBO and SEBC use to continue the mission of offering State of Delaware employees, retirees, and their dependents access to high quality health care that produces good health outcomes at an affordable cost.
- ✓ Created and promoted the State of Delaware Diabetes Management and Prevention Programs and Resources evaluation report and resource document. This document is a comprehensive resource guide for GHIP members to better learn about the programs and resources available to them to manage and prevent prediabetes and diabetes.
- ✓ Participated in the Greater Philadelphia Business Coalition of Health's Employer Action Collaborative on Obesity and Diabetes Interest Group.
- ✓ Collaborated with legislators and the SEBC on House Resolution 32 and other opportunities to decrease the prevalence of prediabetes and diabetes among GHIP members.

Chapter 8: Recommendations

To help realize the vision of the Delaware Diabetes Plan and to continue progress already made, DPH, DMMA, and SBO make six recommendations. For each recommendation, the agencies provide the intended outcomes and an estimated timeline for implementing the recommendation. DHDPCP provides an estimate of the amount of annual grant funding received by external sources devoted to achieving each recommendation.

Recommendation 1: Continue to promote diabetes risk reduction through healthy lifestyle behaviors.

- **Intended Outcomes:** Increase the proportion of adults who engage in healthy lifestyle behaviors, including eating a healthy diet and engaging in regular physical activity; increase the proportion of adults who are aware of diabetes risk factors and symptoms; support early identification of adults with prediabetes and diabetes to reduce the number of Delawareans who are unaware they have the conditions; improve diabetes self-management skills; improve diabetes outcomes; and reduce health care costs.
- **Anticipated Timeline:** Ongoing (updates to be included in the 2027 biennial report)
- **Estimated Amount of External Grant Funding Used to Achieve the Recommendation:** \$250,000 per year

Recommendation 2: Increase referrals to the nationally recognized and evidence-based National Diabetes Prevention Program (National DPP) for Delawareans at risk for diabetes.

- **Intended Outcomes:** Increase awareness of the National DPP among all Delawareans with additional outreach to high-risk populations; increase the number of adults with prediabetes who are referred to, enrolled in, and complete the National DPP; increase the number of adults with prediabetes who achieve 5% to 7% weight loss and get at least 150 minutes of physical activity per week; reduce the proportion of adults with prediabetes who convert to diabetes; and reduce the incidence of diabetes in Delaware.
- **Anticipated Timeline:** Ongoing (updates to be included in the 2027 biennial report)
- **Estimated Amount of External Grant Funding Used to Achieve the Recommendation:** \$100,000 per year

Recommendation 3: Reduce the proportion of Delawareans with uncontrolled high blood pressure through improved medication adherence and/or referrals to lifestyle change programs like the Healthy Heart Ambassador—Blood Pressure Self-Monitoring Program (HHA-BPSM).

- **Intended Outcomes:** Increase awareness of the HHA-BPSM among all Delawareans with additional outreach to high-risk populations; increase the number of adults with hypertension who are referred to, enrolled in, and complete the HHA-BPSM; increase the proportion of adults with hypertension who self-monitor their blood pressure; increase the proportion of adults with hypertension who take their medication as prescribed; reduce the proportion of adults who experience cardiovascular disease, heart attack, and stroke; reduce the proportion of adults with prediabetes who convert to diabetes; reduce the incidence of diabetes in Delaware; improve diabetes and cardiovascular outcomes; and reduce health care costs.
- **Anticipated Timeline:** Ongoing (updates to be included in the 2027 biennial report)
- **Estimated Amount of External Grant Funding Used to Achieve the Recommendation:** \$100,000 per year

Recommendation 4: For Delawareans diagnosed with diabetes, increase referrals to evidence-based lifestyle change programs including Diabetes Self-Management and Education Support (DSMES) services, the Diabetes Self-Management Program (DSMP), Livongo® (for GHIP members covered by Highmark Delaware), and Transform Diabetes Care® (for GHIP members covered by Aetna).

- **Intended Outcomes:** Increase awareness of evidence-based lifestyle change programs among all Delawareans with additional outreach to high-risk populations; increase the number of adults with diabetes who are referred to, enrolled in, and complete lifestyle change programs; improve self-management skills among adults diagnosed with diabetes; increase the proportion of adults with diabetes who follow evidence-based Diabetes Care Schedule tasks; increase the proportion of adults with diabetes who achieve diabetes control; improve health outcomes; and reduce health care costs.
- **Anticipated Timeline:** Ongoing (updates to be included in the 2027 biennial report)
- **Estimated Amount of External Grant Funding Used to Achieve the Recommendation:** \$100,000 per year

Recommendation 5: Promote a team-based care approach to diabetes to improve clinical outcomes and reduce health care costs.

- **Intended Outcomes:** Incorporate care team members with diverse health care backgrounds; create person-centered diabetes management plans that meet individuals' unique situations; improve self-management skills among adults diagnosed with diabetes; increase the proportion of adults with diabetes who follow evidence-based Diabetes Care Schedule tasks; increase the proportion of adults with diabetes who achieve diabetes control; improve health outcomes; prevent

avoidable admissions and readmissions among adults with diabetes; improve diabetes outcomes; and reduce health care costs.

- **Anticipated Timeline:** Ongoing (updates to be included in the 2027 biennial report)
- **Estimated Amount of External Grant Funding Used to Achieve the Recommendation:** \$150,000 per year

Recommendation 6: Use high-quality electronic health record data and claims data to inform outreach and policy.

- **Intended Outcomes:** Monitor service utilization rates among Delaware adults with diabetes; identify patients with clinical indicators of uncontrolled diabetes; conduct targeted outreach to patients at high-risk for diabetes and diabetes-related complications; increase the number of adults with prediabetes who are referred to the National DPP; increase the number of adults with diabetes who are referred to DSMES; increase the number of adults with high blood pressure who engage in self-blood pressure monitoring; standardize clinical processes to promote excellent clinical diabetes management; improve health outcomes; and reduce health care costs.
- **Anticipated Timeline:** Ongoing (updates to be included in the 2025 biennial report)
- **Estimated Amount of External Grant Funding Used to Achieve the Recommendation:** \$150,000 per year

Conclusion

Diabetes is lifelong, chronic condition that requires consistent, long-term, and comprehensive management. Data from the Behavioral Risk Factor Survey show that in 2023, 13.3% of Delaware adults over the age of 18 reported that they had been diagnosed with diabetes [2]. An additional 14.5% of Delaware adults reported that they had been diagnosed with prediabetes [2]. In total, more than 209,000 Delaware adults have received a diagnosis of prediabetes or diabetes. As Delaware's population ages, the number of adults impacted by diabetes is expected to dramatically increase.

Thanks to advances in diabetes screening, early diagnosis, self-management, and clinical care, people with diabetes can live long, healthy lives following a diagnosis. Delaware has built a statewide resource infrastructure for those at risk for diabetes and those living with the disease. For individuals at risk for diabetes, making healthy lifestyle changes can delay, or even prevent, a diabetes diagnosis. For those diagnosed with the disease, effective diabetes self-management can help prevent complications and comorbidities.

DPH, DMMA, and SBO work continuously to increase awareness of and access to diabetes resources for their specific target populations. Together, DPH, DMMA, and SBO created the Delaware Diabetes Plan. The Delaware Diabetes Plan provides direction, focus, and accountability as stakeholders continue to make progress toward a vision of Delawareans living free from the burden of diabetes.

The agencies make six recommendations to continue the work already underway to empower a healthy population, ensure excellent clinical care for adults living with diabetes, promote health equity, and reduce health care costs. The Delaware Diabetes Plan is considered a living document. DPH, DMMA, SBO, and diabetes partners will work together to provide regular updates, review progress, identify lessons learned, and make Plan adjustments as needed.

References

- [1] Centers for Disease Control and Prevention, "Diabetes Basics," [Online]. Available: <https://www.cdc.gov/diabetes/about/index.html>. [Accessed 4 January 2025].
- [2] Delaware Department of Health and Social Services, Division of Public Health, "Delaware Behavioral Risk Factor Survey (BRFS)," 2023.
- [3] American Diabetes Association, "The Burden of Diabetes in Delaware, 2024 State Fact Sheet," [Online]. Available: https://diabetes.org/sites/default/files/2024-03/adv_2024_state_fact_delaware.pdf. [Accessed 29 January 2025].
- [4] V. Fonseca, "Defining and characterizing the progression of type 2 diabetes," *Diabetes Care*, vol. 32, no. Suppl 2.
- [5] E. Parker, J. Lin, T. Mahoney, N. Ume, G. Yang, R. Gabbay, N. ElSayed and R. Bannuru, "Economic Costs of Diabetes in the U.S. in 2022," *Diabetes Care*, vol. 47, no. 1, pp. 26-43, 2024.
- [6] J. Echouffo-Tcheugui and E. Selvin, "Pre-diabetes and what it means: The epidemiological evidence," *Annual Review of Public Health*, vol. 42, pp. 59-77, 2021.
- [7] W. Knowler, E. Barrett-Connor, S. Fowler, R. Hamman, J. Lachin, E. Walker and D. Nathan, "Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin," *New England Journal of Medicine*, vol. 46, no. 6, pp. 393-403, 2002.
- [8] Centers for Disease Control and Prevention, "Background and Benefits of DSMES," 15 May 2024. [Online]. Available: <https://www.cdc.gov/diabetes-toolkit/php/about-dsmes/background-dsmes.html>. [Accessed 10 February 2025].
- [9] Delaware Population Consortium, "Population Projections by Single Year and 5-Year Age Cohorts, Version 2024.0," 2024.
- [10] Kaiser Family Foundation, State Health Facts, "Total Monthly Medicaid & CHIP Enrollment and Pre-ACA Enrollment, October 2024," 2025. [Online]. Available: <https://www.kff.org/state-category/medicaid-chip/>. [Accessed 2 February 2025].
- [11] Centers for Disease Control and Prevention, "National Diabetes Statistics Report," 2024.
- [12] L. Geiss, J. Wang, Y. Cheng, T. Thompson, L. Barker, Y. Li, A. Albright and E. Gregg, "Prevalence and incidence trends for diagnosed diabetes among adults aged 20 to 79 years, United States, 1980-2012," *Journal of the American Medical Association*, vol. 312, no. 12, pp. 1218-26, 2014.
- [13] W. Rowley, C. Bezold, Y. Arikan, E. Bryne and S. Krohe, "Diabetes 2030: Insights from yesterday, today, and future trends," *Population Health Management*, vol. 20, no. 1, pp. 6-12, 2017.
- [14] Centers for Disease Control and Prevention, "Symptoms of Diabetes," 15 May 2024. [Online]. Available: <https://www.cdc.gov/diabetes/signs-symptoms/index.html>. [Accessed 19 January 2025].
- [15] T. Schnurr, H. Jakupovic, G. Carrasquilla, L. Angquist, T. Sorensen, A. Tjonneland, K. Overvad, O. Pedersen, T. Hansen and T. Kilpelainen, "Obesity, unfavourable lifestyle, and genetic risk of type 2 diabetes: A case-cohort study," *Diabetologia*, vol. 63, pp. 1324-1332, 2020.

- [16] K. Narayan, J. Boyle, T. Thompson, E. Gregg and D. Williamson, "Effect of BMI on lifetime risk for diabetes in the U.S.," *Diabetes Care*, vol. 30, no. 6, pp. 1562-6, 2007.
- [17] A. D. Association, "Classification and diagnosis of diabetes: standards of medical care in diabetes - 2018," *Diabetes Care*, vol. 41, no. suppl 1, pp. S13-S27, 2018.
- [18] Centers for Disease Control and Prevention, National Center for Health Statistics, "Interactive Summary Health Statistics for Adults. Percentage of diagnosed diabetes for adults aged 18 and over, United States, 2023," 2025. [Online]. Available: https://wwwn.cdc.gov/NHISDataQueryTool/SHS_adult/index.html. [Accessed 20 January 2025].
- [19] Delaware Health Statistics Center, "Delaware Vital Statistics Annual Report 2022," Delaware Department of Health and Social Services, Division of Public Health, 2025.
- [20] G. Wei, S. Coady, D. Goff, F. Brancati, D. Levy, E. Selvin, R. Vasan and C. Fox, "Blood pressure and the risk of developing diabetes in African Americans and Whites: ARIC, CARDIA, and the Framingham Heart Study," *Diabetes Care*, vol. 34, no. 4, pp. 873-879, 2011.
- [21] G. Jia and J. Sowers, "Hypertension in diabetes: An update of basic mechanisms and clinical disease," *Hypertension*, vol. 78, no. 5, pp. 1197-1205, 2021.
- [22] J. Petrie, T. Guzik and R. Touyz, "Diabetes, hypertension, and cardiovascular disease: Clinical insights and vascular mechanisms," *Canadian Journal of Cardiology*, vol. 34, no. 5, pp. 575-584, 2018.
- [23] American Heart Association, "Understanding blood pressure readings," 14 May 2024. [Online]. Available: <https://www.heart.org/en/health-topics/high-blood-pressure/understanding-blood-pressure-readings>. [Accessed 28 January 2025].
- [24] H. Wall, M. Ritchey, C. Gillespie, J. Omura, A. Jamal and M. George, "Vital signs: Prevalence of key cardiovascular disease risk factors for Million Hearts 2022 -- 2011-2016," *MMWR Morbidity and Mortality Weekly Report*, vol. 67, no. 35, pp. 983-991, 2018.
- [25] M. Meador, J. Lewis, R. Bay, H. Wall and C. Jackson, "Who are the undiagnosed? Disparities in hypertension diagnoses in vulnerable populations," *Family & Community Health*, vol. 43, no. 1, pp. 35-45, 2020.
- [26] M. Fang, D. Wang, J. Coresh and E. Selvin, "Trends in diabetes treatment and control in U.S. adults, 1999-2018," *New England Journal of Medicine*, vol. 384, no. 23, pp. 2219-2228, 2021.
- [27] Cleveland Clinic, "A1C," 22 11 2022. [Online]. Available: <https://my.clevelandclinic.org/health/diagnostics/9731-a1c>. [Accessed 27 1 2025].
- [28] American Diabetes Association Professional Practice Committee, "Glycemic goals and hypoglycemia: Standards of care in diabetes - 2024," *Diabetes Care*, vol. 47, no. Suppl. 1, pp. S111-S125, 2024.
- [29] National Institute of Diabetes and Digestive and Kidney Health, "Diabetes Tests and Diagnoses," July 2022. [Online]. Available: <https://www.niddk.nih.gov/health-information/diabetes/overview/tests-diagnosis#diagnosis>. [Accessed 5 February 2025].
- [30] Centers for Disease Control and Prevention, "About Prediabetes and Type 2 Diabetes," 15 May 2024. [Online]. Available: <https://www.cdc.gov/diabetes/>. [Accessed 29 January 2025].

- [31] Diabetes Prevention Program Research Group, "Long-term effects of lifestyle intervention or metformin on diabetes development and microvascular complications over 15-year follow-up: the Diabetes Prevention Program Outcomes Study," *The Lancet Diabetes & Endocrinology*, vol. 3, no. 11, pp. 866-875, 2015.
- [32] Centers for Disease Control and Prevention, "Your Diabetes Care Schedule," 19 April 2023. [Online]. Available: <https://www.cdc.gov/diabetes/managing/care-schedule.html>. [Accessed 22 May 2023].
- [33] Centers for Disease Control and Prevention, "Monitoring Your Blood Sugar," 30 December 2022. [Online]. Available: <https://www.cdc.gov/diabetes/diabetes-testing/monitoring-blood-sugar.html>. [Accessed 8 March 2023].
- [34] J. Davis, A. Hess Fischl, J. Beck, L. Browning, A. Carter, J. Condon, M. Dennison, T. Francis, P. Hughes, S. Jaime, K. Lau, T. McArthur, K. McAvoy, M. Magee, O. Newby, S. Ponder, U. Quraishi, K. Rawlings, J. Socke, M. Stancil, S. Uelman and S. Villalobos, "2022 National Standards for Diabetes Self-Management Education and Support," *Diabetes Care*, vol. 45, no. 2, pp. 484-494, 2022.
- [35] M. Funnell, T. Brown, B. Childs, L. Haas, G. Hosey, B. Jensen, M. Maryniuk, M. Peyrot, J. Piette, D. Reader, L. Siminerio, K. Weinger and M. Weiss, "National standards for diabetes self-management education," *Diabetes Care*, vol. 33, no. Suppl 1, pp. S89-S96, 2010.
- [36] Centers for Disease Control and Prevention, "On Your Way to Preventing Type 2 Diabetes," 6 April 2022. [Online]. Available: <https://www.cdc.gov/diabetes/pdfs/prevent/On-your-way-to-preventing-type-2-diabetes.pdf>. [Accessed 22 May 2023].
- [37] Office of Disease Prevention and Health Promotion, "Healthy People 2030: Diabetes," U.S. Department of Health and Human Services, n.d.. [Online]. Available: <https://health.gov/healthypeople/objectives-and-data/browse-objectives/diabetes>. [Accessed 23 May 2021].
- [38] National Cancer Institute, Office of Cancer Communications, "Making Health Communication Programs Work: a Planner's Guide," U.S. Department of Health & Human Services, National Institutes of Health, Bethesda, MD, 2002.
- [39] American Medical Association, "Practice Transformation: About Practice Transformation," [Online]. Available: <https://www.ama-assn.org/practice-management/sustainability/practice-transformation>. [Accessed 20 March 2021].
- [40] P. O'Connor, N. Bodkin, J. Fradkin, R. Glasgow, S. Greenfield, E. Gregg, E. Kerr, L. Pawlson, J. Selby, J. Sutherland, M. Taylor and C. Wysham, "Diabetes performance measure: Current status and future directions," *Diabetes Care*, vol. 34, no. 7, pp. 1651-1659, 2011.
- [41] H. Khalili, "Transforming health care delivery: Innovations in payment models for interprofessional team-based care," *North Carolina Medical Journal*, vol. 85, no. 3, pp. 175-179, 2024.
- [42] K. Boye, M. Lage, V. Thieu, S. Shinde, S. Dhamija and J. Bae, "Obesity and glycemic control among people with type 2 diabetes in the United States: A retrospective cohort study using insurance claims data," *Journal of Diabetes and its Complications*, vol. 35, no. 9, pp. 1-6, 2021.