



**GEORGIA DEPARTMENT OF PUBLIC HEALTH**

# **2020 Georgia Diabetes Report and Action Plan**

Diabetes Program  
Chronic Disease Prevention Section  
Georgia Department of Public Health

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**Authors:** Allison Smith, MPH, CHES; Kyle Southerland, Miranda Ouellette, MPH, CHES; Shana Scott, JD, MPH; and Kia Toodle, CPM

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# Executive Summary

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The goals of this report are to enhance and enable diabetes services, improve the overall health of individuals and populations with diabetes, and reduce diabetes-associated per capita health care costs. The 2020 Diabetes Report and Action Plan provides an overview of diabetes and the burden of the disease in Georgia, the cost and complications of diabetes, and information regarding how the Georgia Department of Public Health (DPH) proposes to address diabetes in partnership with the Department of Community Health (DCH) and other state agencies. DPH is required to provide an annual submission of the report as directed by Senate Resolution 1121 adopted in the 2014 Georgia State Senate.<sup>1</sup>

Diabetes is a chronic disease that affects the pancreas's ability to produce the hormone insulin. Insulin helps regulate the glucose level in the blood. According to the Centers for Disease Control and Prevention (CDC), the typical blood glucose target (before a meal) is between 80 to 130 mg/dL.<sup>2</sup> With diabetes, the pancreas either does not produce enough insulin to go throughout the body, the body rejects the insulin that is produced, or it does not produce any insulin at all.

Some key facts about diabetes in Georgia include:

- Between 2014 and 2018, diabetes was the cause for 104,098 hospitalizations and 154,761 ER visits in Georgia.<sup>3</sup>
- The prevalence of diabetes in Georgia has increased by almost 20% since 2006 when an estimated 9.7% of adults had diabetes, compared to 11.4% in 2016.<sup>4</sup>
- Approximately 234,000 Georgians with diabetes have not been tested and are unaware they have the disease.<sup>5</sup>
- At 22.1, Georgia's diabetes death rate per 1,000 is above the 21.4 national rate.<sup>6</sup>
- In 2017, the total cost of diabetes in Georgia was approximately \$10.9 billion. Of that, \$7.8 billion was attributed to direct medical cost and the remaining \$3.1 billion was attributed to loss of productivity and sick days.<sup>7</sup>
- Georgia currently has only 110 accredited/recognized self-management programs, an insufficient number to meet the needs of the already nearly 1 million people with diabetes.<sup>8,9</sup>

While diabetes is a serious challenge for Georgia, there are steps that can be taken to prevent some types of diabetes and improve the diagnosis and quality of care for persons with diabetes. This report contains recommendations to improve data collection related to diabetes; prevent more diabetes cases; offer more evidence-based and accredited self-management and prevention programs at the community level; and support health care providers and health systems in providing high quality care for persons with diabetes.

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<sup>1</sup> SR 1121 2013-2014 Regular session. <http://www.legis.ga.gov/Legislation/en-US/Display/20132014/SR/1121>. Accessed September 2020.

<sup>2</sup> Manage blood sugar: What are blood sugar targets. Centers for Disease Control and Prevention. <https://www.cdc.gov/diabetes/managing/manage-blood-sugar.html>. Published June 2, 2020. Accessed September 2020.

<sup>3</sup> Community health needs assessment dashboard. Online Analytical Statistical Information System. <https://oasis.state.ga.us/>. Accessed September 2020.

<sup>4</sup> U.S. Diabetes Surveillance System. <https://gis.cdc.gov/grasp/diabetes/diabetesatlas.html>. Accessed September 2020.

<sup>5</sup> American Diabetes Association. The burden of diabetes in Georgia. [http://main.diabetes.org/dorg/docs/state-fact-sheets/ADV\\_2020\\_State\\_Fact\\_sheets\\_GA.pdf](http://main.diabetes.org/dorg/docs/state-fact-sheets/ADV_2020_State_Fact_sheets_GA.pdf). Published February 2020. Accessed September 2020.

<sup>6</sup> State health facts. Kaiser Family Foundation. <https://www.kff.org/statedata/>. Accessed September 2020.

<sup>7</sup> American Diabetes Association. Economic costs of diabetes in the U.S. in 2017. *Diabetes Care*.2018 May;41(5):917-928; DOI: 10.2337/dci18-0007

<sup>8</sup> ERP listing. American Diabetes Association.

[https://professional.diabetes.org/erp\\_list?field\\_erp\\_state\\_value=GA&field\\_erp\\_epediatric\\_value=All&field\\_erp\\_dpp\\_value=All&field\\_erp\\_espanish\\_value=All&field\\_erp\\_ldl\\_value=All&=Apply](https://professional.diabetes.org/erp_list?field_erp_state_value=GA&field_erp_epediatric_value=All&field_erp_dpp_value=All&field_erp_espanish_value=All&field_erp_ldl_value=All&=Apply). Accessed September 2020

<sup>9</sup> Find an education program. Association of Diabetes Care & Education Specialists. <https://www.diabeteseducator.org/living-with-diabetes/find-an-education-program>. Accessed September 2020.

# What is Diabetes?

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Diabetes is a complex group of chronic conditions where the glucose levels in the blood stream become dangerously high. High blood glucose levels result from the pancreas producing inadequate amounts of insulin or the body not properly absorbing insulin. Insulin is a hormone produced by the pancreas to lower the levels of glucose in the blood stream and assist in using that glucose for energy.

Diabetes is a leading cause of death in Georgia and nationwide. While type 2 diabetes and prediabetes can be prevented through physical activity and nutrition, once acquired, there is no known cure for this disease. With proper treatment it can be controlled and managed so that it does not progress to the point of severe medical complications.

Symptoms include frequent urination, excessive hunger, extreme thirst, blurred vision, fatigue, and nausea. Constant blood glucose monitoring is crucial for optimal control. When the amount of sugar circulating in the blood is too high, it causes damage to many parts of the body including the eyes, heart, blood vessels, kidneys, and nerves. Uncontrolled blood glucose levels can lead to complications such as blindness, kidney disease, slow healing wounds, and even death. This damage makes diabetes the leading cause of adult blindness, end-stage kidney disease, and amputations of the foot and/or leg. People with diabetes are also at greater risk for heart disease and stroke.

There are four different types of diabetes: type 1, type 2, gestational, and pre-diabetes. All of these diseases affect the body's ability to produce and use insulin properly.

- **Type 1 diabetes**, once known as "juvenile diabetes" or "insulin-dependent diabetes," is an autoimmune disease that affects the production of insulin via the pancreas. The body produces little to no insulin, resulting in elevated blood glucose levels. Individuals with type 1 diabetes are dependent on insulin to keep their blood glucose levels within normal range (80 - 130 mg/dL). Insulin is given to them via multiple daily injections or an insulin pump. On average, a person with type 1 diabetes will give eight or more insulin injections a day or pump extra insulin into their body eight or more times a day. Good nutrition and physical activity can aid in the control of the blood glucose levels of a person with type 1 diabetes but, they also need to have insulin in their bodies as well due to the pancreas not producing it. This type of diabetes affects 5% of the diabetes population.<sup>10</sup> There is no known prevention method for type 1 diabetes, but it can be managed by living a healthy lifestyle, following a prescribed treatment plan, and receiving education and support.<sup>11</sup>

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<sup>10</sup> National Diabetes Statistics Report 2020: Estimates of Diabetes and Its Burden in the United States. 2020. <https://www.cdc.gov/diabetes/pdfs/data/statistics/national-diabetes-statistics-report.pdf>.

<sup>11</sup> Diabetes basics: Type 1 diabetes. Centers for Disease Control and Prevention. <https://www.cdc.gov/diabetes/basics/type1.html>. Published March 11, 2020. Accessed September 2020.

- **Type 2 diabetes** is sometimes called adult-onset diabetes, and it develops from insulin resistance, a condition in which cells (e.g., liver, muscles) of the body do not use insulin properly. As the body resists its own insulin, the pancreas begins to lose the ability to make enough of it. A diagnosis of type 2 diabetes is normally obtained through a Hemoglobin A1c (HbA1c) test, fasting blood sugar test, or random glucose test. According to the CDC, a positive diagnosis occurs when an individual has an A1c level of 6.5% or higher.<sup>12</sup> Type 2 diabetes can often be controlled with good nutrition and physical activity, but individuals diagnosed may need to also take an oral medication and sometimes insulin injections. Type 2 diabetes is most common in older persons, those who are overweight, have a family history of diabetes, or a history of gestational diabetes. This type of diabetes accounts for 90 - 95% of the diabetes population.<sup>10</sup> Type 2 diabetes is preventable and reversible.
- **Prediabetes** is a condition in which the body's glucose levels are elevated but not to the point of a diabetes diagnosis. This usually occurs due to the body no longer responding normally to insulin produced by the pancreas. Some people may be asymptomatic or have vague symptoms for years without knowing they have prediabetes. A diagnosis of prediabetes happens when the individual has an A1c level between 5.7% - 6.4%.<sup>11</sup> Having prediabetes can increase a person's risk for developing type 2 diabetes, heart disease, and stroke.<sup>11</sup>
- **Gestational diabetes** is a type of diabetes that is first seen in a pregnant women, usually around the 24<sup>th</sup> week, who did not have a diagnosis of diabetes prior to pregnancy. The gestational diabetes risk factors are similar to those for type 2 diabetes. Gestational diabetes requires treatment to lessen the risk of complications such as preterm births, larger babies requiring cesarean sections, preeclampsia, birth defects, and increased risk of type 2 diabetes for both the mother and the child once she/he reaches adulthood. Often, gestational diabetes can be controlled through eating healthy food and physical activity. In some cases, insulin treatment may also be necessary for a woman with gestational diabetes.

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<sup>10</sup> See page 6.

<sup>11</sup> See page 6.

<sup>12</sup> Diabetes basics: Diabetes tests. Centers for Disease Control and Prevention. <https://www.cdc.gov/diabetes/basics/getting-tested.html>. Published May 15, 2019. Accessed September 2020.

# Risk Factors for Diabetes

The risk factors vary by type of diabetes. Family history increases the risk for type 1 diabetes, and some viral infections have been linked to the increased risk for type 1 diabetes.<sup>13</sup> Type 1 diabetes is generally not considered preventable.

Type 2 diabetes, however, is almost entirely preventable. Risk factors related to type 2 diabetes are primarily associated with lifestyle behaviors and genetics (Figure 1). Risk factors such as age, race, and family history cannot be changed; others, such as being overweight or obese, lack of physical activity, having high blood pressure and cholesterol, and smoking, which significantly increases the risk of developing type 2 diabetes, can be mitigated.

Non- Modifiable	Modifiable	Social Determinants
Age Race Gender Family History History of Gestational Diabetes Polycystic Ovarian Syndrome	Weight Gain Overweight or Obesity Sedentary Lifestyle Tobacco Use High Blood Pressure High Cholesterol	Education level Income Housing Food Insecurity Access to Care Geography & Environment

Figure 1: Risk Factors for Type 2 Diabetes

Those at high risk can implement changes to lower the risk for type 2 diabetes. For example, those at risk can begin a walking routine; the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)<sup>14</sup> suggests that just walking 30 minutes a day for five days a week can lower one’s risk of developing type 2 diabetes. Once someone has diabetes of any type, these factors can make the impacts and consequences of diabetes more severe.

Some of the key modifiable risk factors for type 2 diabetes are:

**Tobacco Use**

Smoking increases the risk for diabetes. According to the CDC<sup>15</sup>, smokers are 30-40% more likely to develop type 2 diabetes than nonsmokers. Furthermore, people with diabetes who smoke are more likely to have trouble with insulin dosing and controlling their disease.<sup>16</sup> Smoking can increase blood sugar levels and decrease the body’s ability to use insulin.

<sup>13</sup> Filippi C, von Herrath M. Viral trigger for type 1 diabetes. *Diabetes Care*.2008 Nov;57(11):22863-2871. DOI:10.1056/NEJMoa012512  
<sup>14</sup> Choose more than 50 ways to prevent type 2 diabetes. National Institute of Diabetes and Digestive and Kidney Diseases. <https://www.niddk.nih.gov/health-information/diabetes/overview/preventing-type-2-diabetes/50-ways>. Published September 2014. Accessed September 2020.  
<sup>15</sup> Smoking and diabetes. Centers for Disease Control and Prevention. <https://www.cdc.gov/tobacco/campaign/tips/diseases/diabetes.html>. Published March 23, 2020. Accessed September 2020.  
<sup>16</sup> National Center for Chronic Disease Prevention and Health Promotion (US) Office on Smoking and Health. *The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General*. Atlanta (GA): Centers for Disease Control and Prevention (US); 2014.



## **Overweight/Obesity**

Overweight and/or obesity refer to ranges of weight that are greater than what is generally considered healthy for a given height. Overweight and obesity ranges are determined by using a person's weight and height to calculate a number called 'body mass index' (BMI).<sup>17</sup> An adult who has a BMI between 25 and 29.9 is considered overweight, while an adult who has a BMI of 30 or greater is considered obese.<sup>18</sup> People who are overweight or obese have added pressure on their body's ability to use insulin to properly control blood sugar levels (a condition called 'insulin resistance'), thereby increasing the risk of diabetes.<sup>19</sup> Obesity is one of the main risk factors associated with a type 2 diabetes diagnosis.

## **Physical Inactivity**

Getting regular physical activity can help to manage blood sugar levels.<sup>20</sup> A sedentary lifestyle increases risk of diabetes. Starting a physical activity program can help individuals with diabetes not only maintain a healthy weight but keep their blood glucose levels on target.

## **High Cholesterol**

Cholesterol is a soft, waxy substance found in the blood stream and the body's cells. There are typically two types of cholesterol: "good cholesterol", or HDL cholesterol, of which the body needs in ample supply and "bad cholesterol", or LDL cholesterol, which should be kept at a minimum. Diabetes tends to reduce HDL cholesterol levels and increase LDL cholesterol levels, thereby increasing the risk for heart disease and stroke. When blood sugar remains high for a long period of time, the glucose can be stored as fats, causing an increase in cholesterol over time. Lifestyle changes, such as improving weight, eating a healthy diet, and increasing physical activity, can all help in lowering cholesterol levels.

## **High Blood Pressure**

Blood pressure is the force of blood flow inside the blood vessels. High blood pressure is defined as blood pressure  $\geq 140/90$  mm Hg, or  $\geq 130/80$  mm Hg for certain populations.<sup>21</sup> The heart has to work harder to pump blood when the blood pressure is high, thereby increasing the risk for heart disease (and diabetes if not already present). Diabetes, which can thicken and harden blood vessels, increases the risk of high blood pressure. High blood pressure can be reduced by reducing sodium in one's diet, having good nutrition, quitting smoking, improving physical activity, and preventing weight gain.

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<sup>17</sup> Healthy weight, nutrition, and physical activity: Body Mass Index (BMI). Centers for Disease Control and Prevention.

<https://www.cdc.gov/healthyweight/assessing/bmi/index.html>. Published September 17, 2020. Accessed September 2020.

<sup>18</sup> Healthy weight, nutrition, and physical activity: About adult BMI. Centers for Disease Control and Prevention.

[https://www.cdc.gov/healthyweight/assessing/bmi/adult\\_bmi/index.html](https://www.cdc.gov/healthyweight/assessing/bmi/adult_bmi/index.html). Published September 17, 2020. Accessed September 2020.

<sup>19</sup> Symptoms and causes of diabetes. National Institute of Diabetes and Digestive and Kidney Diseases. <https://www.niddk.nih.gov/health-information/diabetes/overview/symptoms-causes>. Published December 2016. Accessed September 2020.

<sup>20</sup> Diabetes: Manage blood sugar. Centers for Disease Control and Prevention. <https://www.cdc.gov/diabetes/managing/manage-blood-sugar.html>. Published June 2, 2020. Accessed September 2020.

<sup>21</sup> Diabetes: Manage blood sugar. Centers for Disease Control and Prevention. <https://www.cdc.gov/diabetes/managing/manage-blood-sugar.html>. Published June 2, 2020. Accessed September 2020.

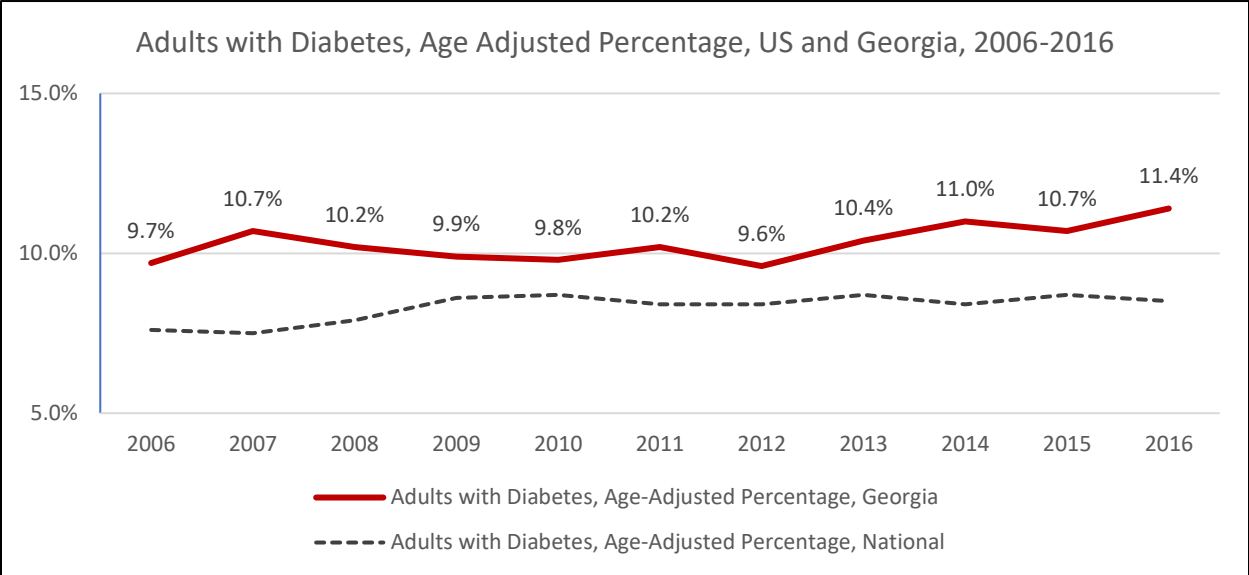
**Heart Disease**

Coronary artery disease, also called ischemic heart disease, is caused by a hardening or thickening of the blood vessel walls that go to the heart. Diabetes increases this tendency of the blood vessel walls to harden and thicken. If blood sugar levels remain high over time, this can cause damage to the nerves and blood vessels including those leading to the heart, thereby increasing the risk of coronary artery disease. The risk of heart disease or complications of heart disease can be reduced through increased physical activity, better nutrition, improved control over blood pressure, and reduced tobacco use.

# Burden of Diabetes

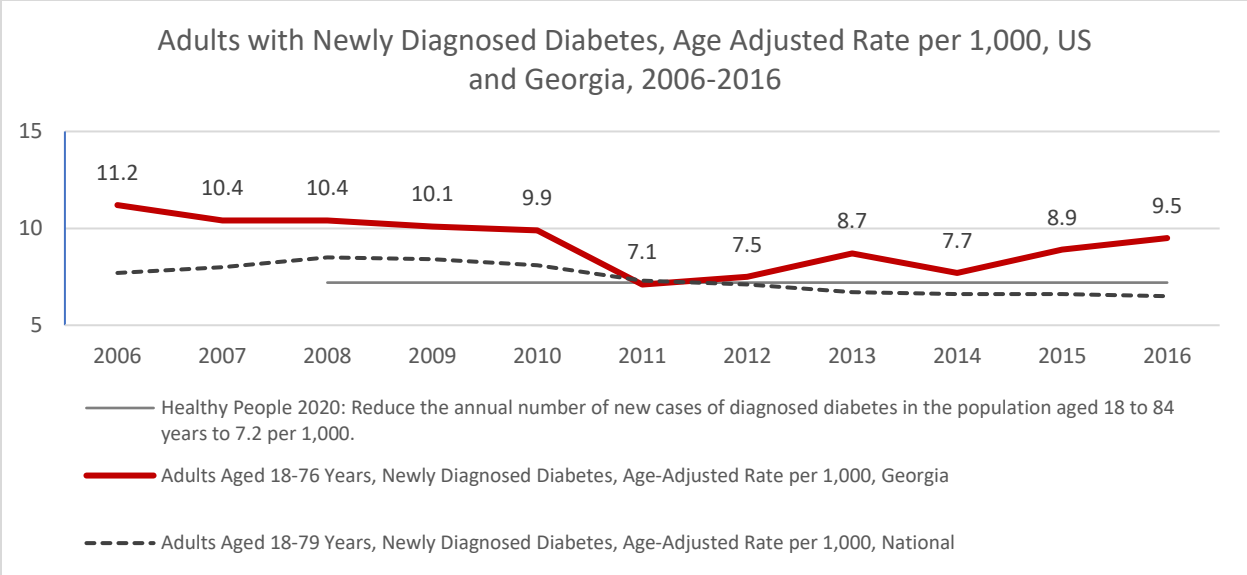
Diabetes is a leading cause of death and disability in the US.<sup>22</sup> The CDC estimates that in 2018, there were 34.2 million Americans, or 10.5% of the population living with diabetes, which correlates to approximately 1 out of every 10 Americans, and approximately 7.3 million Americans who were not aware of or did not report having diabetes.<sup>10</sup>

In Georgia, from 2006 to 2016, the prevalence of diabetes in the state jumped from 9.7% to 11.4%, which is an 18% increase over the last 10 years (Figure 2a).<sup>4</sup> Healthy People 2020<sup>23</sup> set an objective to reduce the annual number of new cases of diagnosed diabetes in the population aged 18 to 84 years to 7.2 per 1,000. Since meeting the objective at 7.1 new cases per 1,000 in 2011, Georgia’s rate inclined, increasing to 9.5 per 1,000 in 2016, while the national rate declined (Figure 2b).<sup>4</sup>



**Figure 2a: Prevalence of Diabetes among Georgia Adults by Year**

<sup>10</sup> See page 6.  
<sup>4</sup> See page 4.  
<sup>22</sup> Kochanek KD, Murphy SL, Xu JQ, Arias E. Deaths: Final data for 2017. National Vital Statistics Reports; vol 68 no 9. Hyattsville, MD: National Center for Health Statistics. 2019.  
<sup>23</sup> Diabetes: Objectives. HealthyPeople.gov. <https://www.healthypeople.gov/2020/topics-objectives/topic/diabetes/objectives>. Accessed September 2020.



**Figure 2b: Prevalence of Diabetes among Georgia Adults by Year**

The American Diabetes Association (ADA)<sup>24</sup> estimates that in 2017 an additional 2.9% of Georgia adults had diabetes but had not yet been diagnosed (Figure 3). This means that there were approximately 234,000 Georgians living with diabetes, and not receiving treatment, who were at risk for its associated complications.<sup>24</sup> Those who do not receive treatment for diabetes are at a higher risk of developing severe complications due to continuously elevated blood glucose levels and being hospitalized or even dying.

Diabetes Condition	Prevalence	Rate (%)
Diagnosed Diabetes	853,000	10.7
Undiagnosed Diabetes	234,000	2.9
Prediabetes	2,674,000	33.7
Gestational Diabetes	8,300	6.4

**Figure 3: Prevalence of Diabetes Conditions among Georgia Adults, 2017**

<sup>24</sup> Dall T, Yang W, Gillespie K, et al. The economic burden of elevated blood glucose levels in 2017: Diagnosed and undiagnosed diabetes, gestational diabetes mellitus, and prediabetes. Diabetes Care.2019 Sep;42(9):1661-1668; DOI: 10.2337/dc18-1226

The map in Figure 5 represents the percent of diagnosed adults by health district within the state. As seen from the map, diabetes is most prevalent in the southern portion of the state. The South (8-1) health district has the highest percentage of individuals diagnosed with diabetes at 21.7%, followed by the Southwest (8-2) and Southeast (9-2) health districts at 16.0% and 15.0% respectively.<sup>25</sup> The state is working to bring awareness of DPP and DSMES programs into these areas so that the undiagnosed patients will become aware of the signs and symptoms of the disease, and the individuals diagnosed with diabetes will know how to self-manage and reduce risk factors.

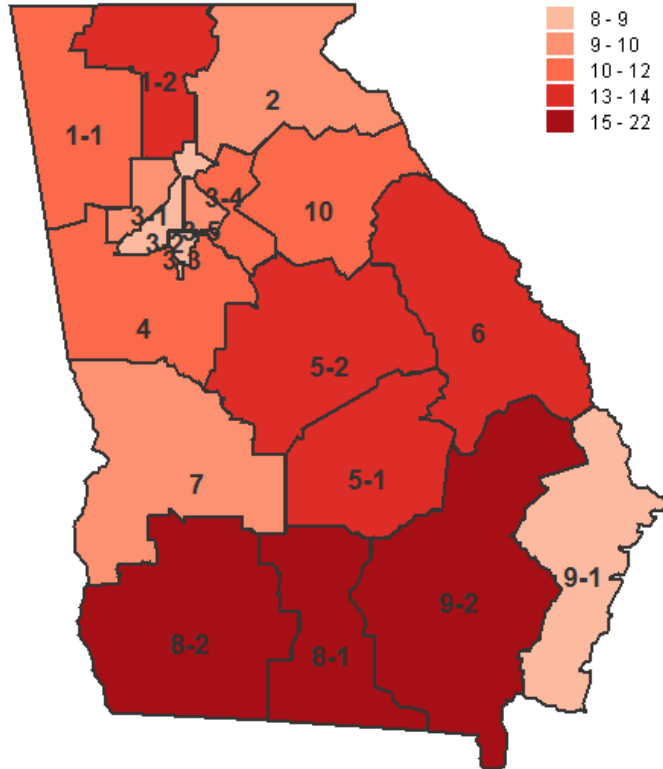
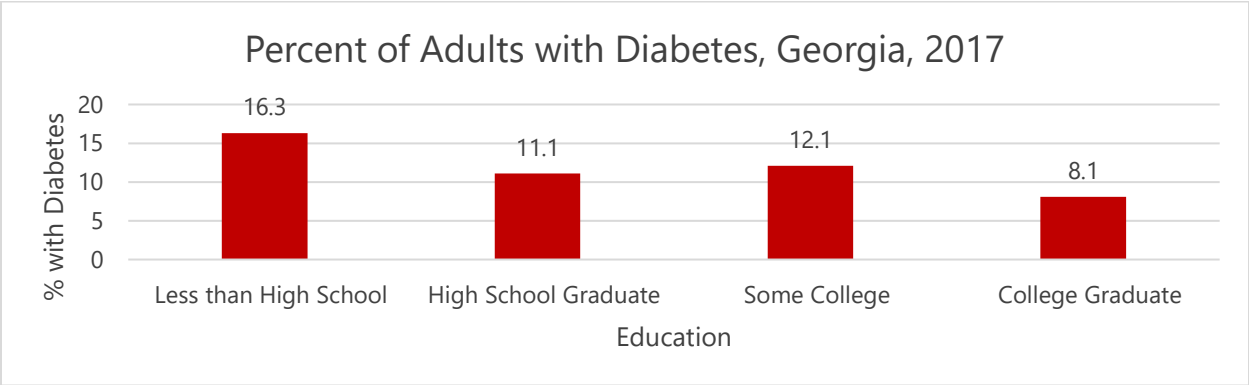
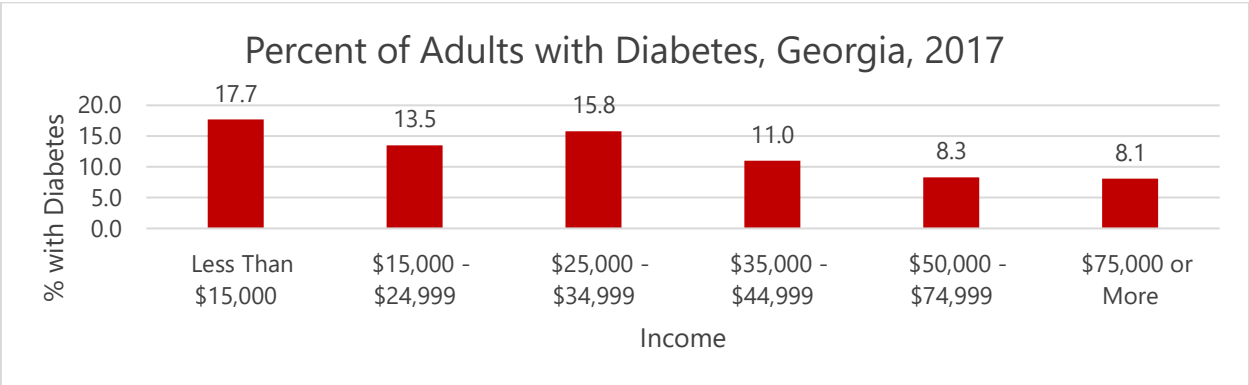
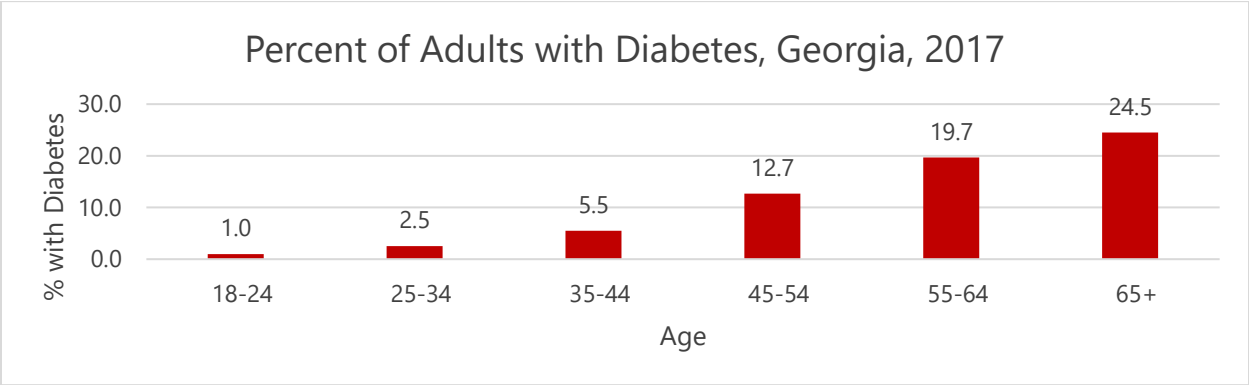
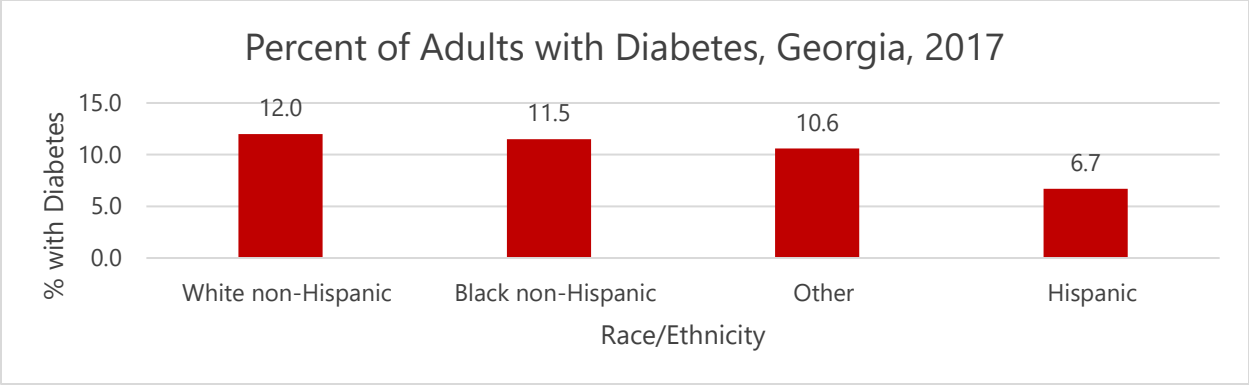


Figure 5: Diabetes Prevalence by District

Figure 6 on the following page shows the prevalence of diabetes in Georgia by race/ethnicity, age, income, and education level.

- White non-Hispanic individuals were more likely (12.0%) to have ever been diagnosed with diabetes than individuals identified as Black non-Hispanic (11.5%), Other (10.6%), and Hispanic (6.7%).
- The prevalence of diabetes grew with age and was highest among adults aged 65 years and older (24.5%).
- As income increased, the percent of individuals with a diabetes diagnosis decreased. Adults with a household income of less than \$15,000 were the most likely (17.7%) to ever have diabetes.
- The percent of adults with less than a high school education (16.3%) was double that of college graduates (8.1%). (See Figure 6)<sup>25</sup>

<sup>25</sup> Behavioral Risk Factor Surveillance Survey. Online Analytical Statistical Information System. <https://oasis.state.ga.us/oasis/brfss/qryBRFSS.aspx>. Accessed September 2020



**Figure 6: Percent of Adults Diagnosed with Diabetes by Race/Ethnicity, Age, Income, and Education Level**

# Management of Diabetes

Individuals with diabetes require a healthcare team with a comprehensive blend of expertise as well as the skills and tools necessary to make daily self-management decisions#. Controlling glucose levels is an important part of diabetes self-management. With uncontrolled glucose levels, individuals have a higher risk of developing complications such as kidney failure, retinopathy that can lead to blindness, nerve damage of the feet and hands, cardiovascular disease, poor circulation, and slow healing wounds that may lead to amputations. People with type 1 diabetes manage their diabetes through insulin injections or a continuous insulin infusion pump. Type 2 diabetes can be managed through good nutrition and physical activity, but these individuals also may need to take oral medications and sometimes insulin through either injections or an insulin pump. Through a blended approach to care, all people with diabetes can navigate their daily self-care, improving their overall health and decreasing per capita costs of health care.<sup>26</sup>

Figures 7 and 8 below show the range of people nationally using different approaches for managing their diabetes and preventing diabetes-related complications. Diabetes is an intensely individualized condition; every person has a different plan, medication level, and nutrition and physical activity plan; therefore, Diabetes Self-Management Education and Support (DSMES) services are important for those with diabetes. Knowing how to self-manage, develop goals and action plans, cope, and problem solve makes an incredible difference in the management of this disease.<sup>26</sup> This component of diabetes care is effective, cost-saving, and high-impact on a person’s ability to self-manage that should be accessed and utilized.<sup>26</sup>

Diabetes Management Medication	Percentage	(95% CI)
Pills Only	51.7	(47.4-55.9)
Insulin Only	14.9	(12.4-17.7)
Both Insulin and Pills	14.4	(12.1-17.2)
No Medication	19.0	(16.2-22.2)

Figure 7: Diabetes Medication Use, Total, Adults with Diabetes Aged 18+ years, Age-Adjusted Percentage, National, 2016.<sup>4</sup>

Diabetes-Related Complications Preventive Factors	Percentage	(95% CI)
At least one usual source of diabetes care	34.2	(30.4-38.1)
At least 150 minutes per week of leisure-time physical activity	15.8	(13.2-18.8)
Managing or losing weight to lower their risk for developing certain diseases	22.3	(19.5-25.4)
Among adults aged 40-75 years, % on statin therapy	13.2	(10.7-16.2)

Figure 8: Crude percentage of factors associated with prevention of diabetes-related complications among adults aged 18 years or older with diagnosed diabetes, United States, 2013-2016.<sup>10</sup>

<sup>4</sup> See page 4.

<sup>10</sup> See page 6.

<sup>26</sup> Powers M, Bardsley J, Cypress M, et al. Diabetes self-management education and support in adults with type 2 diabetes: A consensus report of the American Diabetes Association, the Association of Diabetes Care and Education Specialists, the Academy of Nutrition and Dietetics, the American Academy of Family Physicians, the American Academy of PAs, the American Association of Nurse Practitioners, and the American Pharmacists Association. *Diabetes Care*.2020 Jul;43(7): 1636-1649; DOI: 10.2337/dci20-0023

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## Diabetes Self-Management Education and Support

Diabetes Self-Management Education and Support (DSMES) services, sometimes called Diabetes Self-Management Training (DSMT), is a proven way for people with diabetes to practice better techniques to manage their blood glucose levels and medications.

These services can go by many names. All consist of the following core content areas:<sup>27</sup>

- Diabetes pathophysiology and treatment options
- Healthy eating
- Physical activity
- Medication usage
- Monitoring and using patient-generated health data (PGHD)
- Preventing, detecting, and treating acute and chronic complications
- Healthy coping with psychosocial issues and concerns
- Problem solving

The sessions teach participants how to problem solve, make informed decisions, and take charge of their own health. After the service is completed, participants have the confidence to manage their diabetes.

In Georgia, accredited programs are eligible for reimbursement by Medicare and some private insurers. The 2017 National Standards for Diabetes Self-Management Education and Support<sup>27</sup> are:

- 1) **Internal Structure:** The provider(s) of DSMES services will define and document a mission statement and goals. The DSMES services are incorporated within the organization — large, small, or independently operated.
- 2) **Stakeholder Input:** The provider(s) of DSMES services will seek ongoing input from valued stakeholders and experts to promote quality and enhance participant use.
- 3) **Evaluation of Population Served:** The provider(s) of DSMES services will evaluate the communities they serve to determine the resources, design, and delivery methods that will align with the population’s need for DSMES services.
- 4) **Quality Coordinator Overseeing DSMES Services:** A Quality Coordinator will be designated to ensure implementation of the Standards and oversee DSMES services. The Quality Coordinator is responsible for all components of DSMES, including evidence-based practice, service design, evaluation, and continuous quality improvement (CQI).
- 5) **DSMES Team:** At least one of the team members responsible for facilitating DSMES services will be a registered nurse, registered dietitian/nutritionist, or pharmacist with training and experience pertinent to DSMES, or be another healthcare professional holding certification as a diabetes education and support specialist (CDCES) or board certification



in advanced diabetes management (BC-ADM). Other healthcare workers or diabetes paraprofessionals may contribute to DSMES services with appropriate training in DSMES and with supervision and support by at least one of the team members listed above.

- 6) **Curriculum:** A curriculum reflecting current evidence and practice guidelines, with criteria for evaluating outcomes, will serve as the framework for the provision of DSMES. The needs of the individual participant will determine which elements of the curriculum are required.
- 7) **Individualization:** DSMES needs will be identified and led by the participant with assessment and support by one or more DSMES team members. Together, the participant and DSMES team member(s) will develop an individualized DSMES plan.
- 8) **Ongoing Support:** The participant will be made aware of options and resources available for ongoing support of his/her initial education and will select the option(s) that will best meet his/her self-management needs.
- 9) **Participant Progress:** The provider(s) of DSMES services will monitor and communicate whether participants are achieving their personal diabetes self-management goals and other outcome(s) to evaluate the effectiveness of the educational intervention(s), using appropriate measurement techniques.
- 10) **Quality Improvement:** The DSMES services Quality Coordinator will measure the impact and effectiveness of DSMES services and identify areas for improvement by conducting a systematic evaluation of process and outcome data.

The return on investment for self-management programs is high. For example, an economic analysis conducted in 2000 by Klonoff and Schwartz<sup>28</sup> reported that for every \$1 spent on DSME/T, there was a net savings of \$0.44 to \$8.76. An additional study<sup>29</sup> also found that diabetes education (and disease management) was associated with decreased costs, cost savings, cost effectiveness, or positive return on investment. In the commercially insured population, the gap between the cost of the diabetes education population and the non-education population increased over time.<sup>30</sup>

The cost-effectiveness of diabetes self-management programs in real-world community primary care settings has been proven effective for type 2 diabetes. One study<sup>31</sup> found that self-management programs for type 2 diabetes are cost-effective from a health systems perspective when the cost savings due to reductions in long-term complications are recognized; the authors noted that these findings may justify increased reimbursement for effective self-management programs in diverse settings.

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<sup>27</sup> Beck J, Greenwood D, Blanton L et al. 2017 National standards for diabetes self-management education and support. *Diabetes Care*.2017 Oct;40(10):1409-1419; DOI: 10.2337/dc17-0025

<sup>28</sup> Klonoff DC, Schwartz DM. An economic analysis of interventions for diabetes. *Diabetes Care*. 2000;23(3):390-404. doi:10.2337/diacare.23.3.390

<sup>29</sup> Boren SA, Fitzner KA, Panhalkar PS, Specker JE. Costs and benefits associated with diabetes education: a review of the literature. *Diabetes Educ*. 2009;35(1):72-96. doi:10.1177/0145721708326774

<sup>30</sup> Duncan I, Birkmeyer C, Coughlin S, Li QE, Sherr D, Boren S. Assessing the value of diabetes education. *Diabetes Educ*. 2009;35(5):752-760. doi:10.1177/0145721709343609

<sup>31</sup> Brownson CA, Hoerger TJ, Fisher EB, Kilpatrick KE. Cost-effectiveness of diabetes self-management programs in community primary care settings. *Diabetes Educ*. 2009;35(5):761-769. doi:10.1177/0145721709340931

Overall, the case for accredited programs is overwhelming. A 2011 study found that patients exposed to DSMES services showed lower cost patterns when compared with a control group of people with diabetes without DSMES encounters. People with diabetes who had multiple DSMES encounters were more likely to receive care in accordance with recommended guidelines and to comply with diabetes-related prescription regimens, resulting in lower costs and utilization trends. This analysis demonstrated that repeated DSMES encounters over time result in a dose-response effect on positive outcomes.<sup>32</sup>

However, as of 2020, in Georgia there were just 74 ADA programs, 36 ADCES programs recognized or accredited for DSMES services.<sup>8, 9</sup> This number is insufficient to serve the population with diabetes and prediabetes in Georgia.

# Financial Impact of Diabetes & its Complications

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According to the ADA<sup>7</sup>, more than one dollar for every \$10 in US health care expenditures goes directly toward diabetes and its complications. The cost of caring for people with diabetes accounts for one in every four dollars spent on health care in the US.<sup>7</sup> On average, people with diabetes incur medical expenditures that are approximately 2.3 times higher than they would be in the absence of diabetes.<sup>7</sup>

In 2017, diagnosed diabetes cost the nation \$327 billion, with \$237 billion being attributed to direct medical costs and \$90 billion being related to reduced productivity.<sup>28</sup> In Georgia during the same year, medical expenses attributable to diagnosed diabetes totaled \$7.8 billion, and indirect expenses, such as lost productivity and premature mortality, totaled \$3.1 billion.<sup>24</sup> An additional \$2 billion was estimated to be accrued in direct medical costs attributable to undiagnosed diabetes, prediabetes, and gestational diabetes.<sup>24</sup>

The ADA<sup>7</sup> estimates that the largest component of US health care expenditures attributed to diabetes in 2017 was for prescription medications. At \$71 billion, prescription medication expenditures attributed to diabetes were higher than the total diabetes-related expenditures for hospital inpatient care at \$69 billion.<sup>7</sup> That is higher than all of the expenditures related to outpatient care (physician office, emergency department, home health, etc.), and it is more than double the combined expenditures for all other outpatient medications and supplies.<sup>7</sup>

16 million emergency department visits due to complications from diabetes were reported for 2016.<sup>10</sup> Most of these encounters resulted in treatment followed by discharge to home; a third resulted in a hospital admission.<sup>10</sup> When uncontrolled, diabetes and its related complications frequently lead to potentially preventable readmissions. 7.8 million diabetes-related hospitalizations among US adults were reported for 2016.<sup>10</sup> Top reasons for hospitalization due to complications from diabetes include ischemic heart disease, stroke, lower-extremity amputation, hyperglycemia, and hypoglycemia.<sup>10</sup> 1.7 million, or 75.3 per 1,000 adults with diabetes, of these hospitalizations were for major cardiovascular diseases.<sup>10</sup>

In 2012, the average hospitalization cost of a person with Type 2 Diabetes was \$28,083. And, the cost of hospital inpatient care for people with diabetes has risen from \$58 billion in 2007 to \$76 billion in 2012 in the U.S.

These high numbers do not account for those undiagnosed with diabetes or those with pre-diabetes. Nationwide, the prevalence of pre-diabetes has been estimated at 34.5% of adults.<sup>10</sup>

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<sup>7</sup> See page 4.

<sup>10</sup> See page 6.

<sup>24</sup> See page 12.

<sup>33</sup> The cost of diabetes. American Diabetes Association. <https://www.diabetes.org/resources/statistics/cost-diabetes>. Accessed September 2020.

# Prevention of Diabetes

The Centers for Disease Control and Prevention<sup>29</sup> (CDC) estimates that 88 million (1 out of 3) adults in the United States have prediabetes. Of these 88 million, more than 84% of them do not know they have prediabetes.<sup>29</sup> Prediabetes is normally diagnosed through either a fasting glucose test, oral glucose tolerance test, or by measuring Hemoglobin A1c (HgA1c). See Figure 10 below.

	Normal	Prediabetes	Diabetes
<b>Fasting glucose</b> (plasma glucose measured after not having anything to eat or drink for 8 hours before the test)	99 mg/dL or lower	<b>100-125 mg/dL</b>	126 mg/dL or higher
<b>Oral glucose tolerance test</b> (Plasma glucose measured 2 hours after a 75-gram glucose load)	139 mg/dL or lower	<b>140-199 mg/dL</b>	200 mg/dL or higher
<b>Hemoglobin A1c</b> (Blood test measuring average blood sugars over the past 8-12 weeks)	Less than 5.7%	<b>5.7-6.4%</b>	6.5% or higher

**Figure 10: Laboratory Values that Identify Individuals with Prediabetes or Type 2 Diabetes.**<sup>12</sup>

In Georgia, close to 2.6 million individuals, about 36.1% of adults, are estimated to have prediabetes.<sup>22</sup> Additionally, there is a population of individuals who are at risk for developing type 2 diabetes but would not be diagnosed with prediabetes based on laboratory results. These individuals have many of the risk factors for prediabetes and type 2 diabetes, but their lab results will still appear normal.<sup>30</sup> In 2016, the CDC<sup>31</sup> estimated that there were approximately 42.5 percent of adults in Georgia with prediabetes or at risk for type 2 diabetes, about 3.2 million people. Without intervention, around 5-10 percent of people with prediabetes will transition from prediabetes to type 2 diabetes every year.<sup>31</sup>

However, with proper education and lifestyle changes, those who have been diagnosed with prediabetes or are at risk for developing type 2 diabetes can lower their risk of type 2 diabetes.<sup>29</sup> One such way is by participating in a CDC-recognized lifestyle change program, such as the Diabetes Prevention Program.

<sup>12</sup> See page 7.  
<sup>22</sup> See page 11.  
<sup>34</sup> Diabetes: Prediabetes - Your chance to prevent type 2 diabetes. Centers for Disease Control and Prevention. <https://www.cdc.gov/diabetes/basics/prediabetes.html>. Published June 11, 2020. Accessed September 2020.  
<sup>35</sup> Tabák AG, Herder C, Rathmann W, Brunner EJ, Kivimäki M. Prediabetes: a high-risk state for diabetes development. *Lancet*. 2012;379(9833):2279-2290. doi:10.1016/S0140-6736(12)60283-9  
<sup>36</sup> Centers for Disease Control and Prevention. *Technical report for the diabetes prevention impact toolkit*. Atlanta, GA; 2016

## Diabetes Prevention Program

The Diabetes Prevention Program (DPP) is an evidence-based, year-long lifestyle change program proven to prevent or delay type 2 diabetes in people with a diagnosis of prediabetes, or those at high risk for developing type 2 diabetes. The program supports participants as they work to make changes through education about healthy eating choices, increasing physical activity, improving coping skills, stress management, and problem solving.<sup>32</sup>

The DPP was developed based on research which demonstrated that weight loss of 5-7 percent of body weight, achieved by reducing calories and increasing physical activity to at least 150 minutes per week, resulted in a 58 percent lower incidence of type 2 diabetes. For people age 60 years and older, the program reduced the incidence of type 2 diabetes by 71 percent.<sup>33</sup> After 10 years, lifestyle change program participants had a 34 percent lower incidence of type 2 diabetes compared to those who did not participate in the lifestyle change program.<sup>34</sup>

Currently, Georgia has 53 locations offering the National DPP; however, only 20 locations have achieved preliminary or full recognition by the CDC. To achieve this status, a program must be in operation for at least one full year and show that the program is effective at meeting quality measures. Earning preliminary or full CDC recognition allows the program to apply for Medicare reimbursement and eventually bill for services.

For more details about recognition status and the quality measures required for preliminary or full recognition, please see the National Diabetes Prevention Program information on the CDC's website (<https://www.cdc.gov/diabetes/prevention/index.html>).

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<sup>37</sup> National diabetes prevention program: Research behind the national DPP. Centers for Disease Control and Prevention. [https://www.cdc.gov/diabetes/prevention/research-behind-ndpp.htm?CDC\\_AA\\_refVal=https%3A%2F%2Fwww.cdc.gov%2Fdiabetes%2Fprevention%2Fprediabetes-type2%2Fpreventing.html](https://www.cdc.gov/diabetes/prevention/research-behind-ndpp.htm?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fdiabetes%2Fprevention%2Fprediabetes-type2%2Fpreventing.html). Published April 4, 2019. Accessed September 2020.

<sup>38</sup> Knowler W, Barrett-Connor E, Fowler S et al. Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin. *N Engl J Med*.2002;346:393-403. doi:10.1056/NEJMoa012512

<sup>39</sup> Diabetes Prevention Program Research Group, Knowler WC, Fowler SE, et al. 10-year follow-up of diabetes incidence and weight loss in the Diabetes Prevention Program Outcomes Study [published correction appears in *Lancet*. 2009 Dec 19;374(9707):2054]. *Lancet*. 2009;374(9702):1677-1686. doi:10.1016/S0140-6736(09)61457-4

## Recommendations / Action Plan

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Currently in Georgia there are no state funds outside of the Medicaid program specifically set aside for diabetes initiatives such as awareness, prevention, self-management, or improving the quality of care for diabetes.

In September 2018, the Department of Public Health entered into a five-year cooperative agreement with the Centers for Disease Control and Prevention (CDC): *Improving the Health of Americans Through Prevention and Management of Diabetes and Heart Disease and Stroke* (FOA – DP18-1815). The CDC supports state efforts to:

- Prevent or delay development of type 2 diabetes in people at high risk and improve the health of people living with diabetes.
- Prevent and manage cardiovascular disease.

With the funds provided through this federal award, the Department of Public Health is currently working to:

- Improve access to and participation in ADA-recognized/ADCES-accredited DSMES programs in underserved areas.
- Increase engagement of pharmacists in the provision of medication management or DSMES for people with diabetes.
- Assist health care organizations in implementing systems to identify people with prediabetes and refer them to CDC-recognized lifestyle change programs for type 2 diabetes prevention.
- Collaborate with payers and relevant public and private sector organizations within the state to expand availability of the National DPP as a covered benefit for one or more of the following groups: Medicaid beneficiaries, state/public employees, employees of private sector organizations.
- Implement strategies to increase enrollment in CDC-recognized lifestyle change programs.
- Develop a statewide infrastructure to promote long-term sustainability/reimbursement for Community Health Workers (CHWs) as a means to establish or expand their use in a) CDC-recognized lifestyle change programs for type 2 diabetes prevention and/or b) ADA-recognized/ADCES-accredited DSMES programs for diabetes management.

To accomplish these objectives and address the burden of diabetes in Georgia, the Department of Public Health and its partners are implementing the following activities:

## **Strategy A1: Diabetes Self-Management Education and Support (DSMES) Access and Participation**

**Provide ongoing technical assistance to establish ADA-recognized/ADCES-accredited programs to ensure sustainability and promote expansion by:**

- Completing a landscape analysis of ADA-recognized/ADCES-accredited programs on barriers to implementation, program numbers from the previous 12 months, recruitment and referral process, and program needs to ensure sustainability.
- Conducting two webinars on topics determined through the landscape analysis, to promote sustainability and increased recruitment for programs.
- Continuing bi-monthly Diabetes Advisory Council calls to support the sharing of information, best practices and to discuss diabetes-related opportunities for professional development.
- Offer ADCES Reimbursement Bootcamp training on DSMES implementation and reimbursement to established DSMES programs and the site billing specialists.
- Offer Diabetes Support Staff training to up to 60 CHWs and medical assistants to expand the knowledge base of standard diabetes care practices.

**In partnership with the Georgia Primary Care Association (GPCA), increase DSMES access, patient referrals, and reimbursement at Federally Qualified Health Centers (FQHCs) by:**

- Assisting to up to five (5) health systems (FQHC/hospital system) in establishing new ADCES-accredited DSMES programs.
- Providing technical assistance on EHR measures/clinical support pathways to identify those who qualify for services and create referral policies to connect patients with services to the four FQHCs with previously established DSMES program and the five newly established DSMES programs.
- Providing direct support to FQHCs through the provision of webinars, peer-to-peer learning calls, and funds to support participant recruitment and program sustainability.

## Strategy A3: Pharmacy-based Diabetes Services

**Coordinate with the Georgia Pharmacy Association (GPhA), Piedmont Healthcare, and WellStar Health Systems to advance the work for Collaborative Practice Agreements (CPAs) for diabetes management by:**

- Partnering with Piedmont to complete an analysis of their pilot data to build an ROI for the expansion of the CPA policies. (Q1-Q3)
- Conduct introductory conversations with Piedmont to recruit a second location to implement the CPA policies by Q4.
- Utilizing the information collected from the CPA champions in year 2, produce education materials to be disseminated to pharmacists and primary care providers in Georgia. Materials to include project profiles outlining successes, barriers to implementation, and best practices, provider tools, and a provider factsheet.
- In direct partnership with GPhA, ACP, and GAFP provide education to pharmacists and primary care providers on the process of establishing CPAs and model policies for implementation. Education will be completed through webinars, newsletters, and presentations at association meetings.

**Assist pharmacies in establishing new ADCES-accredited DSMES programs by:**

- Providing technical assistance and funding support to at least five (5) pharmacies to become newly accredited DSMES sites.

**Provide ongoing technical assistance to approximately 25 DSMES accredited pharmacies and five (5) new pharmacies by:**

- Providing funding to implement technology platforms for DSMES data collection and management.
- Continue pharmacy collaborative call series to allow peer-to-peer sharing, the dissemination of best practices, and the identification of barriers to pharmacy-based DSMES program expansion that DPH can work to address and eliminate.
- Offer an ADCES Reimbursement Bootcamp training targeted to pharmacies to up to 20 pharmacists to promote sustainability through proper reimbursement for services.

**Increase referrals to pharmacy DSMES programs by:**

- Continuing to implement and expand to one additional site through the pEACHHealth Project to total 14 pharmacy sites in the Coastal, Waycross, Valdosta, Dublin, and Athens health districts. DPH will disseminate the operations manual, which details how to implement MTM for diabetes at a community pharmacy site. Through pEACHHealth, pharmacy students are supervised by a pharmacist to measure patient data on medication adherence and to create patient improvement plans. These plans can include working with PCPs to make appropriate referrals to DSMES or hypertension programs.



## **Strategy A4: Prediabetes Screening, Testing, and Referral**

### **Promote access and referrals to established National DPP by:**

- Continuing partnership, through established MOUs, with the Georgia Hospital Association (GHA) and the American Medical Association (AMA). MOUs are in place that state GHA and AMA will assist Georgia health care organizations in the development of systems to identify individuals with prediabetes and develop referral systems. GHA will recruit and fund up to ten (10) hospitals to implement the National DPP Lifestyle Change program and participate in the 4-part AMA webinar learning series to improve screening, testing, and referring for the National DPP by developing policies and processes for implementation and referrals.
- Providing ongoing tailored technical assistance and pay-for-performance reimbursement to up to 14 hospitals and five (5) FQHCs focusing on sustainability and expansion of the program. These systems will be required to continue the implementation of the systems developed to identify individuals with prediabetes and work to expand these systems, if applicable.

### **Promote access to the National DPP through Registry Development and Landscape Analysis by:**

- Developing an internal registry of Certified Diabetes Prevention Lifestyle Coaches and CDC-Recognized Diabetes Prevention Lifestyle Change Programs. Knowing where coaches are located and having updated contact information will allow DPH to target coaches and programs for advanced training on the implementation of systems to identify individuals with prediabetes and refer them to lifestyle change programs. It will also allow DPH to provide this information to health care organizations so they can create referral systems to these programs.
- Compiling information from previous landscape analyses and CDC database on current program offerings, contact information, insurance coverage, and modality of delivery to create an internal registry of lifestyle coaches and National DPP organizations.
- Disseminating pertinent program information gained from internal registries to Health Systems and other organizations to promote referrals to DPP programs.

### **Provide ongoing technical assistance to organizations with established CDC-recognized National DPP Lifestyle Change programs by:**

- Offering up to 2 sessions on the National DPP at the 6th Annual Health Systems Symposium on fidelity to DPP standards as they expand, engaging partners in promotion, and implementation and referral systems.

## Strategy A5: National DPP Coverage

### Utilize knowledge gained from participation in the NACDD A5 Learning Collaborative by:

- Continuing to work with the City of Savannah and at least one additional employer to pilot the National DPP and complete an ROI analysis to promote coverage of the National DPP.
- Continuing conversations with payers/employers throughout Georgia to promote best practices related to coverage of the National DPP for employees. These conversations will include technical assistance on program delivery, dissemination of national coverage resources, and identification of local DPP providers for a referral to in-person services.

### Expand the availability of National DPP as a covered benefit to state employees and private sector organizations by:

- Working with NACDD as part of the employer learning collaborative to obtain an updated Georgia State Profile from Leavitt Partners of providers, payers, and purchasers in Georgia to reflect current landscape of employers and payers offering the National DPP. Understanding how the landscape has changed since the original profile will allow the diabetes team to identify new targets for employer work and ensure the work is high-impact by targeting private sector organizations that cover large markets.

### Expand coverage and adoption of the National DPP within the University System of Georgia by:

- Disseminating information collected and analyzed following the "Coverage Pilot."
- Continuing partnership with USG to expand the reach of the program and increase the utilization of the benefit among USG employees. Universities will be encouraged to utilize patient data and success stories to complete an employee awareness campaign.
- Promoting sustainability of the benefit by providing funding to USG to cover a Master Trainer for the university system and DAPS Data system access for each University offering in-person programs. USG will provide oversight to all university programs to ensure sustainability and promote the expansion of the National DPP through additional USG sites.
- Providing technical assistance to organizations such as USG through collaborative calls.

### Engage Medicaid CMOs in the provision of the National DPP to Medicaid populations and DCH in the provision of the National DPP through the State Health Benefit Plan by:

- Disseminating a survey, developed in year 2, to determine interest in the coverage of prediabetes screenings, diabetes resources, and/or valued based services offered. (Q1)
- Re-engaging SHBP in conversations concerning coverage for state employees through the dissemination of completed ROIs and an updated Georgia State Profile data. (Q1-Q2)
- Convening CMOs and other key stakeholders for a one-day meeting to provide educational sessions and discuss delivery of the National DPP to Medicaid populations. (Q3)

## Strategy A6: CDC-Recognized Lifestyle Change Programs

### Increase availability to and awareness of new National DPP lifestyle change programs by:

- Assisting up to 10 organizations (hospitals, etc.) and 5 FQHCs through the initial application process and development of a sustainability plan for the program
- Providing technical assistance and funding support to at least 10 pharmacies in becoming newly recognized National DPP sites by utilizing a pharmacy data technology platform.
- Sponsor a minimum of 3 Lifestyle Coach Trainings to increase the capacity of organizations to implement the NDPP. Trainings ensure organizations have certified Lifestyle Coaches prepared to implement DPP. Trainings will be for the 10 health systems, 5 FQHCs, and 10 pharmacies being supported through the implementation of activities being completed under strategies A4, A5 and A6.
- Developing and disseminating a National DPP Newsletter to organizations offering National DPP and all trained lifestyle coaches.

### Provide ongoing technical assistance to established National DPP programs by:

- Conducting monthly calls for trained lifestyle coaches with master trainers and DPH staff. Monthly calls will focus on key aspects of implementation and sustainability of the National DPP.
- Disseminating an example implementation manual to new National DPP sites to assist in the start-up of their program. This manual will assist larger, multi-site organizations in developing policies and procedures related to their internal National DPP lifestyle change program to support the expansion of the program to additional sites.
- Developing a sustainability plan for an in-house program at the State Health Department, as well as a guide for health districts interested in participating in the National DPP.

### Assist existing CDC-recognized lifestyle change programs to increase enrollment by:

- Providing up to five (5) health systems, community-based organizations, and pharmacies with pay-for-performance vouchers for participants within the National DPP who meet designated criteria, such as minimum sessions attended, weight loss, and physical activity recorded.
- Continuing to support one (1) or more Community Health Worker Consultants (CHWc) in DeKalb and Floyd counties to act as DPP Champions. DPH will utilize evaluation information collected during the year 2 pilot, the training curriculum for CHWc will be finalized, and the program will be expanded to include additional CHWc. CHWc will offer support on how to identify community members who may be eligible for the DPP, work with individuals to identify a program that meets their needs and continue follow-up to identify barriers that may prevent a participant in completing the program.

## Strategy A6: CDC-Recognized Lifestyle Change Programs (cont.)

### Increase awareness of and referrals to the National DPP through collaborations with internal Department of Public Health partners by:

- Continuing partnership with the Maternal and Child Health section to build relationships with the high-risk pregnancy centers (example: Piedmont Columbus) that deliver care to those diagnosed with gestational diabetes. Utilize protocols developed in Year 2 to increase referrals to DPP for those with gestational diabetes and determine soft-handoff procedures post-partum.
- Continuing partnership with the Fulton County Board of Health Chronic Disease and HIV sections to expand and modify protocols developed in year 2 for diabetes and hypertension screening and referrals in community-based mobile clinics. Chronic Disease screenings take place in mobile clinics while participants are awaiting HIV results. The protocol has an algorithm for determining who should be referred to a National DPP Lifestyle Change program.

### Increase marketing to individuals at higher risk by:

- Continuing partnership with DPH Tobacco Quitline coordinator and utilize the CDC-developed guide: *Connecting Diabetes Prevention and Smoking Cessation: A Guide to Understanding and Establishing Bidirectional Referrals* to increase bidirectional referrals between Tobacco Quitline and National DPP. DPH will work with CDC Category A Project Officer, the North American Quitline Consortium, and OSH technical assistance staff to develop a plan.

## **Strategy A7: Community Health Worker (CHW) Sustainability**

### **Provide technical support to CHW Communications Champions that focuses on education and referral to the Diabetes Prevention Program by:**

- Building off of established "Stop Prediabetes. Take the Test. Know Your Risk." campaign.
- Providing CHWs who are currently participating in CHW certification training with the opportunity to participate in the 1817 CHW Communication Project. The referral of CHWs to this program will expand the use of CHWs across the state in engaging in DPP work.

### **Provide guidance and resources for employers by:**

- Developing an Employer/Supervisor CHW Toolkit. The toolkit will provide guidance and resources on how employers can include CHWs in the practice flow, how to effectively manage a CHW, and the benefits of hiring CHWs.

### **Partner with Atlanta Regional Collaborative for Health Improvement (ARCHI) by:**

- Utilizing recently trained Georgia-based CHW trainers to conduct two (2) CHW Curriculum trainings. Trainings will include: 1) CVD Prevention and Management as well as other chronic diseases and public health issues and 2) the roles and core competencies of CHWs as described in the Georgia Stakeholder Consensus Document. These trainings will focus on all four (4) Georgia geographical regions.

### **Track referrals that CHWs are making to community-based resources by:**

- Monitoring and managing the Pathways HUB System for Georgia CHWs who completed the CCS Curriculum Training. The CHW Initiative Program Manager will be the point of contact for GA CHWs utilizing the Pathways HUB System.

### **Lead the development of the statewide CHW program by working across both categories to:**

- Oversee the existing CHW Advisory Board.
- Collaborate with external partners to inform the development of standardized training and core competencies of CHWs.
- Establish a pathway for CHWs to be certified and reimbursed for DPP.

### **Plan, facilitate, and execute the fifth Statewide Community Health Worker Stakeholder Forum by:**

- Partnering with the Georgia Health Policy Center (GHPC). This will be a one-day event for stakeholders across the state to come together to focus on training and professional development for CHWs as well as tools and resources for employers, advocates, and stakeholders. GHPC will handle all logistics for the forum as well as develop the meeting design. Center staff will summarize the discussions of the day and incorporate feedback from the meeting evaluations into a summary report.

