



Management of Diabetes Mellitus in Adults 18 - 75 Years of Age

OBJECTIVE

The objective of this Clinical Practice Guideline (CPG) is to provide evidence-based practice recommendations for the management of Diabetes in Adults. The CPG discusses the progression of disease including symptomology, modifiable risks, co-morbid conditions (e.g., hypertension, obesity, cardiovascular disease, cholesterol management), and the role of diet and physical activity. The CPG outlines the organizations that WellCare aligns with regarding Diabetes and Heart Disease as well as Measureable Health Outcomes. For recommendations related to screening, refer to WellCare's Preventive Health CPGs: *Pediatric: HS-1019, Adolescent: HS-1051, Adult: HS-1018, and Older Adult: HS-1063.*

OVERVIEW

Diabetes mellitus (DM) is a group of metabolic diseases in which a person has high blood sugar, producing symptoms such as frequent urination, increased thirst, and increased hunger. Untreated, diabetes can cause complications like:¹

- Diabetic ketoacidosis (high blood sugar)
- Hypoglycemia (low blood sugar)
- Peripheral vascular disease
- Poor wound healing and ulcers
- Loss of limbs (amputation)
- Retinopathy
- Heart disease
- Cerebrovascular disease and stroke
- Neuropathy
- Kidney failure

Risk factors that can lead to diabetes include:¹

- Physical inactivity
- First-degree relative with diabetes
- High-risk ethnic populations (African American, Latino, Native American, Asian American, Pacific Islander)
- Women who delivered a baby weighing ≥ 9 lb or were diagnosed with GDM
- Women with a history of hypertension ($\geq 140/90$ mmHg or on therapy for hypertension)
- HDL cholesterol level <35 mg/dl (0.90 mmol/l) and/or a triglyceride level >250 mg/dl (2.82 mmol/l)
- Women with polycystic ovary syndrome
- A1C $> 5.7\%$, IGT, or IFG on previous testing
- Other clinical conditions associated with insulin resistance (e.g., severe obesity, acanthosis nigricans)
- History of cardiovascular disease

Hierarchy of Support

GUIDELINE HIERARCHY

CPGs are updated annually or as necessary due to updates made by the United States Preventive Services Task Force (USPSTF), American Diabetes Association (ADA), American Association of Clinical Endocrinologists (AACE), and the American College of Endocrinology (ACE). When there are differing opinions noted by national organizations, WellCare will default to the member's benefit structure as deemed by state contracts and Medicaid / Medicare regulations. If there is no specific language pertaining to diabetes, WellCare will default (in order) to the following:

- National Committee for Quality Assurance (NCQA);
- United States Preventive Services Task Force (USPSTF), National Quality Strategy (NQS), Agency for

Healthcare Research and Quality (AHRQ);

- Specialty associations, colleges, societies, etc. (e.g., American Academy of Family Physicians, American Congress of Obstetricians and Gynecologists, American Cancer Society, etc.).

Links to websites within the CPGs are provided for the convenience of Providers. Listings do not imply endorsement by WellCare of the information contained on these websites. NOTE: All links are current and accessible at the time of MPC approval. WellCare aligns with the USPSTF, ADA, AACE, and the ACE; the following are highlights of the recommendations.

UNITED STATES PREVENTIVE SERVICES TASK FORCE (USPSTF)

The United States Preventive Services Task Force (USPSTF) recommends screening for abnormal blood glucose as part of cardiovascular risk assessment in adults aged 40 to 70 years seen in primary care settings who do not have symptoms of diabetes *and* are overweight or obese. Providers should offer or refer patients with abnormal blood glucose to intensive behavioral counseling interventions to promote a healthful diet and physical activity. The USPSTF recommendation can be viewed [here](#).²

AMERICAN DIABETES ASSOCIATION (ADA)

The American Diabetes Association (ADA) recommends the following criteria for asymptomatic adults:³

- Testing should be considered in all adults who are overweight (BMI ≥ 25 kg/m²*) and have risk factors:
 - Physical inactivity
 - First-degree relative with diabetes
 - High-risk ethnic populations (African American, Latino, Native American, Asian American, Pacific Islander)
 - Women who delivered a baby weighing ≥ 9 lb or were diagnosed with GDM
 - Women with a history of hypertension ($\geq 140/90$ mmHg or on therapy for hypertension)
 - HDL cholesterol level <35 mg/dl (0.90 mmol/l) and/or a triglyceride level >250 mg/dl (2.82 mmol/l)
 - Women with polycystic ovary syndrome
 - A1C $\geq 5.7\%$, IGT, or IFG on previous testing
 - Other clinical conditions associated with insulin resistance (e.g., severe obesity, acanthosis nigricans)
 - history of CVD
 - If results are normal, testing should be repeated at least at 3-year intervals, with consideration of more frequent testing depending on initial results and risk status.

Highlights of the 2018 update to the ADA guidelines are noted below:

- An updated section on *Improving Care and Promoting Health in Populations* that includes a new recommendation regarding the use of reliable data metrics to assess and improve the quality of diabetes care and reduce costs. Information was also included on the social determinants of health and the emerging use of telemedicine in diabetes care.
- Additional recommendations are included regarding the appropriate use of the A1C test generally and for diagnosing diabetes in special cases (e.g., hemoglobin variants, assay interference, conditions associated with red blood cell turnover).
- Revisions to the table describing the components of a comprehensive medical evaluation (Table 3.1) now include information about the recommended frequency of the components of care at initial and follow-up visits.
- Emphasis was placed on language choice in patient-centered communication.
- Pancreatitis was added to the section on comorbidities and includes a new recommendation about islet autotransplantation to prevent postsurgical diabetes in patients with medically refractory chronic pancreatitis who require total pancreatectomy.
- A recommendation was added on serum testosterone levels in men with diabetes, symptoms of hypogonadism.
- A section on Lifestyle Management was revised to include individual and group settings as well as technology-based platforms for the delivery of effective diabetes self-management education and support.

- The recommendation regarding the use of metformin in the prevention of prediabetes was revised to reflect the data from the Diabetes Prevention Program.

To view the ADA's full guideline, click [here](#). Note: At-risk BMI may be lower in some ethnic groups.

AMERICAN ASSOCIATION OF CLINICAL ENDOCRINOLOGISTS (AACE) AND AMERICAN COLLEGE OF ENDOCRINOLOGY (ACE)

The American Association of Clinical Endocrinologists (AACE) and the American College of Endocrinology (ACE) guideline for management of patients with type 2 diabetes includes an algorithm with new recommendations for lifestyle optimization as an adjunct to medical therapy. The guidelines incorporate the following treatment principles as well:

- Lifestyle therapy, including medically supervised weight loss, is key to managing type 2 diabetes.⁴
- The hemoglobin A1C target must be individualized.
- The choice of therapies must be individualized.
- Minimizing risk of hypoglycemia and weight gain are priorities.
- Comprehensive management includes lipid and blood pressure therapies and management of related comorbidities; the algorithm includes lipid and blood pressure targets.
- The therapeutic regimen should be as simple as possible to optimize adherence.

The algorithm stratifies choice of therapies based on the patient's initial A1C, and includes every FDA-approved class of medications for diabetes. The key components of lifestyle therapy include medical nutrition therapy, regular physical activity, sufficient amounts of sleep, behavioral support, and smoking cessation and avoidance of all tobacco products.

To view the AACE and ACE guideline, click [here](#).

Evidence Based Practice

MEASUREMENT OF COMPLIANCE

WellCare is committed to adhering to the measures and standards published by the Centers for Medicare and Medicaid Services (CMS) and the National Committee for Quality Assurance (NCQA). Please reference WellCare's Clinical Policy Guiding Document titled *Measures of Compliance*.

NOTE: To access Clinical Policy Guiding Documents visit www.wellcare.com – select the Provider tab, then “Tools” and “Clinical Guidelines”.

Care Management

The goals for Care Management is to support the member's ability to self-manage their disease, minimize risks factors, and remove barriers preventing the member from achieving those goals. Educate member on the primary diabetic symptoms to seek emergency medical care for:⁵

- High blood sugar reading greater than 600
- Shortness of breath
- Very dry mouth
- Slurred speech
- Seizures
- Vomiting
- Fruity smelling breathe
- Heart palpitations
- Confusion
- Reaction to medication

Integrated care management of diabetes involves:⁵

- Coaching related to making lifestyle changes
- Facilitating use of glucose meter and self-monitoring of blood glucose
- Monitoring of HgA1c regularly and setting an individual goal (target 7 or lower, may be higher in older adults)
- Ensuring member's understanding of medication dosing and adherence to medications, refilling timely
- Therapeutic monitoring of diabetes medications including biguanides, sulfonylureas, thiazolidinediones, and DiPeptidyl Peptidase (DPP)-IV Inhibitors, incretin mimetics, and meglitinides
- Supporting the member's weight loss and tobacco cessation efforts as appropriate
- Regular screening for co-morbidities (e.g., hypertension, obesity, cardiovascular disease, cholesterol management)
- Assess for risk of depression and share with appropriate provider(s) if risks identified

MEASURABLE HEALTH OUTCOMES

Targeted Health Outcomes (Extended Program Goals) result from successful member self-management (see Case Management Objectives).⁵

1. HbA1c less than 7%. Compare lab data pre and post engagement at 6-12 months. In absence of lab data, Provider and/or Member narrative and/or HRA data may be used
2. Maintaining a healthy diet. Compare member's knowledge and dietary habits pre and post engagement at 6-12 months. In absence of documentation, Provider and/Member narrative/HRA data may be used.
3. Glucose control with a targeted range of 80-120 before meals Compare lab data pre and post engagement at 12 - 18 months. In absence of lab data, Provider and/or Member narrative and/or HRA data may be used
4. A moderate physical activity regimen to include a minimum of 30 minutes on most days of the week .Compare physical activity level documented in provider records, assessments and care plans, and monitoring data pre and post engagement 6-12 months. In the absence of these data sources , CM may use Provider and/or Member narrative and/or HRA data may be used.

CASE GOALS

Case Goals should target specific care gaps and/or adherence issues, and measure the member's progress towards self-management and adherence which will lead to the targeted health outcomes above. Examples:⁵

1. The member will increase their level of physical activity by 2-5 minutes each week. Member self-reports exercise regime over the last 30 days that demonstrates improved adherence to physical recommendation.
2. The member will be able to identify healthy eating patterns. Member self-reports grocery shopping and diet regime over the last 30 days that demonstrate improved adherence to guideline and or provider recommendation.
3. The member will verbalize understanding of the how to use a glucometer for monitoring of blood glucose levels as prescribed by provider. The member will obtain a record log to document readings.
4. Specific for Members requiring hospitalization: The Member participates in provider follow-up visit within 7 days of hospital discharge.

CASE MANAGEMENT OBJECTIVES

Case Management Objectives should focus on improving the Member's self-management skills up including:

1. Lifestyle change skills
2. Increasing physical activity to at least 150 minutes/week or as otherwise prescribed by physician
3. Following a ADA diet (may require nutritionist and / or CDE support)
4. Taking medications including insulin as prescribed
5. Keeping feet clean and protected, and monitoring of feet for open areas or injuries to the physician
6. Adhering to Provider visit(s) as scheduled
7. Checks blood glucose as directed by Provider
8. Keeping a log of blood glucose readings to share with Provider(s)
9. Tobacco cessation
10. Avoiding second-hand smoke
11. Early identification of symptoms to manage, report to physician and / or call for emergency services

The care team should also conduct screening for and treatment of anxiety and/or depression, as appropriate.

MEMBER EDUCATION, COUNSELING AND RISK FACTOR MODIFICATION

Upon diagnosis, and as needed, each patient should receive written management plans that are reviewed and revised annually with the assistance of a diabetic team consisting of the physician, certified diabetic educator, and registered dietician. The management plan should incorporate the following facets of care:⁶

- Blood glucose management and frequency of self-monitoring of blood glucose (SMBG) determined by severity
- Nutrition counseling, including role of weight in insulin resistance and importance of progress toward ideal body weight, as recommended by registered dietician
- Blood pressure management
- Regular exercise program

- Training in self-management skills and problem solving, if appropriate, refer to diabetic education classes and WellCare's Diabetes Disease Management Program
- Self-care of feet
- Cardiovascular risk reduction
- Smoking cessation program and avoiding secondhand smoke

MEMBER EDUCATIONAL RESOURCES

Care Managers working with Members can access the educational materials from Krames; items are available to review with Members to address knowledge gaps. Materials can also be sent to Members.

NOTE: Links are internal for WellCare Care Management staff.

- [Coping with Your Diagnosis - Diabetes](#)
- [Long Term Complications of Diabetes](#)
- [Identifying Your Heart Risks - Diabetes](#)
- [Diabetes and Peripheral Arterial Disease \(PAD\)](#)
- [What Is Diabetic Retinopathy](#)
- [Hyperglycemia \(High Blood Sugar\)](#)
- [Hypoglycemia \(Low Blood Sugar\)](#)
- [Diabetes Understanding Carbohydrates](#)
- [Healthy Meals for Diabetes](#)
- [Understanding Food and Cholesterol - Diabetes](#)
- [Tips for Using Less Salt - Diabetes](#)
- [Low-Fat Cooking Tips- Diabetes](#)
- [Diabetes Learning About Serving and Portion Sizes](#)
- [Reading Food Labels](#)
- [How to Check Your Blood Sugar](#)
- [Using a Blood Sugar Log](#)
- [Oral Medications for Type 2 Diabetes](#)
- [Using Injected Insulin](#)
- [Diabetes- Exams and Tests](#)
- [Cholesterol Quiz - Diabetes](#)
- [Micro albumin - Urine](#)
- [Managing Diabetes The A1C Test](#)
- [Managing Stress When You Have Diabetes](#)
- [Diabetes The Benefits of Exercise](#)
- [Diabetes Sick Day Plan](#)
- [Diabetes- Inspecting Your Feet](#)
- [Erectile Dysfunction Rebuilding Intimacy](#)

Providers may wish to research the titles above related to diabetes that Case Managers utilize with Members.

MEDICAL AND BEHAVIORAL INTEGRATION

Behavioral Health and Diabetes. Diabetics with a behavioral health diagnosis are 2-3 times more costly than diabetics without a BH diagnosis. The most common behavior-related comorbidities in adults with diabetes include:⁷

- Depression (refer to WellCare CPG *Major Depressive Disorders in Adults:HS-1008*)
- Anxiety (refer to WellCare CPG *Generalized Anxiety Disorder: HS-1057*)
- Substance use (refer to WellCare CPG *Substance Use Disorders: HS-1031*)
- Higher rate of smoking quit attempts (refer to WellCare CPG *Smoking Cessation: HS-1035*)
- Sexual dysfunction (refer to the resources below)
 - [American Diabetes Association – “Erectile Dysfunction”](#)
 - [National Institute of Diabetes and Digestive Kidney Diseases \(NIDDK\) – “New Treatment Options for Erectile Dysfunction in Patients with Diabetes Mellitus”](#)
 - [NIDDK – “Diabetes and Sexual and Urologic Problems”](#)

Pregnancy. For recommendations related to gestational diabetes, refer to the CPG on *Pregnancy: HS-1029*. The following resources are also available:⁷

- [Centers for Disease Control and Prevention – “Diabetes and Pregnancy”](#)
- [Centers for Disease Control and Prevention – “Gestational Diabetes”](#)

Transition Between Pediatric and Adult Care of Diabetes. For recommendations related to transitioning a pediatric member to adult care of diabetes, refer to the *Management of Diabetes in Children CPG (HS-1004)*.

Related WellCare Guidelines

In addition to this CPG, please reference the following age-specific preventive health CPGs: *Adult: HS-1018* and *Older*

Adult: HS-1063. The following CPGs are also available: *Cholesterol Management: HS-1005, Diabetes in Children: HS-1004, Hypertension: HS-1010, and Tobacco Cessation: HS-1035.* For the Georgia market, please reference the CPG *Diabetes: HS-1009GA.*

NOTE: Clinical Policies can be accessed by going to www.wellcare.com – select the Provider tab, then “Tools” and “Clinical Guidelines”.

References

1. Standards of Medical Care in Diabetes (2018). *Diabetes Care* 2018 Jan; 41(Supplement 1): S1-S2. http://care.diabetesjournals.org/content/41/Supplement_1/S1. Accessed December 28, 2017.
2. Abnormal blood glucose and type 2 diabetes mellitus: screening. United States Preventive Services Task Force Web site. <http://www.uspreventiveservicestaskforce.org>. Published October 2015. Accessed December 28, 2017.
3. Garber AJ, Abrahamson MJ, Barzilay JI, Blonde L, Bloomgarden ZT, Bush MA. Consensus statement by the American Association of Clinical Endocrinologists (AACE) and the American College of Endocrinology (ACE) on the comprehensive type 2 diabetes management algorithm (2016 executive summary). *Endocrine Practice*. January 2016;22(1):84-102. Available at <https://www.aace.com/sites/all/files/diabetes-algorithm-executive-summary.pdf>. Accessed December 28, 2017.
4. Complications. American Diabetes Association Web site. <http://www.diabetes.org/living-with-diabetes/complications/?loc=lwd-slabnav>. Accessed December 28, 2017.
5. WellCare. Internal Care Management Training. 2015.
6. Peters A, Laffel L, the American Diabetes Association Transitions Working Group. Diabetes care for emerging adults: recommendations for transition from pediatric to adult diabetes care systems. 2011. *Diabetes Care*; 34(11):2477-2485.

Disclaimer

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Easy Choice Health Plan ~ Harmony Health Plan of Illinois ~ Missouri Care ~ Ohana Health Plan, a plan offered by WellCare Health Insurance of Arizona
OneCare (Care 1st Health Plan Arizona, Inc.) ~ Staywell of Florida ~ WellCare Prescription Insurance ~ WellCare Texan Plus (Medicare – Dallas and Houston markets)
WellCare (Arizona, Arkansas, Connecticut, Florida, Georgia, Illinois, Kentucky, Louisiana, Mississippi, Nebraska, New Jersey, New York, South Carolina, Tennessee, Texas)

Medical Policy Committee Approval History

Date	Medical Policy Committee History and Revisions
1/4/2018	<ul style="list-style-type: none"> • Approved by MPC. Included information from the ADA updated guidelines.
1/27/2017	<ul style="list-style-type: none"> • Approved by MPC. Enhanced Care Management and Measures of Compliance sections. Revised with CM, DM, QI, UM, BH and the Chief Medical Directors.
2/4/2016	<ul style="list-style-type: none"> • Approved by MPC. Inclusion of updated guidelines from the American Association of Clinical Endocrinologists (AACE) and the American College of Endocrinology (ACE).
1/7/2016	<ul style="list-style-type: none"> • Approved by MPC. Cross referenced Georgia specific CPG on Asthma. Inclusion of CPG Hierarchy.
11/5/2015	<ul style="list-style-type: none"> • Approved by MPC. Inclusion of USPSTF recommendation; updated ADA recommendations.
2/5/2015	<ul style="list-style-type: none"> • Approved by MPC. Addition of <i>Care Management</i> items.
5/2/2013	<ul style="list-style-type: none"> • Approved by MPC. No changes.
6/7/2012	<ul style="list-style-type: none"> • Approved by MPC. Added criteria for comprehensive diabetes evaluations (ADA, 2010) and section on gestational diabetes (see 2 CDC references). Included issues in transition between pediatric and adult care (Peters & et al., 2011).
12/1/2011	<ul style="list-style-type: none"> • New template design approved by MPC.
6/2010	<ul style="list-style-type: none"> • Approved by MPC.