Capital Health PLAN℠

An Independent Licensee of the Blue Cross and Blue Shield Association

Diabetes Clinical Practice Guideline

Based on American Diabetes Association Position Statement: Standards of Medical Care in Diabetes 2025

Approved by CHP Quality Improvement Committee: 9/8/09, 5/10/11, 3/12/13, 3/10/15, 03/14/17, 3/6/18, 3/12/2019, 3/9/2021, 7/11/2023, 3/18/2025

Standards of Medical Care for Patients with Diabetes Mellitus

Diabetes and Population Health

1. Ensure treatment decisions are timely, rely on evidence-based guidelines, capture key elements within the social determinants of health, and are made collaboratively with patients based on individual preferences, prognoses, comorbidities and informed financial considerations. (Evidence B)

2. Align approaches to diabetes management with evidence-based care models. These models emphasize person-centered team care, integrated long-term treatment approaches to diabetes and comorbidities, and ongoing collaborative communication and goal setting between all team members and people with diabetes. (Evidence A)

3. Care systems should facilitate in-person and virtual team-based care, including those knowledgeable and experienced in diabetes management as part of the team, and utilization of patient registries, decision support tools, proactive care planning, and community involvement to meet patient needs. (Evidence B)

4. Assess diabetes health care maintenance using reliable and relevant data metrics to improve processes of care and health outcomes, with attention to care costs, individual preferences and goals for care, and treatment burden. (Evidence B)

5. Health systems should adopt a culture of quality improvement, implement benchmarking programs, and engage interprofessional teams to support sustainable and scalable process changes to improve quality of care and health outcomes. (Evidence A)

6. Tailor treatment for the social context:

    a. During clinical encounters, assess for social determinants of health, including food insecurity, housing insecurity, financial barriers, health insurance and health care access, environmental and neighborhood factors, and social capital/social community support to inform treatment decisions, with referral to appropriate local community resources. (Evidence A)

    b. Provide patients with additional self-management support from lay health coaches, navigators, or community health workers when available. (Evidence A)

    c. Consider the involvement of community health workers to support management of diabetes and cardiovascular risk factors, especially in underserved communities and health care systems. (Evidence B)

Criteria for the Diagnosis of Diabetes

1. A1C ≥ 6.5% (≥48 mmol/mol)

    - This test should be performed in a laboratory using a method that is NGSP (National Glycohemoglobin Standardization Program) certified and standardized to the DCCT assay

    - Point-of-care A1C testing for diabetes screening and diagnosis should be restricted to devices approved for diagnosis by the U.S. Food and Drug Administration at Clinical Laboratory Improvement Amendments-certified laboratories that perform testing of moderate complexity or higher by trained personnel (Evidence B)

    - Evaluate for the possibility of a problem or interference with either test when there is consistent and substantial discord between blood glucose values and A1C test results (Evidence B)

    - In conditions associated with an altered relationship between A1C and glycemia, such as some hemoglobin variants, pregnancy (second and third trimesters and the postpartum period), glucose-6-phosphate dehydrogenase deficiency, HIV, Hemodialysis, recent blood loss or transfusion, hemolysis or erythropoietin therapy, plasma glucose criteria should be used to diagnose diabetes (Evidence B), OR

2. Fasting plasma glucose ≥126 mg/dL (7.0 mmol/L). Fasting is defined as no caloric intake for at least 8 hours, OR

3. 2-hour plasma glucose ≥ 200 mg/dl (11.1 mmol/L) during an oral glucose tolerance test as described by the WHO, OR

4. Symptoms of hyperglycemia or hyperglycemic crisis and random plasma glucose ≥200 mg/dL (11.1 mmol/L).

Criteria for Screening for Diabetes and Prediabetes

1. Screening for prediabetes and type 2 diabetes with an assessment of risk factors or validated risk calculator should be done in asymptomatic adults. (Evidence B)

2. Testing for prediabetes or type 2 diabetes in asymptomatic people should be considered in adults of any age with overweight or obesity (BM I≥25 kg/m² or ≥23 kg/m² in Asian American individuals) who have one or more risk factors: (Evidence B)

    a. First-degree relative with diabetes

    b. High-risk race/ethnicity (e.g., African American, Latino, Native American, Asian American)

    c. History of cardiovascular disease

d. Hypertension (≥130/80 mmHg or on therapy for hypertension)

e. HDL cholesterol level <35mg/dL (0.90 mmol/L) and/or a triglyceride level >250 mg/dL (2.82 mmol/L)

f. Individuals with polycystic ovary syndrome

g. Physical inactivity

h. Other clinical conditions associated with insulin resistance (e.g., severe obesity, acanthosis nigricans, metabolic dysfunction-associated steatotic liver disease)

3. For all other people, screening should begin at age 35 years. (Evidence B)

4. To screen for prediabetes and type 2 diabetes, fasting plasma glucose, 2-h plasma glucose during 75-g oral glucose tolerance test, and A1c are each appropriate. (Evidence B)

5. Risk-based screening for prediabetes and/or type 2 diabetes should be considered after the onset of puberty or after 10 years of age, whichever occurs earlier, in children and adolescents with overweight (BMI ≥85th percentile) or obesity (BMI ≥95th percentile) and who have one or more risk factors for diabetes. (Evidence B):

   a. Maternal history of diabetes or GDM during the child's gestation

   b. Family history of type 2 diabetes in first- or second-degree relative

   c. High-risk race, ethnicity, or ancestry

   d. Signs of insulin resistance or conditions associated with insulin resistance (acanthosis nigricans, hypertension, dyslipidemia, polycystic ovary syndrome, large- or small-for-gestational-age birth weight)

6. In people who are prescribed second-generation antipsychotic medications, screen for prediabetes and diabetes at baseline and repeat 12-16 weeks after medication initiation or sooner, if clinically indicated, and annually thereafter. (Evidence B)

Prevention or Delay of Type 2 Diabetes

Lifestyle Behavior Change for Diabetes Prevention

1. Refer adults with overweight/obesity at high risk of type 2 diabetes, as seen by the Diabetes Prevention Program (DPP) to an intensive behavioral lifestyle change program to achieve and maintain a weight reduction of at least 7% of initial body weight through healthy reduced-calorie diet and ≥150 min/week of moderate intensity physical activity. (Evidence A)

2. Prescribe an eating pattern known to be effective in preventing type 2 diabetes to individuals with prediabetes. A variety of eating patterns have shown benefit: (Evidence B)

    a. Mediterranean-style

    b. Low carbohydrate

    c. Intermittent fasting

3. Given the cost-effectiveness of lifestyle behavior modification programs for diabetes prevention, such diabetes prevention programs should be offered to adults at high risk of type 2 diabetes. (Evidence A)

4. Based on individual preference, certified technology-assisted diabetes prevention programs may be effective in preventing type 2 diabetes and should be considered. (Evidence B)

Pharmacologic Interventions to Delay Type 2 Diabetes

a. Metformin for the prevention of type 2 diabetes should be considered in adults at high risk of type 2 diabetes, as typified by the Diabetes Prevention Program, especially those aged 25-59 years with BMI ≥35 kg/m², higher fasting plasma glucose (e.g., ≥110 mg/dL), and higher A1c (e.g., ≥6%), and in individuals with prior gestational diabetes mellitus. (Evidence A)

b. Long-term use of metformin may be associated with vitamin B12 deficiency; consider periodic assessment of vitamin B12 level in metformin-treated individuals, especially in those with anemia or peripheral neuropathy. (Evidence B)

Prevention of Vascular Disease and Mortality

1. Prediabetes is associated with heightened cardiovascular risk; therefore, screening for and treatment of modifiable risk factors for cardiovascular disease are suggested. (Evidence B)

2. Statin therapy may increase the risk of type 2 diabetes in people at high risk of developing type 2 diabetes. In such individuals, glucose status should be monitored regularly and diabetes prevention approaches reinforced. It is not recommended that statins be avoided or discontinued for this adverse effect. (Evidence B)

3. In people with a history of stroke and evidence of insulin resistance and prediabetes, pioglitazone may be considered to lower the risk of stroke or myocardial infarction. However, this benefit needs to be balanced with the increased risk of weight gain, edema, and fractures. (Evidence A)

Person-Centered Care Goals

1. In adults with overweight/obesity at high risk of type 2 diabetes, care goals should include weight loss or maintenance, minimizing the progression of hyperglycemia, and attention to cardiovascular risk. (Evidence B)

2. Pharmacotherapy (e.g., for weight management, minimizing the progression of hyperglycemia, cardiovascular risk reduction) may be considered to support person-centered care goals. (Evidence B)

3. More intensive preventive approaches should be considered in individuals who are at particularly high risk of progression to diabetes, including individuals with BMI ≥35 kg/m², those at higher glucose levels (e.g., fasting plasma glucose 110-125 mg/dL, 2-h post challenge glucose 173-199 mg/dL, A1C ≥6.0%), and individuals with a history of gestational diabetes mellitus. (Evidence A)

Comprehensive Medical Evaluation and Assessment of Comorbidities

1. A person-centered communication style that uses person-centered, culturally sensitive, and strength-based language and active listening; elicits individual preferences and beliefs; and assesses literacy, numeracy, and potential barriers to care should be used to optimize health outcomes and health-related quality of life. (Evidence B)

2. A complete medical evaluation should be performed at the initial visit and follow-up, as appropriate, to:

   a. Confirm the diagnosis and classify diabetes. (Evidence A)

   b. Assess glycemic status and previous treatment. (Evidence A)

   c. Evaluate for diabetes complication, potential comorbid condition, and overall health status. (Evidence A)

   d. Assess social determinants of health and structural barriers to optimal health and health care. (Evidence A)

   e. Review risk factor management in people with established diabetes. (Evidence A)

   f. Begin engagement with the person with diabetes in the formulation of a care management plan including initial goals of care. (Evidence A)

   g. Develop a plan for continuing care. (Evidence A)

   h. Ongoing management should be guided by the assessment of overall health status, diabetes complications, cardiovascular risk, hypoglycemia risk, and shared decision-making to set therapeutic goals. (Evidence B)

Immunizations

Provide routinely recommended vaccinations for children and adults with diabetes as indicated by age. (Evidence A)

Components of the comprehensive diabetes medical evaluation at initial, follow-up, and annual visits

Diabetes History

- Characteristics at onset (e.g., age, symptoms and/or signs)
- Review of previous treatment plans and response
- Access frequency/cause/severity of past hospitalizations

Family History

- Family history of diabetes in a first-degree relative
- Family history of autoimmune disorders

Personal history of complications and common comorbidities

- Common comorbidities (e.g., obesity, OSA, and MASLD)
- High blood pressure or abnormal lipids
- Macrovascular and microvascular complications
- Hypoglycemia: awareness/frequency/causes/timing of episodes
- Presence of hemoglobinopathies or anemias
- Last dental visit
- Last dilated eye exam
- Visits to specialists
- Disability assessment and use of assistive devices (e.g., physical, cognitive, vision and auditory, history of fractures, and podiatry)
- Personal history of autoimmune disease

Surgical and procedure History

- Surgeries (e.g., metabolic surgery and transplantation)

Interval history

- Changes in medical/family history since last visit

Behavioral factors

- Eating patterns and weight history
- Assess familiarity with carbohydrate counting (e.g., type 1 diabetes, type 2 diabetes treated with MDI)
- Physical activity and sleep behaviors; screen for OSA
- Tobacco, alcohol, and substance use

Medications and Vaccinations

- Current medication plan
- Medication-taking behavior, including rationing of medications and/or medical equipment
- Medication intolerance or side effects
- Complementary and alternative medication use
- Vaccination history and needs

Technology use

- Access use of health apps, online education, patient portals, etc.
- Glucose monitoring (meter/CGM): results and data use
- Review insulin pump setting and use, connected pen and glucose data

Social Life Assessment: Social Network

- Identify existing social supports
- Identify surrogate decision maker and advanced care plan
- Identify social determinants of health (e.g., food security, housing stability and homelessness, transportation access, financial security, and community safety)
- Assess daily routine and environment, including school or work schedules and ability to engage in diabetes self-management

Physical examination

- Height, weight and BMI; growth/pubertal development in children and adolescents
- Blood pressure determination
- Orthostatic blood pressure measures (when indicated)
- Fundoscopic examination (refer to eye specialist)
- Thyroid palpation
- Skin examination (e.g., acanthosis nigricans, insulin injection or insertion sites, lipodystrophy)

- Comprehensive foot examination:
    - Visual Inspection (e.g., skin integrity, callous formation, foot deformity or ulcers, toenails) at every visit in people with diabetes with sensory loss, previous foot ulcer, or amputations.
    - Screen for PAD (pedal pulses – refer for ABI if diminished).
    - Determination of temperature, vibration or pinprick sensation, and 10-g monofilament exam.
- Screen for depression, anxiety, diabetes distress, fear of hypoglycemia, and disordered eating.
- Assessment for cognitive performance if indicated.
- Consider assessment for bone health (e.g., loss of height and kyphosis).

<u>Laboratory evaluation</u>

- A1C, if the results are not available within the past 3 months
- If not performed/available within past year:
    - Lipid profile, including total, LDL and HDL cholesterol and triglycerides
    - Liver function tests (i.e., FIB-4)
    - Thyroid-stimulating hormone (TSH) in people with type 1 diabetes
    - Lipid profile, liver function tests, and TSH may also need to be checked after initiation or dose changes of medications that affect these laboratory values (i.e., diabetes medications, blood pressure medications, cholesterol medications, or thyroid medications).
    - Spot urine albumin-to-creatinine ratio
    - Serum creatinine and estimated glomerular filtration rate
    - Thyroid-stimulating hormone in people with type 1 diabetes
    - Celiac disease in people with type 1 diabetes
    - Serum potassium levels in patients on ACE inhibitors, ARBs, or diuretics
    - Vitamin B12 if taking Metformin for >5 years

- CBC with platelets
- Calcium, vitamin D, and phosphorus for appropriate people with diabetes

Bone Health

1. Assess fracture risk in older adults with diabetes as part of routine care in diabetes clinical practice, according to risk factors and comorbidities. (Evidence A)

2. Monitor bone mineral density using dual-energy X-ray absorptiometry in older adults with diabetes (aged ≥65 years) and younger individuals with diabetes and multiple risk factors every 2-3 years. (Evidence A)

3. Consider the potential adverse impact on skeletal health when selecting pharmacological options to lower glucose levels in people with diabetes. Avoiding medications with a known association with higher fracture risk (e.g., thiazolidinediones and sulfonylureas) is recommended, particularly for those at elevated risk for fractures. (Evidence B)

4. Prioritize use of glucose-lowering medications that are associated with low risk for hypoglycemia to avoid falls. (Evidence B)

5. Advise people with diabetes on their intake of calcium (1000-1200 mg/day) and vitamin D to ensure it meets the recommended daily allowance for those at risk for fracture, either through their diet or supplemental means. (Evidence B)

6. Antiresorptive medications and osteoanabolic agents should be recommended for older adults with diabetes who are at high risk of fracture, including those with low bone mineral density with a T-score ≤ -2.0, history of fragility fracture, or elevated Fracture Risk Assessment Tool score (≥3% for hip fracture or ≥20% for major osteoporotic fracture). (Evidence B)

Additional Information for Medical Evaluation

1. Cognitive Impairment /Dementia

    a. In the presence of cognitive impairment, diabetes treatment plans should be simplified as much as possible and tailored to minimize the risk of hypoglycemia. (Evidence B)

2. Dental Care

    a. Coordinate efforts between the medical and dental teams to appropriately adjust glucose-lowering medication and treatment plans prior to and in the post-dental procedure period as needed. (Evidence B)

3. Low Testosterone and Erectile Dysfunction in Men

    a. In men with diabetes or prediabetes, inquire about sexual health (e.g., Low libido, ED, and depression), screen with a morning serum total testosterone level. (Evidence B)

    b. In men with diabetes or prediabetes, screen for ED, particularly those with high cardiovascular risk, retinopathy, cardiovascular disease, chronic kidney disease, peripheral or autonomic neuropathy, longer duration of diabetes, depression, and hypogonadism, and in those who are not meeting glycemic goals. (Evidence B)

4. Female Sexual Dysfunction

    a. In women with diabetes or prediabetes, inquire about sexual health by screening for desire (libido), arousal, and orgasm difficulties, particularly in those who experience depression and/or anxiety and those with recurrent urinary tract infection. (Evidence B)

    b. In postmenopausal women with diabetes or prediabetes, screen for symptoms and/or signs of genitourinary syndrome of menopause, including vaginal dryness and dyspareunia. (Evidence B)

5. Metabolic Dysfunction-Associated Steatotic Liver Disease and Metabolic Dysfunction-Associated Steatohepatitis Screening and Management

    a. Screen adults with type 2 diabetes or prediabetes, particularly those with obesity or other cardiometabolic risk factors or established cardiovascular disease, for their risk of having or developing cirrhosis related to metabolic dysfunction-associated steatohepatitis (MASH), using a calculated fibrosis-4 index (FIB-4) (derived from age, ALT, AST, and platelets [mdcalc.com/calc/2200/fibrosis4-fib-4-index-liver-fibrosis]), even if they have normal liver enzymes. (Evidence B)

    b. Adults with diabetes or prediabetes with persistently elevated plasma aminotransferase levels for >6 months and low FIB-4 should be evaluated for other causes of liver disease. (Evidence B)

    c. Adults with type 2 diabetes or prediabetes with a FIB-4 $\geq$1.3 should have additional risk stratification by liver stiffness measurement with transient elastography, or, if available, the enhanced liver fibrosis (ELF) test. (Evidence B)

    d. Refer adults with type 2 diabetes or prediabetes at higher risk for significant liver fibrosis (i.e., as indicated by FIB-4, liver stiffness measurement, or ELF) to a gastroenterologist or hepatologist for further evaluation and management. (Evidence B)

e. Adults with type 2 diabetes or prediabetes, particularly with overweight or obesity, who have metabolic dysfunction-associated steatotic liver disease (MASLD) should be recommended lifestyle changes using an interprofessional approach that promotes weight loss, ideally within a structured nutrition plan and physical activity program for cardiometabolic benefits. (Evidence B)

f. In adults with type 2 diabetes, MASLD, and overweight or obesity, consider using a glucagon-like peptide 1 (GLP1) receptor agonist (RA) or a dual glucose-dependent insulinotropic polypeptide (GIP) and GLP-1 RA for the treatment of obesity with potential benefits in MASH as an adjunctive therapy to lifestyle interventions for weight loss. (Evidence B)

g. In adults with type 2 diabetes and biopsy-proven MASH or those at high risk for liver fibrosis (based on non-invasive tests), pioglitazone a GLP-1 RA, or a dual GIP and GLP-1 RA is preferred for glycemic management because of potential beneficial effects on MASH. (Evidence B)

h. Combination therapy with pioglitazone plus GLP-1 RA can be considered for the treatment of hyperglycemia in adults with type 2 diabetes with biopsy-proven MASH and those at high risk of liver fibrosis (identified with noninvasive tests) because of potential beneficial effects of MASH. (Evidence B)

i. For consideration of treatment with a thyroid hormone receptor-ß agonist in adults with type 2 diabetes or prediabetes with MASLD with moderate (F2) or advanced (F3) liver fibrosis on liver histology, or by a validated imaging-based or blood-based test, refer to a gastroenterologist or hepatologist with expertise in MASLD management. (Evidence A)

j. Treatment initiation and monitoring should be individualized and within the contest of an interprofessional team that includes a gastroenterologist or hepatologist, consideration of individual preferences, and a careful shared-decision cost-benefit discussion. (Evidence B)

k. In adults with type 2 diabetes and MASLD, use of glucose-lowering therapies other than pioglitazone or GLP-1 RAs may be continued as clinically indicated, but these therapies lack evidence of benefit in MASH. (Evidence B)

l. Adults with type 2 diabetes and MASLD are at increased cardiovascular risk; therefore, comprehensive management of cardiovascular risk factors is recommended. (Evidence B)

m. Statin therapy is safe in adults with type 2 diabetes and compensated cirrhosis from MASLD and should be initiated or continued for cardiovascular risk reduction as clinically indicated. (Evidence B)

n. In people with decompensated cirrhosis, statin therapy should be used with caution, and close monitoring is needed, given limited safety and efficacy data. (Evidence B)

o. Consider metabolic surgery in appropriate candidates as an option to treat MASH in adults with type 2 diabetes (Evidence B) and to improve cardiovascular outcomes. (Evidence B)

p. Metabolic surgery should be used with caution in adults with type 2 diabetes with compensated cirrhosis from MASLS (Evidence B) and is not recommended in decompensated cirrhosis. (Evidence B)

Facilitating Positive Health Behaviors and Well-being to Improve Health Outcomes

Diabetes Self-Management Education and Support

1. All people with diabetes should be advised to participate in developmentally and culturally appropriate diabetes self-management education and support (DSMES) to facilitate informed decision-making, self-care behaviors, problem-solving, and active collaboration with the health care team. (Evidence A)

2. Consider offering SMSMES via telehealth and/or digital interventions as needed to meet individual preferences, address barriers to access, and improve satisfaction. (Evidence B)

3. DSMES can improve outcomes and reduce costs. (Evidence B)

Medical Nutrition Therapy (MNT) Recommendations

1. **Provide medical nutrition therapy:** An individual medical nutrition therapy program, as needed to achieve treatment goals, provided by a registered dietitian nutritionist, preferably one who has comprehensive knowledge and experience in diabetes care, is recommended for all people with type 1 or type 2 diabetes, prediabetes, and gestational diabetes mellitus (Evidence A), as it can result in cost savings (Evidence B) and improved cardiometabolic outcomes. (Evidence A)

2. **Promote energy balance:** For all people with overweight or obesity, a weight management treatment based on nutrition, physical activity, and behavioral therapy, aiming to achieve and maintain a weight loss of 3-7%, is recommended. (Evidence A)

3. **Evidence-based nutritional advice:**

a. For diabetes prevention and management of people with diabetes and prediabetes, recommend individualized meal plans that keep nutrient quality, total calories, and metabolic goals in mind (Evidence B) as data do not support a specific macronutrient pattern.

b. Eating patterns should emphasize key nutrition principles (inclusion of non-starchy vegetables, whole fruits, legumes, lean proteins, whole grains, nuts and seeds, and low-fat dairy or nondairy alternatives) and minimize consumption of red meat, sugar-sweetened beverages, sweets, refined grains, processed and ultra processed foods in people with prediabetes and diabetes. (Evidence B)

c. Consider reducing overall carbohydrate intake for adults with diabetes to improve glycemia, as this approach may be applied to a variety of eating patterns that meet individual needs and preferences. (Evidence B)

d. Counsel against ß-carotene supplementation, as there is evidence of harm for certain individuals, and it confers no benefit. (Evidence B)

e. Advise adults with diabetes and those at risk for diabetes who consume alcohol to not exceed the recommended daily limits. (Evidence B) Advise abstainers to not start drinking alcohol, even in moderation.

f. Educate people with diabetes about the signs, symptoms, and self-management of delayed hypoglycemia after drinking alcohol, especially when using insulin or insulin secretagogues. The importance of monitoring glucose after drinking alcoholic beverages to reduce hypoglycemia risk should be emphasized. (Evidence B)

g. Counsel people with diabetes to limit sodium consumption to <2,300 mg/day, as clinically appropriate, (Evidence B) and that the best way to achieve this is through limiting consumption of processed foods. (Evidence B)

h. Counsel people with prediabetes and diabetes that water is recommended over nutritive and nonnutritive sweetened beverages. (Evidence A)

i. Counsel people with diabetes and those at risk for diabetes that nonnutritive sweeteners can be used instead of sugar-sweetened products if consumed in moderation and for the short term to reduce overall calorie and carbohydrate intake. (Evidence B)

j. Screen people with diabetes and those at risk for diabetes for malnutrition, especially those who have undergone metabolic surgery (Evidence A) and those being treated with weight loss pharmacologic therapies. (Evidence B)

4. **Carbohydrates:**

   a. Emphasize minimally processed, nutrient-dense, high fiber carbohydrate sources (at least 14 g fiber per 1000 kcal). (Evidence B)

   b. Advise people with diabetes and those at risk to replace sugar-sweetened beverages (including fruit juices) with water or low calorie, no calorie beverages as much as possible to manage glycemia and reduce risk for cardiometabolic disease (Evidence B) and minimize consumption of foods with added sugar that have the capacity to displace healthier, more nutrient-dense food choices. (Evidence A)

   c. Provide education on the glycemic impact of carbohydrate (Evidence A), fat, and protein (Evidence B) tailored to an individual's needs, insulin plan, and preferences to optimize mealtime insulin dosing.

   d. When using a flexible insulin therapy program, education on the glycemic impact of carbohydrate (Evidence A), fat, and protein (Evidence B) should be tailored to an individual's needs and preferences and used to optimize mealtime insulin dosing.

   e. When using fixed insulin doses, individuals should be provided with education about consistent patterns of carbohydrate intake with respect to time and amount while considering the insulin action time, as it can result in improved glycemia and reduce the risk for hypoglycemia. (Evidence B)

5. **Protein:**

   People with diabetes and those at risk for diabetes are advised to incorporate more plant-based protein sources (e.g., nuts, seeds, and legumes) as part of an overall diverse eating pattern to reduce cardiovascular disease risk. (Evidence B)

   a. Counsel people with diabetes to consider an eating plan emphasizing elements of a Mediterranean eating pattern, which is rich in monounsaturated and polyunsaturated fats and long-chain fatty acids such as fatty fish, nuts, and seeds, to reduce cardiovascular disease risk (Evidence A) and improve glucose metabolism (Evidence B)

6. **Dietary fat:**

   a. Counsel people with diabetes and those at risk for diabetes to limit intake of foods high in saturated fat (e.g., red meat, full-fat dairy, butter, and coconut oil) to help reduce cardiovascular disease risk (Evidence A).

7. **Religious Fasting:**

   a. Use the International Diabetes Federation along with Diabetes and Ramadan International Alliance comprehensive prefasting risk assessment to generate a risk score for the safety of religious fasting. Provide fasting-focused education to minimize risks. (Evidence B)

   b. Assess and optimize treatment plan, dose, and timing for people with diabetes well in advance of religious fasting to reduce risk of hypoglycemia, dehydration, hyperglycemia, and/or ketoacidosis. (Evidence B)

   c. Assess and optimize treatment plan, dose, and timing for people with diabetes well in advance of religious fasting to reduce risk of hypoglycemia, dehydration, hyperglycemia, and/or ketoacidosis. (Evidence B)

   d. Assess and optimize treatment plan, dose, and timing for people with diabetes well in advance of religious fasting to reduce risk of hypoglycemia, dehydration, hyperglycemia, and/or ketoacidosis. (Evidence B)

<u>Physical Activity</u>

1. Counsel youth with type 2 diabetes to engage in 60 min/day or more of moderate- or vigorous-intensity aerobic activity, with vigorous muscle-strengthening and bone-strengthening activates at least 3 days/week. (Evidence B).

2. Counsel most adults with type 2 diabetes to engage in 150 min or more of moderate- to vigorous-intensity aerobic activity per week, spread over at least 3 days/week, with no more than 2 consecutive days without activity. Shorter durations (minimum 75 min/week) of vigorous-intensity or interval training may be sufficient for younger and more physically fit individuals. (Evidence B)

3. Counsel adults with type 2 diabetes to engage in 2-3 sessions/week of resistance exercise on nonconsecutive days. (Evidence B)

4. For all people with diabetes, evaluate baseline physical activity and time spent in sedentary behavior (i.e., quiet time sitting, lying, and leaning). For people who do not meet activity guidelines, encourage an increase in physical activities (e.g., walking, yoga, hours work, gardening, swimming, and dancing) above baseline. (Evidence B)

<u>Smoking Cessation: Tobacco and E-Cigarettes</u>

1. Advise all people with diabetes not to use cigarettes or other tobacco products or e-cigarettes. (Evidence A)

2. Ask people with diabetes routinely about the use of cigarettes or other tobacco products. After identification of use, recommend and refer for a combination treatment consisting of both tobacco/smoking cessation counseling and pharmacologic therapy. (Evidence A)

Behavioral Health

Supporting Positive Health Behaviors:

1. Behavioral strategies should be used to support diabetes self-management and engagement in health behaviors (e.g., taking medications, using diabetes technologies, and engaging in physical activity and healthy eating) to promote optional health-related quality of life and health outcomes. (Evidence A)

Psychosocial Care:

1. Psychosocial care should be provided to all people with diabetes, with the goal of optimizing health-related quality of life and health outcomes. Such care should be integrated with routine medical care and delivered by trained health care professionals using a collaborative, person-centered, culturally informed approach. (Evidence A)

2. When indicated, refer to mental health professionals or other trained health professionals, ideally those with experience in diabetes, for further assessment and treatment for symptoms of diabetes distress, depression, suicidality, anxiety, treatment–related fear of hypoglycemia, disordered eating, and/or cognitive capacities. Such specialized psychosocial care should use age-appropriate standardized and validated tools and treatment approaches. (Evidence B)

Diabetes Distress:

1. Screen for diabetes distress at least annually in people with diabetes, caregivers, and family members, and repeat screening when treatment goals are not met, at transition times, and/or in the presence of diabetes complications. Health care professionals can address diabetes distress and may consider referral to a qualified behavioral health professional, ideally one with experience in diabetes, for further assessment and treatment if indicated. (Evidence B)

Anxiety:

1. Screen people with diabetes for anxiety symptoms. Health care professionals can discuss diabetes-related worries and should consider referral to a qualified behavioral health professional for further assessment and treatment if anxiety symptoms indicate interference with diabetes self-management behaviors or quality of life. (Evidence B)

2. Screen people with diabetes at risk for hypoglycemia or fear of hypoglycemia, especially if they have experienced severe and/or frequent hypoglycemic events. (Evidence B)

Depression:

1. Conduct at least annual screening of depressive symptoms in all people with diabetes and more frequently among those with a history of depression. Use age-appropriate, validated depression screening measures, recognizing that further evaluation will be necessary for individuals who have a positive screen. (Evidence B)

2. Rescreen for depression at diagnosis of complications or when there are significant changes in medical status. (Evidence B)

3. Refer to qualified behavioral health professionals or other trained health care professionals with experience using evidence-based treatment approaches for depression in conjunction with collaborative care with the diabetes treatment team. (Evidence A)

Disordered Eating Behavior:

1. Screen for disordered or disrupted eating using validated screening measures. In addition, a review of the medical treatment plan is recommended to identify potential treatment-related effects on hunger/caloric intake. (Evidence B)

2. Consider re-evaluating the treatment plan of people with diabetes who present with symptoms of disordered eating behavior, and eating disorder, or disrupted patterns of eating. Key qualifications include familiarity with the diabetes disease physiology, treatments for diabetes and disordered eating behaviors, and weight-related and psychological risk factors for disordered eating behaviors. (Evidence B)

Serious Mental Illness:

1. Provide an increased level of support for people with diabetes and serious mental illness through enhanced monitoring of, and assistance with, diabetes self-management behaviors. (Evidence B)

Cognitive Capacity and Impairment:

1. Cognitive capacity should be monitored throughout the life span for all individuals with diabetes, particularly in those who have documented cognitive disabilities, those who experience severe hypoglycemia, very young children, and older adults. (Evidence B)

Sleep Health:

1. Consider screening for sleep health in people with diabetes, including symptoms of sleep disorders, disruptions to sleep due to diabetes symptoms or management needs, and worries about sleep. Refer to sleep medicine specialists and/or qualified behavioral health professionals as indicated. (Evidence B)

2. Counsel people with diabetes to practice sleep-promoting routines and habits. (Evidence A)

Management Plan

Glycemic Assessment:

1. Assess glycemic status by A1C and/or continuous glucose monitoring (CGM) metrics such as time in range, time above range, and time below range. (Evidence B) Fructosamine or CGM can be used for glycemic monitoring when an alternative to A1C is required. (Evidence B)

Glycemic Goals:

2. An A1C goal of <7% (53 mmol/mol) is appropriate for many nonpregnant adults without severe hypoglycemia or frequent hypoglycemia affecting health or quality of life. (Evidence A)

3. A goal time in range of >70% in people using CGM is appropriate for many nonpregnant adults. (Evidence B)

4. A goal percent time <70 mg/dL (<3.9 mmol/L) of <4% (or <1% for older adults) and a goal percent time <54 mg/dL (<3.0 mmol/L) of <1% are recommended in people using CGM to prevent hypoglycemia. Deintensify or modify therapy if these goals are not met. (Evidence B)

5. Based on health care professional judgement and the preference of the person with diabetes, achievement of lower A1C levels than the goal of 7% (53 mmol/mol) may be acceptable and even beneficial if it can be achieved safely without frequent or severe hypoglycemia or other adverse effects of treatment. (Evidence B)

6. Less stringent glycemic goals may be appropriate for individuals with limited life expectancy or where the harms of treatment are greater than the benefits. (Evidence B)

7. Deintensify diabetes medications for individuals for whom the harms and/or burdens of treatment may be greater than the benefits, within individualized glycemic goals. (Evidence B)

8. Set a glycemic goal during consultations to improve outcomes. (Evidence A)

Hypoglycemia:

1. Use of CGM is beneficial and recommended for individuals at high risk of hypoglycemia. (Evidence A)

2. Glucose is the preferred treatment for the conscious individual with blood glucose <70 mg/dL (3.9 mmol/L), although any form of carbohydrate that contains glucose may be used. Avoid using foods and beverages high in fat and/or protein for initial treatment of hypoglycemia. Fifteen minutes after initial treatment, repeat the treatment if hypoglycemia persists. (Evidence B)

3. Glucagon should be prescribed for all individuals taking insulin or at high risk of hypoglycemia. (Evidence A) Family, caregivers, school personnel, and others providing support to these individuals should know its location and be educated on how to administer it. Glucagon preparations that do not have to be reconstituted are preferred. (Evidence B)

4. All individuals taking insulin should receive structured education for hypoglycemia prevention and treatment, with ongoing education for those who experience hypoglycemic events. (Evidence A)

5. Regularly assess cognitive function; if impaired or declining cognition is found, the clinician, person with diabetes, and caregiver should increase vigilance for hypoglycemia. (Evidence B)

Hyperglycemic Crises: Diagnosis, Management, and Prevention

1. Provide structured education on the recognition, prevention, and management of hyperglycemic crisis to all individuals with type 1 diabetes, those with type 2 diabetes who have experienced these events, and people at high risk for these events. (Evidence B)

Diabetes Technology

General Device Principles:

1. Diabetes devices should be offered to people with diabetes. (Evidence A)

2. Initiation of continuous glucose monitoring (CGM) should be offered to people with type 1 diabetes early in the disease, even at the time of diagnosis. (Evidence A)

Blood Glucose Monitoring:

1. People with diabetes should be provided with blood glucose monitoring devices as indicated by their circumstances, preferences, and treatment. People using continuous glucose monitoring devices must also have access to blood glucose monitoring at all times. (Evidence A)

2. People who are taking insulin and using blood glucose monitors should be encouraged to check their blood glucose levels when appropriate based on their insulin therapy. This may include checking when fasting, prior to meals and snacks, after meals, at bedtime, in

the middle of the night, prior to, during, and after exercise, when hypoglycemia is suspected, after treating low blood glucose levels until they are normoglycemic, when hyperglycemia is suspected, and prior to and while performing critical tasks such as driving. (Evidence B)

3. Consider potential interference of medication and substances on glucose levels measured by blood glucose meters. (Evidence B)

Continuous Glucose Monitoring Devices:

1. Recommend real-time continuous glucose monitoring (rtCGM) (Evidence A) for diabetes management in adults with diabetes on any type of insulin therapy. The choice of CGM device should be made on the individual's circumstances, preferences, and needs. (Evidence B)

2. Consider using real-time continuous glucose monitoring (rtCGM) and intermittently scanned CGM (isCGM) in adults with type 2 diabetes treated with glucose-lowering medications other than insulin to achieve and maintain individualized glycemic goals. The choice of device should be made based on the individual's circumstances, preferences, and needs. (Evidence B)

3. In people with diabetes on insulin therapy, rtCGM devices should be used as close to daily as possible for maximal benefit. Intermittently scanned continuous glucose monitoring (is CGM) devices should be scanned frequently, at a minimum once every 8h. People with diabetes should have uninterrupted access to their supplies to minimize gaps in continuous glucose monitoring. (Evidence A)

4. CGM can help to achieve glycemic goals (e.g., time in range sand time above range) (Evidence A) and A1C goal. (Evidence B)

Insulin Delivery Systems:

Offer connected insulin pens for people with diabetes taking multiple daily insulin injections. (Evidence B) FDA-approved insulin dose calculators/decision support systems may be helpful for calculating insulin doses. (Evidence B)

Insulin Pumps and Automated Insulin Delivery Systems:

1. AID systems should be the preferred insulin delivery method to improve glycemic outcomes and reduce hypoglycemia and disparities in youth and adults with type 1 diabetes who are capable of using the device (either by themselves or with a caregiver). Choice of an AID system should be made based on the individual's circumstances, preferences, and needs. (Evidence A)

2. Insulin pump therapy, preferably with CGM, should be offered for diabetes management to youth and adults on MDI with type 2 diabetes who can use the device safety (either by

themselves or with a caregiver). The choice of device should be made based on the individual's circumstances, preferences, and needs. (Evidence A)

Open-Source Automated Insulin Dosing:

1. Support and provide diabetes management advice to people with diabetes who choose to use an open-source closed-loop system. (Evidence B)

Digital Health Technology:

1. Consider combining technology (CGM, insulin pump, and/or diabetes apps) with online coaching to improve glycemic outcomes in individuals with diabetes or prediabetes. (Evidence B)

Inpatient Care:

1. In people with diabetes wearing personal DGM, the use of CGM should be continued when clinically appropriate during hospitalization, with confirmatory point-of-care glucose measurements for insulin dosing and hypoglycemic assessment and treatment under an institutional protocol. (Evidence B)

Obesity and Weight Management for the Prevention and Treatment of Type 2 Diabetes

Assessment and Monitoring of the Individual with Overweight or Obesity:

1. In people with type 2 diabetes and overweight or obesity, weight management should represent a primary goal of treatment along with glycemic management. (Evidence A)

2. Provide weight management treatment, aiming for a magnitude of weight loss. Weight loss of 3-7% of base line weight improves glycemia and other intermediate cardiovascular risk factors. (Evidence A) Sustained weight loss of >10% of body weight usually confers greater benefits, including disease-modifying effects and possible remission of type 2 diabetes, and may improve long-term cardiovascular outcomes and mortality. (Evidence B)

Nutrition, Physical Activity, and Behavioral Therapy:

1. Nutrition, physical activity, and behavioral therapy are recommended for people with type 2 diabetes and overweight or obesity to achieve both weight and outcome goals. (Evidence B)

2. Interventions including high frequency of counseling (≥16 sessions in 6 months) with focus on nutrition changes, physical activity, and behavioral strategies to achieve a 500-750 kcal/day energy deficit should be recommended for weight loss and should be considered when available. (Evidence A)

3. Nutrition recommendations should be individualized to the person's preferences and nutritional needs. Use nutritional plans that creates an energy deficit, regardless of macronutrient composition, to achieve weight loss. (Evidence A)

4. Effective long-term (≥1 year) weight maintenance programs provide monthly contact and support, include frequent self-monitoring of body weight (weekly or more frequently) and other self-monitoring strategies (e.g., food diaries or wearables), and encourage regular physical activity (200-300 min/week). (Evidence A)

5. Short-term nutrition intervention using structured, very-low-calorie meals (800-1000 kcal/day) may be prescribed only to carefully selected individuals by trained practitioners in medical settings with close monitoring. Long-term, comprehensive weight maintenance strategies and counseling should be integrated to maintain weight loss. (Evidence B)

6. Nutritional supplements have not been shown to be effective for weight loss and are not recommended. (Evidence A)

Pharmacotherapy:

1. When choosing glucose-lowering medication for people with type 2 diabetes and overweight or obesity, prioritize medications with beneficial effect on weight. (Evidence B)

2. Weight management pharmacotherapy should be considered for people with diabetes and overweight or obesity along with lifestyle changes. Potential benefits and risks must be considered. (Evidence A)

3. In people with diabetes and overweight or obesity, the preferred pharmacotherapy should be a glucagon-like peptide 1 receptor agonist or dual glucose-dependent insulinotropic polypeptide and glucagon-like peptide 1 receptor agonist with greater weight loss efficacy (i.e., semaglutide or tirzepatide), especially considering their added weight-independent benefits (e.g., glycemic and cardiometabolic). (Evidence A)

4. Screen people with diabetes and obesity who have lost significant weight for malnutrition, especially those who have undergone metabolic surgery (Evidence A) and those treated with weight management pharmacologic therapy. (Evidence B)

5. Weight management pharmacotherapy indicated for chronic therapy should be continued beyond reaching weight loss goals to maintain the health benefits. Sudden

   discontinuation of weight management pharmacotherapy often results in weight gain and worsening of cardiometabolic risk factors. (Evidence A)

6. For those not reaching goals, reevaluate weight management therapies and intensify treatment with additional approaches (e.g., metabolic surgery, additional pharmacologic

agents, and structured lifestyle management programs). (Evidence A)

Metabolic Surgery:

1. Consider metabolic surgery as a weight and glycemic management approach in people with diabetes with BMI ≥30 kg/m² (BMI ≥ 27.5 kg/m² in Asian American individuals) who are otherwise good surgical candidates. (Evidence A)

2. People being considered for metabolic surgery should be evaluated for comorbid psychological conditions and social and situational circumstances that have the potential to interfere with surgery outcomes. (Evidence B)

3. People who undergo metabolic surgery should receive long-term medical and behavioral support and routine micronutrient, nutritional, and metabolic status monitoring. (Evidence B)

4. If post-metabolic surgery hypoglycemia is suspected, clinical evaluation should exclude other potential disorders contributing to hypoglycemia, and management should include education, medical nutrition therapy with a dietician experienced in post-metabolic surgery hypoglycemia, and medication treatment, as needed. (Evidence A)

Pharmacologic Approaches to Glycemic Treatment

Pharmacologic Therapy for Adults with Type 1 Diabetes:

1. Most individuals with type 1 diabetes should be treated with multiple daily injections of prandial and basal insulin, or continuous subcutaneous insulin infusion. (Evidence A)

2. For most adults with type 1 diabetes, insulin analogs (or inhaled insulin) are preferable over injectable human insulins to minimize hypoglycemia risk. (Evidence A)

3. Early use of continuous glucose monitoring is recommended for adults with type 1 diabetes to improve glycemic outcomes and quality of life and to minimize hypoglycemia. (Evidence B)

4. Automated insulin delivery systems should be offered to all adults with type 1 diabetes. (Evidence A)

5. To improve glycemic outcomes and quality of life and to minimize hypoglycemia risk, most adults with type 1 diabetes should receive education on how to match mealtime

   insulin doses to carbohydrate intake, fat and protein intake. They should be taught how to modify the insulin dose (correction dose) based on concurrent glycemia, glycemic trends (if available), sick -day management, and anticipated physical activity. (Evidence B)

Pharmacologic Therapy for Adults with Type 2 Diabetes:

1. Healthy behaviors, diabetes self-management education and support, avoidance of therapeutic inertia, and social determinants of health should be considered in the glucose-lowering management of type 2 diabetes. (Evidence A)

2. Combination therapy can be considered in adults with type 2 diabetes at treatment initiation to shorten time to attainment of individual treatment goals. (Evidence A)

3. In adults with type 2 diabetes and established or high risk of atherosclerotic cardiovascular disease, the treatment plan should include medications with demonstrated benefits to reduce cardiovascular events (e.g., glucagon-like peptide 1 receptor agonist [GLP-1 RA] and/or sodium-glucose cotransporter 2 [SGLT2] inhibitor) for glycemic management and comprehensive cardiovascular risk reduction (irrespective of A1C). (Evidence A)

4. In adults with type 2 diabetes who have heart failure (HF) (with either reduced or preserved ejection fraction), an SGLT2 inhibitor is recommended for both glycemic management and prevention of HF hospitalization (irrespective of A1C) (Evidence A)

5. In adults with type 2 diabetes and symptomatic heart failure with preserved ejection fraction (HFpEF) and obesity, a GLP-1 RA with demonstrated benefits for both glycemic management and reduction of HF-related symptoms (irrespective of A1C) is recommended. (Evidence A)

6. In adults with type 2 diabetes who have CKD (with confirmed estimated glomerular filtration rate [eGFR] 20-60 mL/min/1.73 m^2 and/or albuminuria), an SGLT2 inhibitor or GLP-1 RA with demonstrated benefit in this population should be used for both glycemic management (irrespective of A1C) and for slowing progression of CKD and reduction in cardiovascular events. The glycemic benefits of SGLT2 inhibitors are reduced at eGFR <45 mL/min/1.73 m^2. (Evidence A)

7. In adults with type 2 diabetes and advanced DKD (eGFR <30 mL/min/1.73 m^2), a GLP-1 RA is preferred for glycemic management due to lower risk of hypoglycemia and for cardiovascular event reduction. (Evidence B)

8. In adults with type 2 diabetes, metabolic dysfunction-associated steatotic liver disease (MASLD), and overweight or obesity, consider using a GLP-1 RA or a dual glucose-dependent insulinotropic polypeptide (GIP) and GLP-1 RA with potential benefits in metabolic dysfunction-associated steatohepatitis (MASH) for glycemic management and as an adjunctive to healthy interventions for weight loss. (Evidence B)

9. In adults with type 2 diabetes and biopsy-proven MASH or those at high risk for liver fibrosis (based on noninvasive tests), pioglitazone, a GLP-1 RA or a dual GIP and GLP-1 RA is preferred for glycemic management due to potential beneficial effects on MASH. (Evidence B)

10. Combination therapy with pioglitazone plus a GLP-1 RA can be considered for the treatment of hyperglycemia in adults with type 2 diabetes and biopsy-proven MASH or those at high risk of liver fibrosis (identified with non-invasive tests) due to potential beneficial effects on MASH. (Evidence B)

11. Treatment modification (intensification or deintensification) for adults not meeting individualized treatment goals should not be delayed. (Evidence A)

12. Choice of glucose-lowering therapy modification should take into consideration individualized glycemic and weight goals, presence of comorbidities (cardiovascular, kidney, liver, and other metabolic comorbidities), and the risk of hypoglycemia. (Evidence A)

13. When initiating a new glucose-lowering medication, reassess the need for and/or dose of medications with higher hypoglycemia risk (i.e., sulfonylureas, meglitinides, and insulin) to minimize the risk of hypoglycemia and treatment burden. (Evidence A)

14. Concurrent use of dipeptidyl peptidase 4 (DPP-4) inhibitors with aGLP-1 RA is not recommended due to lack of additional glucose lowering beyond that of a GLP-1 RA along. (Evidence B)

15. In adults with type 2 diabetes who have not achieved their individualized weight goals, additional weight management interventions (e.g., intensification of lifestyle modifications, structured weight management programs, pharmacologic agents, or metabolic surgery, as appropriate) are recommended. (Evidence A)

16. In adults with type 2 diabetes and no evidence of insulin deficiency, a GLP-1 RA, including a dual GIP and GLP-RA, is preferred to insulin. (Evidence A)

17. If insulin is used, combination therapy with a GLP-1 RA, including a dual GIP and GLP-1 RA, is recommended for greater glycemic effectiveness as well as well as beneficial effects on weight and hypoglycemia risk for adults with type 2 diabetes. Insulin dosing should be reassessed upon addition or dose escalation of a GLP-1 RA or dual GIP and GLP-1 RA. (Evidence A)

18. In adults with type 2 diabetes who are initiating insulin therapy, continue glucose-lowering agents (unless contraindicated or not tolerated) for ongoing glycemic and metabolic benefits (i.e., weight, cardiometabolic, or kidney benefits). (Evidence A)

Additional Recommendations for all Individuals with Diabetes: Glucagon

1. Glucagon should be prescribed for all individuals requiring intensive insulin therapy or at high risk for hypoglycemia. Family, caregivers, school personnel, and others proving support to these individuals should know its location and be educated on how to administer it. Glucagon preparations that do not require reconstitution are preferred. (Evidence B)

Family Planning:

1. Individuals with diabetes of childbearing potential should be counseled on contraception options (Evidence A)

2. A person-centered shared decision-making approach to preconception planning is essential for all individuals with diabetes and of childbearing potential. Preconception planning should address attainment of glycemic goals and optimal glycemic management in preparation for pregnancy. (Evidence A)

Cardiovascular Disease and Risk Management

Screening and Diagnosis:

1. Blood pressure should be measured at every routine clinical visit, or at least every 6 months. Individuals found to have elevated blood pressure without a diagnosis of hypertension (systolic blood pressure 120-129 mmHg and diastolic blood pressure <80 mmHg) should have blood pressure confirmed using multiple readings, including measurements on a separate day, to diagnose hypertension. (Evidence A) Hypertension is defined as a systolic blood pressure ≥130 mmHg or a diastolic blood pressure ≥80 mm/Hg based on an average of ≥ 2 measurements obtained on ≥2 occasions. (Evidence A)

2. Counsel all people with hypertension and diabetes to monitor their blood pressure at home after appropriate education. (Evidence A)

Treatment Goals:

1. For people with diabetes and hypertension, blood pressure goals should be individualized through a shared decision-making process that addresses cardiovascular risk, potential adverse effects of antihypertensive medications, and patient preferences. (Evidence B)

2. The on-treatment target blood pressure goal is <130/80 mmHg, if it can be safely attained. (Evidence B)

3. In pregnant individuals with diabetes and chronic hypertension, a blood pressure threshold of 140/90 mm/Hg for initiation or titration of therapy is associated with better pregnancy outcomes than reserving treatment for severe hypertension, with no increase in

risk of small-for-gestational age birth weight. A blood pressure target of 110-135/85 mmHg is suggested in the interest of reducing the risk for accelerated maternal hypertension. (Evidence A)

Treatment Strategies

Lifestyle Interventions:

1. For people with blood pressure >20/80 mmHg, lifestyle intervention consists of weight loss when indicated, a Dietary Approaches to Stop Hypertension (DASH)-style eating pattern including reducing sodium and increasing potassium intake, moderation of alcohol intake, smoking cessation, and increased physical activity. (Evidence A)

Pharmacologic Interventions:

1. Individuals with confirmed office-based blood pressure ≥130/80 qualify for initiation and titration of pharmacologic therapy to achieve the recommended blood pressure goal of <130/80 mmHg. (Evidence A)

2. Individuals with confirmed office-based blood pressure ≥150/90 mmHg should, in addition to lifestyle therapy, have prompt initiation and timely titration of two drugs or a single-pill combination of drugs demonstrated to reduce cardiovascular events in people with diabetes. (Evidence A)

3. Treatment for hypertension should include drug classes demonstrated to reduce cardiovascular events in people with diabetes. ACE inhibitors or angiotensin receptor blockers (ARBs) are recommended first-line therapy for hypertension in people with diabetes and coronary artery disease. (Evidence A)

4. Multiple-drug therapy is generally required to achieve blood pressure goals. Avoid combinations of ACE inhibitors and ARBs and combinations of ACE inhibitors or ARBs (including ARBs and neprilysin inhibitors) with direct renin inhibitors. (Evidence A)

5. An ACE inhibitor or ARB, at the maximum tolerated dose indicated for blood pressure treatment, is the recommended first-line treatment for hypertension in people with diabetes and urinary albumin-to-creatinine ration ≥300 mg/g creatinine (Evidence A) or 30-299 mg/g creatinine (Evidence B). If one class is not tolerated, the other should be substituted. (Evidence B)

6. Monitor for increased serum creatinine and for increased serum potassium levels when ACE inhibitors, ARBs, and mineralocorticoid receptor agonists (MRAs) are used, for hypokalemia when diuretics are used at routine visits, at 7-14 days after initiation or after a dose change. (Evidence B)

7. ACE inhibitors, angiotensin receptor blockers, MRAs, direct renin inhibitors, and neprilysin inhibitors should be avoided in sexually active individuals of childbearing potential who are not using reliable contraception and are contraindicated in pregnancy. (Evidence A)

Resistant Hypertension:

1. Individuals with hypertension who are not meeting blood pressure targets on three classes of antihypertensive medications (including a diuretic) should be considered for mineralocorticoid receptor antagonist MRA) therapy. (Evidence A)

Lipid Management

Lifestyle Intervention:

1. Lifestyle modification focusing on weight loss (if indicated); application of a Mediterranean or Dietary Approaches to Stop Hypertension (DASH) eating pattern; reduction of saturated fat and *trans*-fat; increase of dietary n-3 fatty acids, viscous fiber, and plant stanols/sterols intake; and increased physical activity should be recommended to improve the lipid profile and reduce the risk of developing atherosclerotic cardiovascular disease in people with diabetes. (Evidence A)

Ongoing Therapy and Monitoring with Lipid Panel

1. Obtain a lipid profile at initiation of statins or other lipid-lowering therapy, 4-12 weeks after initiation or a change in dose, and annually thereafter, as it facilitates monitoring the response to therapy and informs medication-taking behavior. (Evidence A)

Statin Treatment

Primary Prevention:

1. For people with diabetes aged 40-75 years without atherosclerotic cardiovascular disease (ASCVD), use moderate-intensity statin therapy in additional to lifestyle therapy (Evidence A)

2. For people with diabetes aged 40-75 at higher cardiovascular risk, including those with one or more ASCVD risk factors, high-intensity statin therapy is recommended to reduce LDL cholesterol by ≥50% of baseline and to obtain an LDL cholesterol goal of <70 mg/dL (<1.8 mmol/L). (Evidence A)

3. For people with diabetes aged 40-75 years at higher cardiovascular risk, especially those with multiple additional ASCVD risk factors and an LDL cholesterol ≥70 mg/dL (≥1.8 mmol/L), it may be reasonable to add ezetimibe or a PCSK9 inhibitor to maximum tolerated statin therapy. (Evidence B)

4. In adults with diabetes aged >75 years already on statin therapy, it is reasonable to continue statin treatment. (Evidence B)

5. In people with diabetes intolerant to statin therapy, treatment with bempedoic acid is recommended to reduce cardiovascular event rates as an alternative cholesterol-lowering plan. (Evidence A)

6. In most circumstances, lipid-lowering agents should be stopped prior to conception and avoided in sexually active individuals of childbearing potential who are not using reliable contraception. (Evidence B)

Secondary Prevention:

1. For people of all ages with diabetes and atherosclerotic cardiovascular disease, high intensity statin therapy should be added to lifestyle therapy. (Evidence A)

2. For people with diabetes and ASCVD, treatment with high-intensity statin therapy is recommended to obtain an LDL cholesterol reduction of ≥50% from baseline and an LDL cholesterol goal of <55 mg/d (<1.4 mmol/L). Addition of ezetimibe or a PCSK9 inhibitor with proven benefit in this population is recommended if this goal is not achieved on maximum tolerated statin therapy. (Evidence B)

3. For people with diabetes and ASCVD intolerant to statin therapy, PCSK9 inhibitor therapy with monoclonal antibody treatment or bempedoic acid therapy should be considered as an alternative cholesterol-lowering therapy.

Treatment of Other Lipoprotein Fractions or Goals:

1. In individuals with ASCVD or other cardiovascular risk factors on a statin with managed LDL cholesterol but elevated triglycerides (150-499 mg/dL), the addition of icosapent ethyl can be considered to reduce cardiovascular risk. (Evidence B)

Other Combination Therapy:

1. Statin plus fibrate combination therapy has not been shown to improve ASCVD outcomes and is generally not recommended. (Evidence A)

2. Statin plus niacin combination therapy has not been shown to provide additional cardiovascular benefit above statin therapy alone, may increase the risk of stroke with additional side effects and is generally not recommended. (Evidence A)

Antiplatelet Agents

1. Use aspirin therapy (75-162 mg/day) as a secondary prevention strategy in those with diabetes and a history of ASCVD. (Evidence A)

2. For individuals

3. Combination therapy with aspirin plus low-dose rivaroxaban should be considered for individuals with stable coronary and/or peripheral artery disease (PAD) and low bleeding risk to prevent major adverse limb and cardiovascular events. (Evidence A)

4. Aspirin therapy (75-162 mg/day) may be considered as a primary prevention strategy in those with diabetes who are at increased cardiovascular risk after a comprehensive discussion with the individual on the benefits versus the comparable increased risk of bleeding. (Evidence A)

Cardiovascular Disease

Screening:

1. In asymptomatic individuals, routine screening for coronary artery disease is not recommended as it does not improve outcomes, as long as ASCVD risk factors are treated. (Evidence A)

2. Adults with diabetes are at increased risk for the development of asymptomatic cardiac structural or functional abnormalities (stage B heart failure) or symptomatic (stage c) heart failure. Consider screening adults with diabetes by measuring a natriuretic peptide (B-type natriuretic peptide [BNP] or N-terminal pro-BNP [NT-proBNP]) to facilitate prevention of stage C heart failure. (Evidence B)

3. In asymptomatic individuals with diabetes and abnormal natriuretic peptide levels, echocardiography is recommended to identify stage B health failure. (Evidence A)

Treatment:

1. Among people with type 2 diabetes who have established ASCVD or established kidney disease, as sodium-glucose cotransporter 2 (SGLT2) inhibitor or glucagon-like peptide 1 receptor agonist (GLP-1 RA) with demonstrated cardiovascular disease benefit is recommended as part of the comprehensive cardiovascular risk reduction and/or glucose-lowering treatment plans. (Evidence A)

2. In people with type 2 diabetes and established ASCVD, multiple atherosclerotic cardiovascular disease risk factors, or chronic kidney disease (CKD), an SGLT2 inhibitor with demonstrated cardiovascular benefit is recommended to reduce the risk of major adverse cardiovascular events and/or heart failure hospitalization. (Evidence A)

3. In people with type 2 diabetes and established ASCVD, multiple risk factors for ASCVD, or chronic kidney disease (CKD), a GLP-1 RA with demonstrated cardiovascular benefit is recommended to reduce the risk of major adverse cardiovascular events. (Evidence A)

4. In people with type 2 diabetes and established ASCVD or multiple risk factors for ASCVD, combined therapy with an SGLT2 inhibitor with demonstrated cardiovascular benefit and a GLP-1 RA with demonstrated cardiovascular benefit may be considered for additive reduction in the risk of adverse cardiovascular and kidney events. (Evidence A)

5. In people with type 2 diabetes and established heart failure with either preserved or reduced ejection fraction, an SGLT2 inhibitor (including SGLT1/2 inhibitor) with proven benefit in this population is recommended to reduce the risk of worsening heart failure and cardiovascular death. (Evidence A)

6. In people with type 2 diabetes and established heart failure with either preserved or reduced ejection fraction, an SGLT2 inhibitor with proven benefit in this population is recommended to improve symptoms, physical limitations, and quality of life. (Evidence A)

7. For individuals with type 2 diabetes and CKD with albuminuria treated with maximum tolerated doses of ACE inhibitor or ARB, recommend treatment with a nonsteroidal MRA with demonstrated benefit to improve cardiovascular outcomes and reduce the risk of CKD progression. (Evidence A)

8. In people with established ASCVD or aged ≥55 years with additional cardiovascular risk factors, ACE inhibitor or ARB therapy is recommended to reduce the risk of cardiovascular events and mortality. (Evidence A)

9. In individuals with diabetes and asymptomatic stage B heart failure, an interprofessional approach to optimize guideline-directed medical therapy, which should include a cardiovascular disease specialist, is recommended to reduce the risk for progression to symptomatic (stage C) heart failure. (Evidence A)

10. In individuals with diabetes and asymptomatic state B heart failure, ACE inhibitors or ARBs and ß-blockers are recommended to reduce the risk for progression to symptomatic (stage 3) heart failure. (Evidence A)

11. In individuals with type 2 diabetes and asymptomatic stage B heart failure or with high risk of or established cardiovascular disease, treatment with an SGLT inhibitor with proven heart failure prevention benefit is recommended to reduce the risk of hospitalization for heart failure. (Evidence A)

12. In individuals with type 2 diabetes, obesity, and symptomatic heart failure with preserved ejection fraction, therapy with a GLP-1 RA with demonstrated benefit for reduction of heart failure-related symptoms, physical limitations, and exercise function is recommended. (Evidence A)

13. In individuals with type 2 diabetes and CKD, recommend treatment with a nonsteroidal MRA with demonstrated benefit to reduce the risk of hospitalization for heart failure. (Evidence A)

14. In individuals with diabetes, guideline-directed medical therapy for myocardial infarction and symptomatic stage C heart failure is recommended with ACE inhibitors or ARBs, MRAs, angiotensin receptor or neprilysin inhibitor, ß-blockers, and SGLT2 inhibitors, similar to guideline-directed medical therapy for people without diabetes. (Evidence A)

15. In people with type 2 diabetes with stable heart failure, metformin may be continued for glucose lowering if estimated glomerular filtration rate remains >30 ml/min/1.73 m² but should be avoided in unstable or hospitalized individuals with heart failure. (Evidence B)

Chronic Kidney Disease and Risk Management

Screening:

1. Assess kidney function (e.g., spot urinary albumin-to-creatinine ratio [UACR])) and estimated glomerular filtration rate (eGFR) in people with type 1 diabetes with duration of ≥5 years and in all people with type 2 diabetes regardless of treatment. (Evidence B)

2. In people with established diabetic kidney disease (CKD), monitor urinary albumin (e.g., spot UACR) and eGFR 1-4 times per year depending on the stage of the disease. (Evidence B)

Treatment:

1. Optimize glucose management to reduce the risk or low to reduce the risk or slow the progression of CKD. (Evidence A)

2. Optimize blood pressure management (aim for <130/80 mmHg and reduce blood pressure variability to reduce the risk or slow the progression of CKD and reduce cardiovascular risk. (Evidence A)

3. In non-pregnant people with diabetes and hypertension, either an ACE inhibitor or an angiotensin receptor blocker (ARB) is recommended for those with moderately increased albuminuria (UACR 30-299 mg/g creatinine (Evidence B) and is strongly recommended for those with severely increased albuminuria (UACR ≥300 mg/g creatinine) and/or eGFR <60mL/min/1.73 m² to maximally tolerated dose to prevent the progression of kidney disease and reduce cardiovascular events. (Evidence A)

4. Monitor serum creatinine and potassium levels when ACE inhibitors, ARBs, and mineralocorticoid receptor antagonists (MRAs) are used, or for hypokalemia when diuretics are used at routine visits and 7-14 days after initiation or after a dose change. (Evidence B)

5. An ACE inhibitor or an ARB is not recommended for the primary prevention of chronic kidney disease in people with diabetes who have normal blood pressure, normal UACR (<30 mg/g creatinine), and normal eGFR. (Evidence A)

6. Continue renin-angiotensin system blockade for mild to moderate increases in serum creatinine (≤30%) in individuals who have no signs of extracellular fluid volume depletion. (Evidence A)

7. For people with type 2 diabetes and CKD, use of a sodium-glucose co-transporter 2 (SGLT2) inhibitor with demonstrated benefit is recommended to reduce CKD progression and cardiovascular events in individuals with an eGFR ≥20 mL/min/1.73m². (Evidence A)

8. To reduce cardiovascular risk and kidney disease progression in people with type 2 diabetes and CKD, a glucagon-like peptide 1 agonist with demonstrated benefit in this population is recommended. (Evidence A)

9. To reduce cardiovascular events and CKD progression in people with CKD albuminuria, a nonsteroidal MRA that has been shown to be effective in clinical trials is recommended (if eGFR is ≥25 mL/min/1.73m²). Potassium levels should be monitored. (Evidence A)

10. Potentially harmful antihypertensive medications in pregnancy should be avoided in sexually active individuals of childbearing potential who are not using reliable contraception and, if used, should be switched prior to conception to antihypertensive medications considered safer during pregnancy. (Evidence B)

11. Aim to reduce urinary albumin by ≥30% in people with CKD and albuminuria ≥300 mg/g to slow CKD progression. (Evidence B)

12. For people with non-dialysis-dependent stage G3 or higher CKD, protein intake should be 0.8 g/kg body weight per day, as for the general population. (Evidence A) For individuals on dialysis, protein intake of 1.0-1.2 g/kg/day should be considered since protein energy wasting is a major problem for some individuals on dialysis. (Evidence B)

13. Individuals should be referred for evaluation by a nephrologist if they have continuously increased urinary albumin level and/or continuously decreasing eGFR and/or if the eGFR <30 mL/min/1.73 m². (Evidence A)

14. Refer to a nephrologist for uncertainty about the etiology of kidney disease, difficult management issues, and rapidly progressing kidney disease. (Evidence B)

Retinopathy, Neuropathy, and Foot Care

Diabetic Retinopathy:

1. Implement strategies to help people with diabetes reach glycemic goals to reduce the risk or slow the progression of diabetic retinopathy. (Evidence A)

2. Implement strategies to help people with diabetes reach blood pressure and lipid goals to reduce the risk or slow the progression of diabetic retinopathy. (Evidence A)

Screening:

1. Adults with type 1 diabetes should have an initial dilated and comprehensive eye examination by an ophthalmologist or optometrist within 5 years after the onset of diabetes. (Evidence B)

2. People with type 2 diabetes should have an initial dilated and comprehensive eye examination by an ophthalmologist or optometrist at the time of the diabetes diagnosis. (Evidence B)

3. If there is no evidence of retinopathy for one or more annual eye exams and glycemic indicators are within the goal range, then screening every 1-2 years may be considered. If any level of diabetic retinopathy is present, subsequent dilated retinal examinations should be repeated at least annually by an ophthalmologist or optometrist. If retinopathy is progressing or sight-threatening, then examinations by an ophthalmologist will be required more frequently. (Evidence B)

4. Programs that use retinal photography (with remote reading or the use of U.S. Food and Drug Administration-approved artificial intelligence algorithms to improve to improve access to diabetic retinopathy screening are appropriate screening strategies for diabetic retinopathy. Such programs need to provide pathways for timely referral for a comprehensive eye examination with indicated. (Evidence B)

5. Counsel individuals of childbearing potential with preexisting type 1 or type 2 diabetes who are planning pregnancy or who are pregnant on the risk of development and/or the progression of diabetic retinopathy. (Evidence B)

6. Individuals with preexisting type 1 or type 2 diabetes should receive an eye exam before pregnancy and in the first trimester and may need to be monitored every trimester and for 1 year postpartum as indicated by the degree of retinopathy. (Evidence B)

Treatment:

1. Promptly refer individuals with any level of diabetic macular edema, moderate or worse nonproliferative diabetic retinopathy (a precursor of proliferative diabetic retinopathy [PDR]), or any PDR to an ophthalmologist who is knowledgeable and experienced in the management of diabetic retinopathy. (Evidence A)

2. Panretinal laser photocoagulation therapy is indicated to reduce the risk of vision loss in individuals with high-risk PDR and, in some cases, severe nonproliferative diabetic retinopathy. (Evidence A)

3. Intravenous injections of anti-vascular endothelial growth factor (anti-VEGF) are a reasonable alternative to traditional Panretinal Laser Photocoagulation for some individuals with PDR to reduce the risk of vision loss. (Evidence A)

4. Intravitreous injections of anti-VEGF are indicated as first-line treatment for most eyes with diabetic macular edema that involves the foveal center and impairs vision acuity. (Evidence A)

5. Macular focal/grid photocoagulation and intravitreal injections of corticosteroid are reasonable treatments in eyes with persistent diabetic macular edema despite previous anti-VEGF therapy or eyes that are not candidates for this first line approach. (Evidence A)

6. The presence of retinopathy is not a contraindication to aspirin therapy for cardioprotection, as aspirin does not increase the risk of retinal hemorrhage. (Evidence A)

Neuropathy

Screening:

1. All people with diabetes should be assessed for diabetic peripheral neuropathy starting at diagnosis of type 2 diabetes and 5 years after the diagnosis of type 1 diabetes and at least annually thereafter (Evidence B)

2. Assessment for distal symmetric polyneuropathy should include a careful history and assessment of either temperature or pinprick sensation (small-fiber function) and vibration sensation using a 128-Hz tuning fork (for large-fiber function). All people with diabetes should have annual 10-g monofilament testing to identify feet at risk for ulceration ad amputation. (Evidence B)

Treatment:

1. Optimize glucose management to prevent or delay the development of neuropathy in people with type 1 diabetes (Evidence A). Optimize weight, blood pressure, and serum lipid management to reduce the risk or slow the progression of diabetic neuropathy. (Evidence B)

2. Assess and treat pain related to diabetic peripheral neuropathy. (Evidence B)

3. Gabapentinoids, serotonin-norepinephrine reuptake inhibitors, tricyclic antidepressants, and sodium channel blockers are recommended as initial pharmacologic treatments for neuropathic pain in diabetes. (Evidence A) Opioids, including tramadol and tapentadol, should not be used for neuropathic pain treatment in diabetes given the potential for adverse events. (Evidence B)

Foot Care:

1. Perform a compressive foot evaluation at least annually to identify risk factor for ulcers and amputations. (Evidence A)

2. The examination should include inspection of the skin, assessment of foot deformities, neurological assessment (10-g monofilament testing with at least one other assessment: pinprick, temperature, or vibration), and vascular assessment, including pulses in the legs and feet. (Evidence B)

3. Individuals with evidence of sensory loss or prior ulceration or amputation should have their feet inspected at every visit. (Evidence A)

4. Obtain a prior history of ulceration, amputation, Charcot foot, angioplasty or vascular surgery, cigarette smoking, retinopathy, and renal disease and assess current symptoms of neuropathy (pain, burning, numbness) and vascular disease (leg fatigue, claudication). (Evidence B)

5. Initial screening for peripheral arterial disease (PAD) should include assessment of lower-extremity pulses, capillary refill time, rubor on dependency, pallor on elevation, and venous filling time. Individuals with a history of leg fatigue, claudication, and rest pain relieved with dependency or decreased or absent pedal pulses should be referred for ankle-brachial index with toe pressures and for further vascular assessment as appropriate. (Evidence B)

6. An interprofessional approach facilitated by a podiatrist in conjunction with other appropriate team members is recommended for individuals with foot ulcers and high-risk feet (e.g., those on dialysis, those with Charcot foot, those with a history of prior ulcers or amputation, and those with PAD). (Evidence B)

7. Refer individuals who smoke and have a history of prior lower-extremity complications, loss of protective sensation, structural abnormalities, or PAD to foot care specialist for ongoing preventative care and lifelong surveillance. (Evidence B) These individuals should also be provided with information on the importance of smoke cessation and referred for counseling on smoke cessation. (Evidence A)

8. Provide general preventive foot self-care education to all people with diabetes, including those with loss of protective sensation, on appropriate ways to examine their feet (palpation or visual inspection with an unbreakable mirror) for daily surveillance of early foot problems. (Evidence B)

9. The use of specialized therapeutic footwear is recommended for people at high risk for ulceration, including those with loss of protective sensation, foot deformities, ulcers, callous formation, poor peripheral circulation, or history of amputation. (Evidence B)

10. For chronic foot diabetic foot ulcers that have failed to heal with optimal standard care alone, adjunctive treatment with randomized controlled trial-proven advanced agents should be

considered. Considerations might include negative pressure wound therapy, placental membranes, bioengineered skin substitutes, several acellular matrices, autologous fibrin and leukocyte platelet patches, and topical oxygen therapy. (Evidence A)

Older Adults:

1. Assess the medical, psychological, functional (self-management abilities), and social domains in older adults with diabetes to provide a framework to determine targets and therapeutic approaches for diabetes management. (Evidence B)

2. Screen at least annually for geriatric syndromes (e.g., cognitive impairment, depression, urinary incontinence, falls, persistent pain, and frailty), hypoglycemia, and polypharmacy in older adults with diabetes, as they may affect diabetes management and diminished quality of life. (Evidence B)

Neurocognitive Function:

1. Screening for early detection of mild cognitive impairment or dementia should be performed for adults 65 years of age or older at the initial visit, annually, and as appropriate. (Evidence B)

Hypoglycemia and Hyperglycemia:

1. Ascertain and address episodes of hypoglycemia at routine visits because older adults with diabetes have a greater risk of hypoglycemia, especially when treated with hypoglycemic agents (e.g., sulfonylureas, meglitinides, and insulin). (Evidence B)

2. Recommend continuous glucose monitoring (GGM) for older adults with type 1 diabetes to improve glycemic outcomes, reduce hypoglycemia, and reduce treatment burden (Evidence A)

3. Offer CGM for older adults with type 2 diabetes on insulin therapy to improve glycemic outcomes and reduce hypoglycemia. (Evidence B)

4. Consider the use of automated insulin delivery systems (Evidence A) to reduce risk of hypoglycemia for older adults, based on individual ability and support system.

5. Treatment of hypertension to individualized goal levels is indicated in most older adults with diabetes. (Evidence B)

Lifestyle Management:

1. Recommend healthful eating with adequate protein intake for older adults with diabetes. Recommend regular exercise, including aerobic activity, weight-bearing exercise, and/or resistance training as tolerated I those who can safely engage in such activities. (Evidence B)

2. For older adults with type 2 diabetes, overweight/obesity, and capacity to safely exercise, an intensive lifestyle intervention focused on dietary changes, physical activity, and modest weight loss (e.g., 5-7%) should be considered for its benefits on quality of life, mobility and physical functioning, and cardiometabolic risk. (Evidence A)

Pharmacologic Therapy:

1. Select medications with low risk of hypoglycemia in older adults with type 2 diabetes, specifically for those with hypoglycemia risk factors. (Evidence B)

2. Overtreatment of diabetes is common in older adults and should be avoided. (Evidence B)

3. Deintensify hypoglycemia-causing medications (e.g., insulin, sulfonylureas, or meglitinides) or switch to a medication class with low hypoglycemia risk for individuals who are at high risk for hypoglycemia, using individualized glycemic goals. (Evidence B)

4. Simplify complex treatment plans (especially insulin) to reduce the risk of hypoglycemia and polypharmacy and decrease the treatment burden of the disease if it can be achieved within the individualized glycemic goals. (Evidence B)

5. In older adults with type 2 diabetes and established or high risk of atherosclerotic cardiovascular disease, heat failure, and/or chronic kidney disease, the treatment plan should include agents that reduce cardiovascular and kidney disease risk, irrespective of glycemia. (Evidence A)

6. Consider costs of care and coverage rules when developing treatment plans in order to reduce the cost-related barriers to medication taking and self-management behaviors. (Evidence B)

Annual Measurement for Effectiveness of Diabetes Guideline

HEDIS®
Diabetes MY 2025, Volume 2

- *Glycemic Status Assessment*
    - *Glycemic Status >9%*
    - *Glycemic Status <8%*
- *Statin Therapy*
- *Eye Exam*
- *Kidney Health Evaluation, defined as having eGFR and uACR during the measurement year*
- *Blood Pressure Controlled <140/90 mmHg*

ADA recommendations are assigned rating of A, B or C depending on the quality of evidence:

- *Evidence A- recommendations are based on large well-designed clinical trials or well-done meta-analyses*
- *Evidence B- recommendations are based on well-conducted cohort studies*
- *Evidence C- supportive evidence from poorly controlled or uncontrolled studies. There may be evidence from observational studies or conflicting evidence where the weight of the evidence supports the recommendation*
- *Evidence E- Expert consensus or clinical experience*

References:

American Diabetes Association; Standards of Medical Care in Diabetes - 2025

NCQA; Technical Specifications for Health Plans; HEDIS MY 2025, Volume 2