DIABETES MELLITUS PRACTICE GUIDELINES

Risk Intervention	Recommendations
Screening	Should be considered in adults with BMI >25kg/m² with a least one additional risk factor: ▪ Physical inactivity ▪ First degree relative with diabetes ▪ Members of a high risk population ▪ Hypertension ▪ HDL cholesterol level <35mg/dl or triglyceride >250mg/dl ▪ Women with polycystic ovary syndrome ▪ HbA1c>5.7%, increased fasting blood glucose, or increased glucose tolerance or previous testing. ▪ Conditions associated with insulin resistance such as severe obesity or acanthosis nigricans ▪ History of cardiovascular disease Otherwise testing should begin at age 45 years. If results are normal, retesting should be at 3 year intervals.
Medication Reconciliation	Four recommended office visits per year. Accurately and completely reconcile all medications patient is taking across the continuum. ***(National Patient Safety Goal)***
Smoking **Goal:** **Complete Cessation**	▪ Follow Ask, Assess, Advise, Assist, and Arrange method. ▪ Strongly encourage patient and family to stop smoking. ▪ Provide counseling, nicotine replacement, and formal cessation programs as appropriate.
Blood Pressure Control	Initiate lifestyle modification – weight control, physical activity, alcohol moderation, and moderate sodium restriction – in all patients with blood pressure >120 mm Hg systolic or 80 mm Hg diastolic.

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<u>Goal:</u> **<130/80 mm Hg**	Add blood pressure medication, individualized to other patient requirements and characteristics (ie, age, race, need for drugs with specific benefits) if blood pressure is not <130 mm Hg systolic or <80 mm Hg diastolic in 3 months. First line pharmaceutical agent is an ACE inhibitor either alone or in conjunction with thiazide diuretic. ARB may be substituted for an ACE in cases where ACE is contraindicated or not tolerated. Blood pressure should be measured at every routine diabetes visit. Orthostatic measurement of blood pressure should be performed for the presence of autonomic neuropathy. Inquire about cardiovascular risk factors. Feel pulses and listen for bruits each visit.
Management **<u>Primary goal:</u>** **LDL <100 mg/dL** **<u>Secondary goal:</u>** **HDL >40 mg/dL;** **TG <150 mg/dL**	Individualized MNT (Medical Nutritional Therapy).
	Access fasting lipid profile annually. Statin therapy should be added to lifestyle therapy regardless of baseline lipid levels for the following diabetic patient: ▪ Someone with overt cardiovascular disease ▪ Someone over 40 years with one or more cardiovascular risk factors Goals: ▪ Without overt cardiovascular disease, LDL cholesterol <100mg/dl ▪ With overt cardiovascular disease, LDL<70 mg/dl is an option ▪ Triglycerides<150 mg/dl and HCL cholesterol>40mg/dl in men and >50mg/dl are desirable. ▪ If targets are not reached with statins, combination therapy may be considered but has not been evaluated in studies for cardiovascular outcomes or for safety. ▪ For patients without over cardiovascular disease and under age 40 years, statin therapy should be considered if LDL cholesterol remains>100mg/dl or in those with multiple cardiovascular risk factors. ▪ In selected patients, such as those with a short duration of disease, no cardiovascular disease, and long life expectancy, the options of lowering the LCL to<70 mg/dl and the HbA1c to 6.5% should be considered.

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	If LDL goal not achieved, consider combination therapy.
Glucose Control **Goal** **HbA1c<=7.0%**	Goals should be individualized. First-step Therapy: weight reduction and exercise. Second-step Therapy: Non-Insulin agents Third-step Therapy: insulin therapy. Develop or adjust the management plan to achieve normal or near-normal glycemia with an HbA1c goal of <7%. Less stringent treatment goals may be appropriate for patients with a history of severe hypoglycemia, patients with limited life expectancies, very young children or older adults.
Physical Activity	Regular exercise has shown to improve blood glucose controls, reduce cardiovascular risk factors, contribute to weight loss, and improve well-being. A regular physical activity program adapted to the presence of complications is recommended for all patients with diabetes who are capable of participation. Assess risk, preferably with exercise test, to guide prescription. Advise medically supervised programs for moderate- to high- risk patients.
Medical Nutritional Therapy (MNT)	Attain and maintain recommended metabolic outcomes, including glucose and HbA1c levels; LDL cholesterol, HDL cholesterol, and triglyceride levels; blood pressure; and body weight. Prevent and treat the chronic complications and comorbidities of diabetes. Modify nutrient intake and lifestyle as appropriate for the prevention and treatment of obesity, dyslipidemia, CVD, hypertension, and nephropathy. Improve health through healthy food choices and physical activity.

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	Limit fat intake to <7% of total calories and minimize trans fat intake. Manage carbohydrate intake. Address individual nutritional needs, taking into consideration personal and cultural preferences and lifestyle while respecting the individual's wishes and willingness to change. *People with diabetes should receive individualized MNT as needed.*
Antiplatelet agents/anti-coagulants	Use aspirin therapy (75–162 mg/day) in all adult patients with diabetes and macrovascular disease. Consider beginning aspirin therapy (75–162 mg/day) for primary prevention in patients in age 30-40 with diabetes or in patients with one or more other cardiovascular risk factors. Do not use aspirin in patients <21 years of age because of the increased risk of Reye's syndrome.
ACE inhibitors post-MI	Start early post-MI in stable high-risk patients (anterior MI, previous MI, Killip class II [S^3 gallop, rales, radiographic CHF]). Continue indefinitely for all with LV dysfunction (ejection fraction ≤ 40%) or symptoms of failure. Use as needed to manage blood pressure or symptoms in all other patients.
ACE inhibitors DM	Initiate ACE inhibitors for uncomplicated hypertension as long as no contraindication exists. If ACEs are used, monitor renal function and serum potassium levels. Consider use of ACE inhibitors to delay the progression of nephropathy and microalbuminuria.
Beta-blockers: DM	Post MI 2006 HEDIS measure: Initiate Beta blocker treatment within 7 days of discharge and continue for a minimum of 6 months, is no contraindications exist.
HbA1c	Perform the HbA1c test at least two times a year in patients who are meeting treatment goals (and who have stable glycemic control) and

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	quarterly in patients whose therapy has changed or who are not controlled. ***2007 HEDIS measure***: Clinical documentation of HbA1c test completed.
Foot-care	Feel pulses. Perform a foot examination using a Semmes-Weinstein monofilament, tuning fork, palpation, and visual assessment. Frequency of exam = 1 year (neuropathy + hx diabetes >10 years, poor glucose control). Educate all patients, especially those with risk factors or prior lower-extremity complications, about the risk and prevention of foot problems and reinforce self-care.
Immunization	Annually provide an influenza vaccine to all diabetic patients 6 months of age or older. Provide at least one lifetime pneumococcal vaccine for adults with diabetes. A one-time revaccination is recommended for individuals >64 years of age previously immunized when they were <65 years of age if the vaccine was administered >5 years ago. Other indications for repeat vaccination include nephrotic syndrome, chronic renal disease, and other immunocompromised states, such as post organ transplantation. ***2007 HEDIS measure***: Clinical documentation of annual flu vaccine and pneumococcal vaccine within timeframe noted.
Nephropathy Control	Screening Perform an annual test for the presence of microalbuminuria. ***2007 HEDIS measure***: Clinical documentation of the exams completed for microalbuminuria or the actual presence of microalbuminuria.
Diabetic Retinopathy	**Screening** Dilated retinal exams should be completed annually, or more if indicated, by an ophthalmologist or optometrist who is knowledgeable and experienced in diagnosing the presence of diabetic retinopathy and is aware of its treatment. Yearly screening is required if:

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	▪ previous screening was abnormal ▪ patient is symptomatic Every 2 years if previous screening was normal and patient does not report symptoms. Examinations will be required more frequently if retinopathy is progressing. ***2007 HEDIS measure*:** Clinical documentation of screening exam completed, specialist completed in exam, date of exam and results.
Self Management Education	▪ Assess educational needs and provide self-management education. ▪ Provide access to an interdisciplinary team (RN, CDE, nutritionist, PCP, endocrinologist). ▪ Develop individualized educational plans
Psychosocial Assessment	Screening completed at every office visit. Should include but is not limited to: ▪ Attitudes about the illness ▪ Expectations for medical management ▪ General quality of life Reassess periodically during assessment contacts to mental health specialist who is familiar with diabetes should occur when the patient exhibits any of the following: ▪ Gross noncompliance with medical regimen (due to self or others) ▪ Depression ▪ Indications of an eating disorder ▪ Cognitive functioning that significantly impairs judgment.

Sources:

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