Medicare
HEALTH SUPPORT

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3. American Diabetes Association: Standards of Medical Care for Patients with Diabetes - Foot Care. *Diabetes Care 28* (Suppl. 1), 2005: S20.
4. American Diabetes Association: Standards of Medical Care for Patients with Diabetes – Nephropathy Screening. *Diabetes Care 28* (Suppl. 1), 2005: S18.
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10. American Diabetes Association: Immunization and the Prevention of Influenza and Pneumococcal Disease in People with Diabetes (Position Statement). *Diabetes Care 28* (Suppl. 1), 2005: S14.
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13. The Diabetes Control and Complications Trial Research Group. The effect of intensive treatment of diabetes on the development and progression of long-term complications in insulin-dependent diabetes mellitus. *New England Journal of Medicine*. 1992; 329: 977-986.
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16. AHA/ACC Guidelines for the Management of Patients with Atrial Fibrillation. *Journal of the American College of Cardiology* 38:1266i - ixx, 2001
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This guide does not intend to address all issues that the treating physician may find relevant and appropriate for the care of a particular patient. We encourage physicians to discuss the most appropriate treatment plan with each patient.

These guidelines are intended as an educational reference and do not supercede the clinical judgment of the treating physician with respect to appropriate and necessary care for a particular patient. The clinical references from which these guidelines are taken are listed at the end of this document.

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Care Guide for *Diabetes*

ACTION	FREQUENCY
SCREENING FOR DIAGNOSIS OF DM	ANNUALLY FOR HIGH-RISK, EVERY THREE YEARS IF NORMAL
MONITORING GLUCOSE CONTROL	EVERY THREE MONTHS UNTIL GOAL IS REACHED, EVERY SIX MONTHS IF GOAL IS MET
NEUROPATHY	SENSORY EXAMINATION ANNUALLY, FOOT INSPECTION EACH VISIT
RETINOPATHY	AT LEAST ANNUALLY UNLESS OTHERWISE ADVISED BY EYE-CARE PROFESSIONAL
NEPHROPATHY	AT LEAST ANNUALLY
BLOOD PRESSURE	EACH VISIT
LIPID EVALUATION	AT LEAST ANNUALLY
FLU AND PNEUMONIA VACCINE	ANNUALLY/INITIALLY
SMOKING CESSATION COUNSELING	EACH VISIT
DEPRESSION SCREENING	AT LEAST ANNUALLY

OPPORTUNITY	PROCESS	MEASUREMENT/VALUE	COMMON APPROPRIATE INTERVENTIONS	SUGGESTED FOLLOW-UP
Screening for and Diagnosis of Pre-Diabetes and Diabetes Mellitus (DM)[1,2]	■ All adults 45 years or older. ■ Screening should be considered at a younger age or more frequently in individuals with BMI ≥ 25 kg/m². ■ Additional risk factors: ➤ History of gestational diabetes, family history of diabetes, or high triglycerides +/- low HDL-C ■ Screen overweight children and adolescents with risk factors.	■ Symptoms of DM and a casual glucose ≥ 200 mg/dL. ■ FPG ≥ 126 mg/dL on two separate occasions. ■ 2-h PG ≥ 200 mg/dL during a 75 gm OGTT. In the absence of unequivocal hyperglycemia with acute metabolic decompensation, these criteria should be confirmed by retesting on a different day. ■ Pre-diabetes ➤ FPG 100 - 125 mg/dL=Impaired Fasting Glucose (IFG). ➤ 2-h PG 140 - 199 mg/dL=Impaired Glucose Tolerance (IGT).	■ If abnormal, follow guideline.	■ If normal, repeat at least every three years. ■ For high-risk patients, repeat annually.
Monitoring for Glucose Control[2,12,13]	**A1C:** ■ If at goal: every six months. ■ If not at goal, or change in therapy: every three months.	**Goal:** ■ A1C < 7.0%. ■ A1C < 6% can be considered in individual patients.	■ If above goal of < 7.0%, follow guidelines for pharmacologic and non-pharmacologic treatment - Medical Nutrition Therapy (MNT) and exercise. ■ Education as indicated.	■ Repeat every three months until goal is reached. ■ Repeat every six months if meeting treatment goal.
Self-Monitoring of Blood Glucose for Glucose Control (SMBG)[2]	■ SMBG three or more times a day if using multiple insulin injections or insulin pump. ■ SMBG as needed to reach glucose goals and for sick day management of patients with less frequent use of insulin or non insulin use.	**Goal:** Value / WholeBlood / Plasma Preprandial: 80-120 mg/dL / 90-130 mg/dL Postprandial: < 170 mg/dL / < 180 mg/dL **Additional Action Parameters:** Value / Whole Blood / Plasma Preprandial: < 80 or > 140 mg/dL / < 90 or > 150 mg/dL Postprandial: < 100 or > 160 mg/dL / < 110 or > 180 mg/dL	■ Adjust therapies based on results of SMBG. **Note:** Most SMBG monitors reflect plasma values. Check monitor to see whether it measures whole blood or plasma values.	■ Self-management at home, based on results.
Foot and Neuropathy Evaluation[2,3]	■ Inspection of feet at each office visit. ■ Initial screening should include a claudication history and assessment of pedal pulses. ■ Yearly sensory testing with 5.07 microns (10 gm) nylon monofilament and tuning fork.	■ Document foot inspection at each visit. ■ Document full foot exam each year – foot structure, vascular status and skin integrity. ■ Consider obtaining an Ankle Brachial Index (ABI) and toe pressure. ■ Examination for protective sensation.	■ Refer to foot care specialist if high-risk (peripheral neuropathy with loss of sensation, altered biomechanics, peripheral vascular disease and/or bone deformities). ■ Evaluate for appropriate footwear prescription or referral if abnormal. ■ Repeat basic foot-care education.	■ Inspection at each visit. ■ Repeat sensory exam at least yearly.
Retinopathy Evaluation[2,11]	■ Yearly dilated retinal examination. Initial Exam: ■ Under age 10: Based on clinical judgment. ■ Type 1: Within three to five years after diagnosis of diabetes. ■ Type 2: At time of diagnosis of diabetes.	■ Normal eye or presence of retinopathy.	■ If abnormal exam, refer to ophthalmology.	■ Yearly routine examination and more frequently if retinopathy is progressing. ■ Less frequent exams (every two to three years) may be considered in the setting of a normal eye with the advice of an eye care professional.
Nephropathy Evaluation[2,4]	■ In the absence of previously documented proteinuria, screen annually for microalbuminuria.**	Test annually for one of the following: ■ Albumin/creatinine ratio in random spot urine is preferred. ■ 24 hour urine collection for albumin and creatinine clearance. ■ Four-hour or overnight timed urine collection for albumin.	■ Confirm with repeat test and rule out other causes (infection). ■ Therapy with ACE inhibitors and/or ARBs to treat proteinuria, including microalbuminuria if not contraindicated.***/+ ■ Non-dihydropiridine CCB may be beneficial if ACE I and ARB are contraindicated. ■ Consider statin therapy.	■ Repeat at least annually. ■ Check more frequently (every two to three months) if positive result obtained. ■ Monitor K^+ and Cr if on ACE inhibitor or ARB. ■ Refer to endocrinologist or nephrologist if deterioration occurs.
Blood Pressure Monitoring[2,6,14]	■ Measurement at each visit.	**Goal:** ■ **Adults:** < 130/80 mmHg. ■ **Children:** < 90th percentile of age-adjusted values.	■ SBP 130-139 Therapeutic Lifestyle Changes (TLC) including DASH diet. If goal not reached in 3 months begin pharmacotherapy. ■ BP > 140/90 initiate TLC and pharmacotherapy. ➤ ACE I, ARB, BB, CCB or diuretics are suggested as first line therapies ***/+ ➤ With microalbuminuria consider ACE I or ARB as first line therapy ➤ With history of MI or LV dysfunction, also initiate BB	■ Measure and evaluate at each visit. ■ Review home blood pressure record. ■ Monitor K^+ and Cr in patients on ACE inhibitor or ARB. ■ Assess for medication side effects. **Note:** ARB may be drug of choice in patients with type 2 DM, hypertension and microalbuminuria.
Lipid Evaluation[2,5,7]	**Preventive/Surveillance:** ■ **Adults:** Annually for adults 20 years of age and over; re-evaluate following macrovascular event. ■ **Children:** Lipid profile performed on children over two years old after diagnosis of diabetes and when glucose control has been established. If values are considered low-risk, repeat every two to five years, based on CVD risk. **Treatment:** ■ **Adults:** At clinical discretion while titrating to desired or achievable end point. At steady state at least annually. ■ **Children:** Follow the National Cholesterol Education Program recommendations for children and adolescents.	**Goal:** ■ **Adults:** ➤ LDL Cholesterol: < 100 mg/dL ➤ HDL Cholesterol: Male: > 40 mg/dL; Female: > 50 mg/dL ➤ Triglycerides: < 150 mg/dL If TGs > 200, non-HDL cholesterol should be < 130 mg/dL ➤ Adults with Diabetes and overt CVD LDL < 70 mg/dL ■ **Children:** ➤ LDL Cholesterol: < 110 mg/dL	■ Therapeutic Lifestyle Changes (TLC). ■ Blood glucose control. ■ Weight loss if overweight. ■ Increased physical activity. ■ Medical Nutrition Therapy – focusing on the reduction of saturated fat and cholesterol intake and fiber supplementation. ■ Pharmaceutical agents – statins should be used as first-line therapy for lowering LDL. ■ People with DM and age greater than 40 with TC ≥ 135 mg/dL consider statin to achieve LDL reduction of 30% - 40% regardless of baseline. ■ People < 40 years old without overt CVD but with increased risk treat with statin if TLC unable to achieve LDL < 100 mg/dL. ■ People with DM and overt CVD are at very high risk for further events and should be treated with a statin.	■ Repeat every three months until goal is reached, then yearly. ■ Monitor liver function per safety guidelines. ■ Monitor CPK in patients with muscle discomfort.
Women's Health[2]	■ Pre-pregnancy counseling.	■ Documentation of counseling in all potentially fertile women to include a recommendation for dilated retinal eye examination.	■ Discuss and prescribe appropriate birth control. If pregnancy desired, achieve A1C < 1% above upper limits of normal. ■ Counsel fertile women on medications contraindicated during pregnancy. ■ Oral antidiabetic agents, ACE inhibitors, statins and ARBs should be discontinued before pregnancy. Note: ACE inhibitors and ARBs are contraindicated in pregnancy.	■ If woman is fertile, review each visit.
Tobacco Cessation	■ Tobacco use.	■ Document patient's tobacco use patterns.	■ Counsel on smoking prevention and cessation: ➤ Smoking cessation program ➤ Pharmacologic interventions (Coverage may vary by benefit option)	■ Re-evaluation each visit.
Selected Preventive Health Measures[2,8,9,10]	■ Substance Abuse.	■ Document patient's use patterns.	■ Recommend appropriate lifestyle changes (e.g., and/or referral to appropriate substance abuse program).	■ Re-evaluation each visit.
	■ Pneumococcal vaccination.	■ Document each patient has had a vaccination.	■ Administer vaccination to all patients with diabetes age ≥ 6 months. ■ A one-time revaccination is recommended for individuals > 64 who were previously immunized when they were < 65 and more than five years have elapsed.	■ Document for each patient.
	■ Influenza vaccination.	■ Document patient has a vaccination each year and document if adverse event occurs. ■ May be omitted if previous significant adverse effect is documented.	■ Administer vaccination to all patients with diabetes age ≥ 6 months beginning each September.	■ Yearly.
	■ Aspirin therapy.	■ Document appropriate patients on aspirin.	■ Administer aspirin in doses of 75-162 mg a day. ■ People < 30 years of age have generally not been studied. ■ Aspirin therapy not recommended for patients under 21.	■ Yearly.
	■ Coronary Heart Disease (CHD).	■ Abnormal ECG. ■ Document high-risk indicators, such as microalbuminuria, hypertension or dyslipidemia, in patients with no prior history of a CHD event or symptoms suggesting strong family history of CHD.	■ Administer appropriate cardiac testing and/or referral to cardiologist based on: ➤ Severity of underlying or suspected CHD ➤ Sedentary lifestyle age > 35 starting exercise program ➤ If over 55 with cardiovascular disease, consider ACE inhibitor	■ Re-evaluation yearly.
	■ Weight management.	■ Calculate BMI and measure waist: ➤ BMI Target: 18.5-24.9 kg/m2 ➤ Waist Target: ≤ 35 inches for females ≤ 40 inches for males	■ Prescribe weight management and physical activity programs.	■ Monitor progress at each visit.
Education and Counseling[2]	■ All patients receive education at diagnosis of prediabetes or DM until educational goals are achieved. If control deteriorates, education is restarted. ■ Ongoing education, as indicated.	■ Patients receiving education by provider or referred to an education program and seen by a nurse and/or dietitian.	■ TLC, exercise techniques, medical nutrition therapy, risk factor modification, alcohol moderation, smoking cessation, self-management training, sick-day education, avoidance of hyperosmolar states and ketoacidosis, psychosocial evaluation.	■ If control deteriorates or a sentinel event such as hospitalization occurs, repeat education as needed. ■ Repeat FPG annually for people with prediabetes.
Consider Specialty Referral[2,3,4]	■ Cardiology.	■ Suspected CAD or HF.	■ Testing and/or therapy as needed.	■ As needed by patient.
	■ Endocrinology.	■ Patient with advanced needs, complications, or persistent, suboptimal control.	■ Type 1 diabetes: treatment of complications, advanced technologies.	■ As needed to achieve or maintain control, or to manage complications.
	■ Nephrology.	■ GFR < 60mL mn 1.73m² or Scr > 1.5 mg/dL.	■ Evaluation of renal function.	■ As needed by patient.
	■ Podiatry.	■ Abnormal foot exam or peripheral neuropathy.	■ Evaluation, treatment for prevention of foot lesions.	■ As needed by patient.
	■ Optometry/Ophthalmology.	■ Dilated retinal exam and ophthalmologic treatment.	■ Dilated retinal eye exam and treatment for macular edema and retinopathy.	■ As needed by patient.
	■ OB/GYN.	■ Pregnancy in the diabetic.		■ As needed by patient.
Depression Screening[17]	■ Screen for symptoms of depression.	■ Document that each patient has been screened for symptoms of major depression over two weeks preceding the visit. ■ Coordinate care with psychiatrist or psychotherapist if involved in your patient's treatment. ■ Consider using a patient self-rating depression scale such as the PHQ 8 or 9.	■ Administer treatment and/or refer patients who meet criteria for depression to a behavioral specialist. ■ Administer pharmacologic interventions as indicated. ➤ SSRI's do not have the adverse cardiovascular effects commonly seen with tricyclic antidepressants.	■ Screening is suggested at subsequent visits. ■ Evaluate response to depression treatment with three follow-up contacts in 12 weeks and adjust meds as indicated and/or confer with appropriate treating mental health specialists.

*Diabetes mellitus is a chronic disorder with potential significant complications, most of which are preventable. Treatment of diabetes requires a team approach, including the patient and the physician. The goals of treatment are: near-normalization of average blood glucose as measured by the A1C, prevention of blindness by a yearly dilated retinal exam, detection and treatment of nephropathy using a yearly urinary microalbumin. Co-morbidities, including hypertension and lipid disorders, will be evaluated and treated to goal levels, and preventive measures taken.**At least two out of three tests within a six-month period should show elevated levels before a patient is designated as having microalbuminuria.*** ACE inhibitors and ARBs are contraindicated in pregnancy. + There are some reports of angioedema with ACE-I and ARBs.*