

General Management of Diabetes Mellitus 2015

The following guideline applies to patients with type 1 and type 2 diabetes mellitus. It recommends specific interventions for periodic medical assessment, laboratory tests and education to guide effective patient self-management

<u>Eligible Population</u>	<u>Key Components</u>	<u>Recommendation and Level of Evidence</u>	<u>Frequency</u>
Patients 18-75 years of age with type 1 or type 2 diabetes mellitus	Periodic assessment	<u>Assessment should include:</u> Height, weight, BMI, blood pressure [A] Assess cardiovascular risks (tobacco use, hypertension, dyslipidemia, sedentary lifestyle, obesity, stress, family history, age > 40) Comprehensive foot exam (visual, monofilament, and pulses) [B] Screen for depression [D] Dilated eye exam by ophthalmologist or optometrist TBI, or if no prior retinopathy, may screen with fundal photography TBI	Perform periodic assessment at least annually. Record BP at every visit. In the absence of retinopathy repeat retinal eye exam in 2 years.
	Laboratory tests	Tests should include: A1C [D] Urine microalbumin measurement [B] (unless already on ACE or ARB) Serum creatinine and calculated GFR [D] Lipid profile [B], preferably fasting Consider TSH and LFTs [D]	A1C every 3-6 months based on individual therapeutic goal; other tests annually.
	Education, counseling and risk factor modification	Comprehensive diabetes self-management education and support (DSME and DSMS) from a collaborative team or diabetic educator if available Education should be individualized, based on the National Standards for DSME [B] and include: <ul style="list-style-type: none"> - Importance of regular physical activity including interrupting sedentary periods at least every 90 minutes with physical activity, and a healthy diet [A], and working towards an appropriate BMI - Assessment of patient knowledge, attitudes, self-management skills and health status; strategies for making health behavior changes and addressing psychosocial concerns [C] - Description of diabetes disease process and treatment: safe and effective use of medications; prevention, detection and treatment of acute and chronic complications, including prevention and recognition of hypoglycemia - Role of self-monitoring of blood glucose in glycemic control [A] - Cardiovascular risk reduction - Tobacco cessation intervention² [B] and secondhand smoke avoidance [C] - Self-care of feet including nail and skin care and appropriate footwear [B]; preconception counseling [D]; encourage patients to receive dental care [D] 	At diagnosis and as needed

	<p>Medical recommendations</p>	<p>Care should focus on tobacco cessation, hypertension, lipids and glycemic control:</p> <ul style="list-style-type: none"> - Medications for tobacco dependence unless contraindicated - Treatment of hypertension using up to 3-4 anti-hypertensive medications to achieve adult target of 140/90 mmHg [A] (see <i>MQIC hypertension guideline</i>). Mortality increases if diastolic is < 70. - Prescription of ACE inhibitor or angiotensin receptor blocker in patients with chronic kidney disease or albuminuria [A]³ - Moderate intensity statin^{4,5} therapy for primary prevention against macrovascular complications (e.g. simvastatin 20-40 mg, atorvastatin 10-20 mg) - For patients with overt CVD, high intensity statin (e.g. atorvastatin 40-80 mg) - Anti-platelet therapy [A]: low dose aspirin for adults with cardiovascular disease unless contraindicated. - Individualize the A1C goal⁶. Goal for most patients is 7-8%. Mortality increases when A1C is > 9% [B]. - Assurance of appropriate immunization status [Tdap or Td, influenza, pneumococcal vaccine (PCV13 and PPSV23), Hep B] [C] 	<p>At each visit until therapeutic goals are achieved</p>
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¹ National Standards (or Diabetes Self-Management Education and Support

²There is no evidence that e-cigarettes are a healthier alternative to smoking or that e-cigarettes can facilitate smoking cessation

³Consider referral of patients with serum creatinine value > 2.0 mg/dl (adult value) or persistent albuminuria to nephrologist for evaluation

⁴Diabetes Care. January 2015 Cardiovascular Disease and Risk Management

⁵2013 ACC/AHA Blood Cholesterol Guideline Table 5. High-, Moderate-, and Low-Intensity Statin Therapy

⁶Diabetes Care. Volume 38 Supplement 1. January 2015, S37 Table 5.2

Levels of evidence for the most significant recommendations: A = randomized controlled trials; B = controlled trials, no randomization; C = observational studies; D = opinion of expert panel

This guideline lists core management steps. It is based on the American Diabetes Association Standards of Medical Care in Diabetes - 2015; Volume 38. Supplement 1, Pages S1-S93 (<http://care.diabetesjournals.org>). Individual patient consideration.

medical science may supersede or modify these recommendations.