Management of Diabetes Mellitus

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.

**Key Components**

**Eligible Population**
Patients 18-75 years of age with type 1 or type 2 diabetes mellitus

**Periodic assessment**
Assessment should include:
- 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

**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]

**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 and include:
- 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 intervention [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]

**Medical recommendations**
Care should focus on tobacco cessation, hypertension, lipids and glycemic control:
- 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 MQIC hypertension guideline). Mortality increases if diastolic is < 70.
- Prescription of ACE inhibitor or angiotensin receptor blocker in patients with chronic kidney disease or albuminuria [A]
- Moderate intensity statin 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 goal. 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]