University of Michigan Health System
GUIDES

**University of Michigan Health System**

**Guideline Utilization, Implementation, Development, and Evaluation Studies**

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To: Family Physicians, General Internists, Geriatricians, Internal Medicine Subspecialists, Obstetricians/Gynecologists

From: GUIDES (Guideline Utilization Implementation Development and Evaluation Studies)
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Subject: **UMHS Clinical Care Guideline Update: Management of Type 2 Diabetes**

**What's New!**


- Screening for diabetes. Although little evidence is available on screening for diabetes, screening should be considered every 3 years beginning at age 45 or annually at any age if BMI ≥ 25 kg/m$^2$, history of hypertension, gestational diabetes, or other risk factors.
- A1c for diagnosis. An option for diagnosing diabetes is hemoglobin A1c: 6.5% or greater is diagnostic, 5.7% -6.4% is considered pre-diabetes. (See Table 1 for diagnostic tests and values.)
- New medications for glycemic control. Several new drugs (and drug cautions) have been released, particularly for second line therapy after metformin. See Table 5 for steps in glycemic control, Table 6 for a comparison of agents and Tables 7 and 8 for prescribing information.
- BP target. A reasonable clinical target is 135/80 mmHg. Mortality increases when patients with diabetes have a diastolic blood pressure below 70 mmHg. More aggressive control may be warranted in patients with renal disease. The HEDIS measure for BP in diabetes is <140/90 mmHg. The clinical target of 135/80 mmHg helps assure patients are under the measurement maximum and recognizes the potential clinical benefit of somewhat lower levels.
- Prescribe "statin for all" patients with diabetes including those patients over > 40 years old with LDL < 100 mg/dl. Check baseline LFTS and if normal, no further monitoring is required. If baseline LFTs are mildly abnormal (over upper limit of normal but < 5 X upper limit of normal): monitor LFTs during first 6 months of statin treatment for stability. Abnormal baseline liver biochemistries can frequently improve with statin therapy.
- Hepatitis B vaccination. Vaccinate patients with diabetes ages 19-59 years as soon as feasible after diabetes is diagnosed. Risk is increased primarily due to sharing inadequately cleaned blood glucose monitors (e.g., in healthcare settings, households, worksite clinics, schools and camps). Consider vaccinating those aged ≥ 60 based on likelihood of acquiring HBV infection.
- Measures of clinical care quality. National and regional third-party payors measure 13 aspects of care for patients with diabetes related to payment based on quality of care. See "Measures of Performance."

**Key aspects.** Key aspects of care include:

- Blood pressure measured at every "regular" visit. If repeated measurements ≥ 135/80, treat hypertension. Treatment to BP < 135/80 is recommended.
- Lipids measured annually. Use statins for patients with LDL-C > 100 mg/dL and in patients age 40 years or older (even if LDL-C < 100 m/dL).
- Smoking status asked annually. If smoker, encourage cessation.
- Dilated retinal exam. Dilated retinal examination by an eye care specialist every 2-3 years if good blood sugar and blood pressure control and previous eye exam was normal; otherwise annually or more frequently as recommended by the eye care provider if diabetic changes. If retinopathy, treat aggressively, and patients should undergo a dilated retinal exam at least annually.
- Urine protein or albumin. For patients not being treated with ACE-I or ABR and without diabetic nephropathy, urine albumin should be measured annually. If nephropathy, aggressive BP control.
- Foot examined and foot care emphasized at each "regular" visit. If neuropathy or ulcer, treat aggressively.

**Patient education.** http://sitemaker.umich.edu/umhs.patiented/diabetes_center_

Other information

- Diabetes self-management education (DSME) programs are helpful. MEND's DSME program at Domino's Farms (with classes at Brighton, Canton, and Chelsea Health Centers) is certified by the Michigan Department of Community Health and reimbursable by Medicaid and other payers.