

## Take 3 – Practical Practice Pointers<sup>©</sup> January 7, 2019 Edition

### Diabetes Standards of Care 2019

#### From the Guidelines

#### 1) ADA Diabetes Standards of Care 2019

According to the Virginia Department of health, 1 in 11 Virginians have T2D, and more than 1 in 3 have prediabetes. This trend is similar for other states as well. Given this prevalence and as a follow-up to the December 17<sup>th</sup> Take 3 highlighting the ADA/EASD recently released consensus report on the management of hyperglycemia in T2D, this week's Take 3 will highlight the ADA 2019 Diabetes Standards of Care. For the 2<sup>nd</sup> year, the ADA also published a separate abridged document for primary care intended to serve as a more accessible document.

Note that the ADA evidence-grading system includes levels, A, B, C, and E, with "A" having the strongest evidence and "E" being based on expert opinion. Some recommendations are underlined by me to provide additional emphasis.

#### **Screening:** Recommendations

- Testing for T2D in asymptomatic people should be considered in adults of any age who are overweight or obese (BMI  $\geq 25$  or  $\geq 23$  in Asian Americans) and who have one or more additional risk factors. **B**
- For all people, screening should begin at age 45 years. **B**
- If tests are normal, repeating at a minimum of 3-year intervals is reasonable. **C**
- To test for T2D, fasting plasma glucose, 2-h plasma glucose after 75-g oral glucose tolerance test, and A1C are equally appropriate. **B**
- At least annual monitoring in those with prediabetes. **E**

#### **Diagnosis:** Recommendations:

##### **A1C:**

**Prediabetes** 5.7% to 6.4%

**Diabetes** 6.5% or higher

##### **Fasting Plasma Glucose (FPG) – nothing to eat/drink (except water) for $\geq 8$ hours**

**Prediabetes** 100 mg/dl to 125 mg/dl

**Diabetes** 126 mg/dl or higher

##### **Oral Glucose Tolerance Test (OGTT) – 75 gm**

**Prediabetes** 140 mg/dl to 199 mg/dl

**Diabetes** 200 mg/dl or higher

##### **Random Plasma Glucose Test**

**Diabetes**  $\geq 200$  mg/dl

Unless there is a clear clinical diagnosis (e.g., patient in a hyperglycemic crisis or with classic symptoms of hyperglycemia and a random plasma glucose  $\geq 200$ , diagnosis requires two abnormal test results from the same sample or in two separate test

samples. If using two separate test samples, it is recommended that the second test, which may either be a repeat of the initial test or a different test, be performed without delay. This could be a fasting blood glucose and HbA<sub>1c</sub> or running the A1C test twice from the same blood sample, so the patient doesn't have to return before the diagnosis can be made.

#### **Lifestyle Interventions for Weight Loss in T2D: Recommendations**

- Diet, physical activity, and behavioral therapy designed to achieve >5% weight loss should be prescribed for overweight/obese patients with T2D. **A**
- Diets should be individualized, as those that provide the same caloric restriction but differ in protein, carbohydrate, and fat content are equally effective in achieving weight loss. **A**

#### **A1C Testing: Recommendations**

- Perform the A1C test *at least* two times a year in patients who are meeting treatment goals (and who have stable glycemic control). **E**
- Perform the A1C test quarterly in patients whose therapy has changed or who are not meeting glycemic goals. **E**

#### **A1C Goals: Recommendations**

- A reasonable A1C goal for many nonpregnant adults is <7%. **A**
- Less stringent A1C goals (such as <8%) may be appropriate for certain patients, such as those with limited life expectancy, advanced complications, extensive comorbidities. **B**
- Older adults who are otherwise healthy with few coexisting chronic illnesses and intact cognitive function and functional status should have lower glycemic goals (such as A1C <7.5%, while those with multiple coexisting chronic illnesses, cognitive impairment, or functional dependence should have less stringent glycemic goals (such as A1C <8.0–8.5%. **C**
- Glycemic goals for some older adults might reasonably be relaxed as part of individualized care, but hyperglycemia leading to symptoms or risk of acute hyperglycemia complications should be avoided in all patients. **C**

#### **Pharmacologic Interventions for Prediabetes: Recommendations**

- Metformin for prevention of T2D should be considered in those with prediabetes, especially for those with BMI ≥35, those aged <60 years, women with prior gestational DM, and/or those with rising A1C despite lifestyle intervention. **A**
- Periodic measurement of vitamin B12 levels should be considered in metformin-treated patients, especially in those with anemia or peripheral neuropathy. **B**

#### **Self-Management: Recommendations**

- When prescribed as part of a broad educational program, SMBG may help to guide treatment decisions and/or self-management for patients taking less frequent insulin injections **B**.
- The evidence is insufficient regarding when to prescribe SMBG and how often testing is needed for insulin-treated patients who do not use intensive insulin regimens, such as those with type 2 diabetes using basal insulin with or without oral agents. However, for patients using basal insulin, assessing fasting glucose with SMBG to inform dose adjustments to achieve blood glucose targets results in lower A1C.

- In people with T2D not using insulin, routine glucose monitoring may be of limited additional clinical benefit. Several randomized trials have called into question the clinical utility and cost-effectiveness of routine SMBG in noninsulin-treated patients.

#### **Diabetic Kidney Disease: Recommendations**

- At least once a year, assess urinary albumin (e.g., spot urinary albumin-to-creatinine ratio) and estimated glomerular filtration rate in all patients with T2D, and in all patients with comorbid hypertension. **B**
- Optimize glucose control and BP control to reduce the risk or slow the progression of diabetic kidney disease. **A**
- In nonpregnant patients with diabetes and hypertension, either an ACE-I or ARB is recommended for those with modestly elevated urinary albumin-to-creatinine ratio (30–299 mg/g creatinine) **B** and is *strongly* recommended for those with urinary albumin-to-creatinine ratio  $\geq 300$  and/or estimated glomerular filtration rate  $< 60$ . **A**
- Continued monitoring of urinary albumin-to-creatinine ratio in patients with albuminuria treated with an ACE inhibitor or an ARB is reasonable to assess the response to treatment and progression of diabetic kidney disease. **E**
- An ACE inhibitor or an ARB is not recommended for the primary prevention of diabetic kidney disease in patients with diabetes who have normal blood pressure, normal urinary albumin-to-creatinine ratio ( $< 30$ ), and normal e-GFR. **B**

#### **Diabetic Retinopathy: Recommendations**

- Patients with T2D should have an initial dilated and comprehensive eye examination by an ophthalmologist or optometrist at the time of diagnosis. **B**
- If there is no evidence of retinopathy for one or more annual eye exams and glycemia is well controlled, then exams every 2 years may be considered. **B**

#### **Metabolic Surgery: Recommendations**

- Metabolic surgery should be recommended to treat T2D in appropriate surgical candidates with BMI  $\geq 40$  (BMI  $\geq 37.5$  in Asian Americans), regardless of the level of glycemic control or complexity of glucose-lowering regimens, and in adults with BMI 35.0–39.9 (32.5–37.4 in Asian Americans) when hyperglycemia is inadequately controlled despite lifestyle and optimal medical therapy. **A**

#### **Hypertension/Blood Pressure Control in T2D: Recommendations**

- Most patients with diabetes and hypertension should be treated to a systolic blood pressure goal of  $< 140$  and a diastolic blood pressure goal of  $< 90$ . **A**
- Lower systolic and diastolic blood pressure targets, such as 130/80, may be appropriate for individuals at high risk of cardiovascular disease, if they can be achieved without undue treatment burden. **C**
- An ACE-I or ARB, at the maximum tolerated dose indicated for blood pressure treatment, is the recommended first-line treatment for hypertension in patients with diabetes and urinary albumin-to-creatinine ratio  $\geq 300$  (**A**) or 30–299 (**B**).

#### **Foot Care:**

- All patients should have annual (not every visit) 10-g monofilament testing to identify feet at risk for ulceration and amputation. **B**
- Patients with evidence of sensory loss or prior ulceration or amputation should have their feet inspected at every visit. **C**
- The examination should include inspection of the skin, assessment of foot deformities, neurological assessment (10-g monofilament testing with at least one

other assessment: pinprick, temperature, vibration), and vascular assessment including pulses in the legs and feet. **B**

**My Comment:**

Those of us who practice primary care medicine should be and need to be experts in diabetes care. The abridged document may be one worth investing the time in reading the entire document. It's packed full of information and some helpful tables. It is important to note how many of the recommendations are based on expert opinion. Remember, expert opinion is not necessarily wrong or bad, but it means there is greater uncertainty and more opportunity for bias.

Note that the diagnosis criteria have changed as well, in that the diagnosis can be made from running two separate tests or testing the same sample twice at an office visit. I am not clear of the implications of this from a laboratory flow or insurance coverage perspective.

The fact that the ADA continues to have a hard time letting go of the use of SMBG for those not on insulin tells me that old habits die hard, even those that were never based on any research evidence. And please don't neglect the importance of lifestyle interventions for our patients with prediabetes and T2D! They should be the foundation of T2D care.

Also, take note of the new "Standards of Care APP" that the ADA has created. Link in the references below.

**References:**

- ADA Standards for Medical Care in Diabetes – 2019: Abridged for Primary Care Providers. Clinical Diabetes published ahead of print December 17, 2018. [Article](#)
- ADA Standards of Care 2019: Diabetes Care. January 01 2019; volume 42 issue Supplement 1. [Table of Contents](#)
- New ADA Standards of Care 2019 APP - [Link](#)

Feel free to forward Take 3 to your colleagues. Glad to add them to the distribution list.

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