Take 3 – Practical Practice Pointers© February 10, 2020 Edition

Diabetes Standards of Care Edition 2020 – Part 1

From the Guidelines and the American Diabetes Association (ADA)

1) ADA Diabetes Standards of Care 2020

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, it is essential that we who are providing primary health care become "experts" in the management and prevention of T2D. To that end, this week's (and next week's) Take 3 will highlight the ADA 2020 Diabetes Standards of Care.

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 ≥25 or ≥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 ≥ 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 ≥ 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 ≥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 A1C 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

- Refer patients with prediabetes to an intensive behavioral lifestyle intervention program modeled on the Diabetes Prevention Program (DPP) to achieve and maintain 7% loss of initial bodyweight and increase moderate-intensity physical activity (such as brisk walking) to at least 150 min/week. **A**
- A variety of eating patterns are acceptable for persons with prediabetes.
- Based on patient preference, technology-assisted diabetes prevention interventions may be effective in preventing T2D and should be considered. **B**
- Given the cost-effectiveness of diabetes prevention, such intervention programs should be covered by third-party payers. **B**

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 with a history of severe hypoglycemia, limited life expectancy, advanced microvascular or macrovascular complications, extensive comorbid conditions, or long-standing T2D in whom the goal is difficult to achieve despite DSME, appropriate glucose monitoring, and effective doses of multiple glucose-lowering agents including insulin. **B**

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 of Blood Glucose (SMBG): Recommendations

- Most patients using intensive insulin regimens(multiple daily injections [MDI] or continuous subcutaneous insulin infusion [CSII; insulin pump therapy]) should be encouraged to assess glucose levels using SMBG (and/or continuous glucose monitoring – CGM) prior to meals and snacks, at bedtime, prior to exercise, when they suspect low blood glucose, after treating low blood glucose until they are normoglycemic, and prior to and while performing critical tasks such as driving. **B**
- When prescribed as part of a Diabetes Self-Management Education and Support (DSMES) program, SMBG may help to guide treatment decisions and/or self-management for patients taking less-frequent insulin injections. **B**
- Although self-monitoring of blood glucose in patients on noninsulin therapies has not shown clinically significant reductions in A1C, it may be helpful when altering diet, physical activity, and/or medications (particularly medications that can cause hypoglycemia) in conjunction with a treatment adjustment program. **E**

Continuous Glucose Monitoring (CGM): Recommendations:

- When used properly, real-time and intermittently scanned CGM in conjunction with insulin therapy are useful tools to lower A1C and/or reduce hypoglycemia in adults with T2D who are not meeting glycemic targets. **B**
- People with T2D on CSII or MDI have shown significant reduction in A1C in multiple studies of real-time or intermittently scanned CGM but did not show a reduction in hypoglycemia.
- When used properly, real-time and intermittently scanned continuous glucose monitors in conjunction with insulin therapy are useful tools to lower A1C and/or reduce hypoglycemia in adults with T2D who are not meeting glycemic targets. **B**

Obesity Management: Recommendations

- Diet, physical activity, and behavioral therapy designed to achieve and maintain >5% weight loss is recommended for patients with T2D who have overweight or obesity and are ready to achieve weight loss. Greater benefits in control of diabetes and CV factors may be gained from even greater weight loss. **B**
- Weight-loss medications are effective as adjuncts to diet, physical activity, and behavioral counseling for selected patients with type 2 diabetes and BMI > 27. Potential benefits must be weighed against potential risks of medications. **A**
- If a patient's response to weight-loss medications is <5% weight loss after 3 months or if there are significant safety or tolerability issues at any time, the medication should be discontinued and alternative medications or treatment approaches should be considered. **A**
- Metabolic surgery should be recommended as an option to treat T2D in screened surgical candidates with BMI >40 (BMI >37.5 in Asian Americans) and in adults with BMI 35.0–39.9 (32.5–37.4 in Asian Americans) who do not achieve durable weight loss and improvement in comorbidities with nonsurgical methods. **A**

Hypertension/Blood Pressure Control and CVD Risk in T2D: Recommendations

- The American College of Cardiology/American Heart Association ASCVD risk calculator (Risk Estimator Plus) is a useful tool to estimate 10-year ASCVD risk. Link
- For individuals with T2D and HTN at higher CV risk (existing ASCVD or 10-year risk >15%), a BP target of <130/80 may be appropriate, if it can be safely attained. **C**
- For individuals with T2D and HTN at lower risk for CVD (10-year risk <15%), treat to a BP target of <140/90. **A**
- An ACE inhibitor or ARB, at the maximum tolerated dose indicated for blood pressure treatment, is the recommended first-line treatment for HTN in patients with diabetes and urinary albumin-to-creatinine ratio (UACR) >300 and/or eGFR <60 (**A**) or UACR between 30–299. (**B**)
- If one class is not tolerated, the other should be substituted. **B**
- For patients treated with an ACE-I, ARB, or diuretic, serum Cr, estimated glomerular filtration rate (eGFR) and potassium levels should be monitored at least annually. **B**

Diabetic Kidney Disease: Recommendations

- At least once a year, assess urinary albumin (e.g. spot UACR) and eGFR in all patients with T2D regardless of treatment. **B**
- Patients with urinary albumin > 30 and/or eGFR < 60 should be monitored twice annually to guide therapy. **C**
- For people with non-dialysis-dependent CKD, dietary protein intake should be approximately 0.8 g/kg body weight per day (the recommended daily allowance). **A**

- 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 the diabetes diagnosis. **B** If there is no evidence of retinopathy for one or more annual eye exams and glycemia is well-controlled, then screening every 1–2 years may be considered. **E**

Foot Care:
- Perform a comprehensive foot evaluation at least annually to identify risk factors for ulcers and amputations. **B**
- 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**
- Patients with evidence of sensory loss or prior ulceration or amputation should have their feet inspected at every visit. **B**

Mark's Comments:
I have selectively chosen recommendations from the much longer document. The abridged document referenced below 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.

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. Remember, in may cases with the right lifestyle changes T2D can be cured!

Next week we will highlight the medication recommendations from the ADA Standards 2020, as well as address more about continuous glucose monitoring (CGM), which in my view is being promoted/utilized more aggressively than the data would support.

References:

- ADA Standards for Medical Care in Diabetes – 2020: Abridged for Primary Care Providers. Clinical Diabetes published ahead of print December 20, 2019. Link
- ADA Standards of Care 2020: Diabetes Care. January 1, 2020; volume 43 issue Supplement 1. Link
- 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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