Practice Tips

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For the Committee on Utilization Review and Education

Surveillance for type 2 diabetes and its complications

The "1998 Clinical Practice Guidelines for the Management of Diabetes" in Canada recommend a team approach.[1] This is usually a specialty diabetic clinic team that includes a family doctor. Surveillance of complications, ordering laboratory tests, and specialist consultations, however, are managed by the clinic.

The reality is, however, that family physicians are frequently left looking after their type 2 diabetics by default: patients choose not to attend clinics, patients are not compliant with regular follow-up visits, or, for many other reasons, patients like to attend only their family doctors.

The updated guidelines are very detailed and wide-ranging (29 pages!). I (I.M.N.) recognized a personal need to develop a record (**Figure 1**) that would allow me to follow best care surveillance for type 2 diabetes to prevent disease complications. The surveillance record I devised (a flowchart) was reviewed by our research associate (J.M.P.) and members of the Committee on Utilization Review and Education (CURE) for accuracy, clarity, and ease of use. Subsequently, it was presented to the Department of Family Medicine at St Joseph's Hospital in Hamilton, Ont, for comment. It was favourably received.

Flowchart

In my own practice, I have the flowchart printed on vivid green paper so that I can identify it easily should it disappear into the chart. I fasten it to the inside cover of the chart. At each visit, even if not specifically for diabetic care, a quick glance shows me whether the patient needs reminders, for example, to do a hemoglobin A_{1c} check or to have an ophthalmology review, and these issues can then be opportunistically addressed.

I am aware that many physicians already have similar flowcharts, and I have looked at a number shown to me by colleagues. This flowchart incorporates recommendations from tables and text in the 1998 guidelines document.[1] Since I began using this chart, I have more consistently applied the recommendations in my own practice.

Note

Guidelines change! Given the findings of the United Kingdom Prospective Diabetes Study,[2] the revised guidelines now state that "A therapeutic approach… to achieve tight blood glucose control and tight blood pressure control [<130/85 mm Hg] should be instituted to reduce diabetes-related endpoints" (Grade A, level 1 evidence). The revised guidelines also state that type 2 diabetics with elevated microalbuminuria levels "may benefit from either ACE inhibitor therapy or cardioselective β-blockers" (grade B, level 1 evidence).

We encourage readers to share some of their practice experience: the neat little tricks that solve difficult clinical situations. *Canadian Family Physician* pays $50 to authors upon publication of their Practice Tips. Tips can be sent by mail to Dr Tony Reid, Scientific Editor, *Canadian Family Physician*, 2630 Skymark Ave, Mississauga, ON L4W 5A4; by fax (905) 629-0893; or by e-mail tony@cfpc.ca.

References

1. Meltzer S, Leiter L, Daneman D, Gerstein HC, Lau D, Ludwig S, et al. 1998 Clinical practice guidelines for the management of diabetes in Canada. Canadian Diabetes Association. *Can Med Assoc J* 1998;159(Suppl 8):S1-29.

2. Gerstein HC, Hanna A, Rowe R, Leiter L, MacGregor A. CDA position statement regarding the UKPDS and revision of diabetes clinical practice guidelines accounting for the UKPDS results. *Can J Diabet Care* 1999;23:15-7.

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Figure 1. Type 2 diabetes follow-up record

Name:_____ Birth date:_____ Date of diagnosis: _____

Date						
Weight (BMI ideally < 27)						
Blood pressure (ideally < 130/85 mm Hg)						
Feet (monitor sensation, reflexes, pulses, skin, infection)						
Eyes (refer to an ophthalmologist or trained optometrist at diagnosis and then every 2-4 y)						
Lifestyle (smoking, diet, exercise, weight, alcohol, sexual function)						
Glucose (monitor in a laboratory or at home) • Fasting plasma glucose (action if > 10, 1-2 h plasma glucose > 14 mmol/L; test meter yearly)						
• Hemoglobin A_{1C} (at least every 6 mo; take action if > 0.084)						
Renal function 1. Dipstick urinalysis for gross proteinuria: if negative, see step 2; if positive, see step 3.						
2. Random urinary albumin and creatinine tests at least yearly. If positive ($\varphi \geq 2.8$, $\sigma \geq 2.0$), see step 3.						
3. Monitor 24-h urine creatinine clearance and microalbuminuria every 6-12 mo. Action if > 30 mg albumin, consider giving an ACE inhibitor or cardioselective b-blocker)						
Lipids Monitor every 1-3 y Risk factors / TG / LDL / TC/HDL 1 / < 2.0 / < 4.0 / < 6.0 2 / < 2.0 / < 3.5 / < 5.0 3+ or CAD / < 2.0 / < 2.5 / < 4.0						
Treatment/Changes/ Diabetes clinic						

ACE—angiotensin-converting enzyme, **BMI**—Weight (kg)/height $(m)^2$, **CAD**—Coronary artery disease.