Canadian Family Medicine Clinical Card A17 2014
www.cfpc.ca/sharcfm

Fauteux J Aggarwal SK
Yu Y Thornton T
Keegan DA

Type 2 Diabetes

Screening & Diagnosis

- screen adults ≥ 40 y.o. q3years with FPG (fasting plasma glucose) and/or HbA1c
- screen ALL adults (FPG, 2hrOGGT, HbA1c) q1-2years who have these risk factors : pre-diabetes, 1º family hx, high-risk population, complications associated with diabetes, vascular disease, gest. diabetes/macrosomic infant, HTN, dyslipidemia, obesity, PCOS, meds (corticosteroids, atypical antipsychotics)

T2DM diagnosed if one of:
- FPG ≥ 7.0 mmol/L
- 2hrOGTT ≥ 11.1 mmol/L
- HbA1c ≥ 6.5% (in adults)
- random glucose ≥ 11.1 mmol/L with symptoms (polyuria, polydipsia, weight loss)

***diagnosis must be confirmed with 2nd test unless patient is metabolically decompensated*
Pre-Diabetes diagnosed if FPG is 6.1-6.9mmol/L, OGTT is 7.8-11.0mmol/L, or A1c is 6.0-6.4%

Surveillance After T2DM Diagnosed

	** do all at diagnosis	Ongoing Frequency
Physical Exam	fundoscopy	every 1 – 2 yrs. by optometrist/ophthalmologist
	blood pressure	each visit
	neuropathy screen	annually: check light touch/vibration in big toe
	foot exam	annually: skin changes/deformities/range of motion
Investigations	glucometer use	personalize per patient: fasting 4.0-7.0mmol/L; postprandial 5.0-10.0mmol/L (8.0 if HbA1c >7.0%)
	HbA1c	every 3 months, goal ≤ 7.0%; every 6 months when goal consistently achieved
	fasting lipids	annually
	urine microalbumin + creatinine (eGFR)	annually (every 6 months if chronic kidney disease)
	ECG	every 2 yrs unless <40yo AND N lipids/BP/waist
Assess Regularly:	smoking cessation, erectile dysfunction, immunizations (flu, *S. pneumo*)	
	mental health (provide coping skills, screen for Dx with questionnaires)	
	self-management of disease (eg. medication compliance)	
	diet; weight control; exercise (patients should do *at least* 150min/wk of aerobic exercise AND 3x/wk of resistance exercise)	

Medication Management

Glucose Control / Insulin Resistance
- if HbA1c ≥ 8.5%, start meds at diagnosis: Metformin + [secretagogue or α-glucosidase inhibitor or incretin or weight loss agent]; **OR** straight to insulin
- if HbA1c 7.0-8.5%, trial of 3 months of lifestyle changes, then Metformin
- **target HbA1c: ≤7.0%** within 3mo of tx; if reached, congratulate pt & monitor

Complications & Co-Morbidities
- **hypoglycemia:** educate pt regarding symptoms; ensure pt has carbs on-hand
- **HTN (ie. BP > 130/80):** ACEi *OR* ARB (monitor creatinine; **NEVER** give together), then try DHP CCB, thiazide-like diuretic, B-blocker or non-DHP CCB in that order
- **dyslipidemia**: tx with statin; add fibrate if Total Cholesterol >10.0
- **albuminuria**: ACEi or ARB if creat.clearance >30, careful/refer if <30; stop if hypovolemic/severely ill; check creatinine & [K+] in 2wks then re-check periodically
- **painful neuropathy**: TCA or anticonvulsant or opioid analgesic
- **erectile dysfunction**: PDE5 inhibitor if no contraindications (eg. nitrate use)

Key Reference: Canadian Diabetes Association Clinical Practice Guidelines Expert Committee. Canadian Diabetes Association 2013 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada. *Can J Diabetes* 2013;37(suppl 1):S1-S212.