

Early Identification of Prediabetes / Diabetes Mellitus (DM) in Primary Care

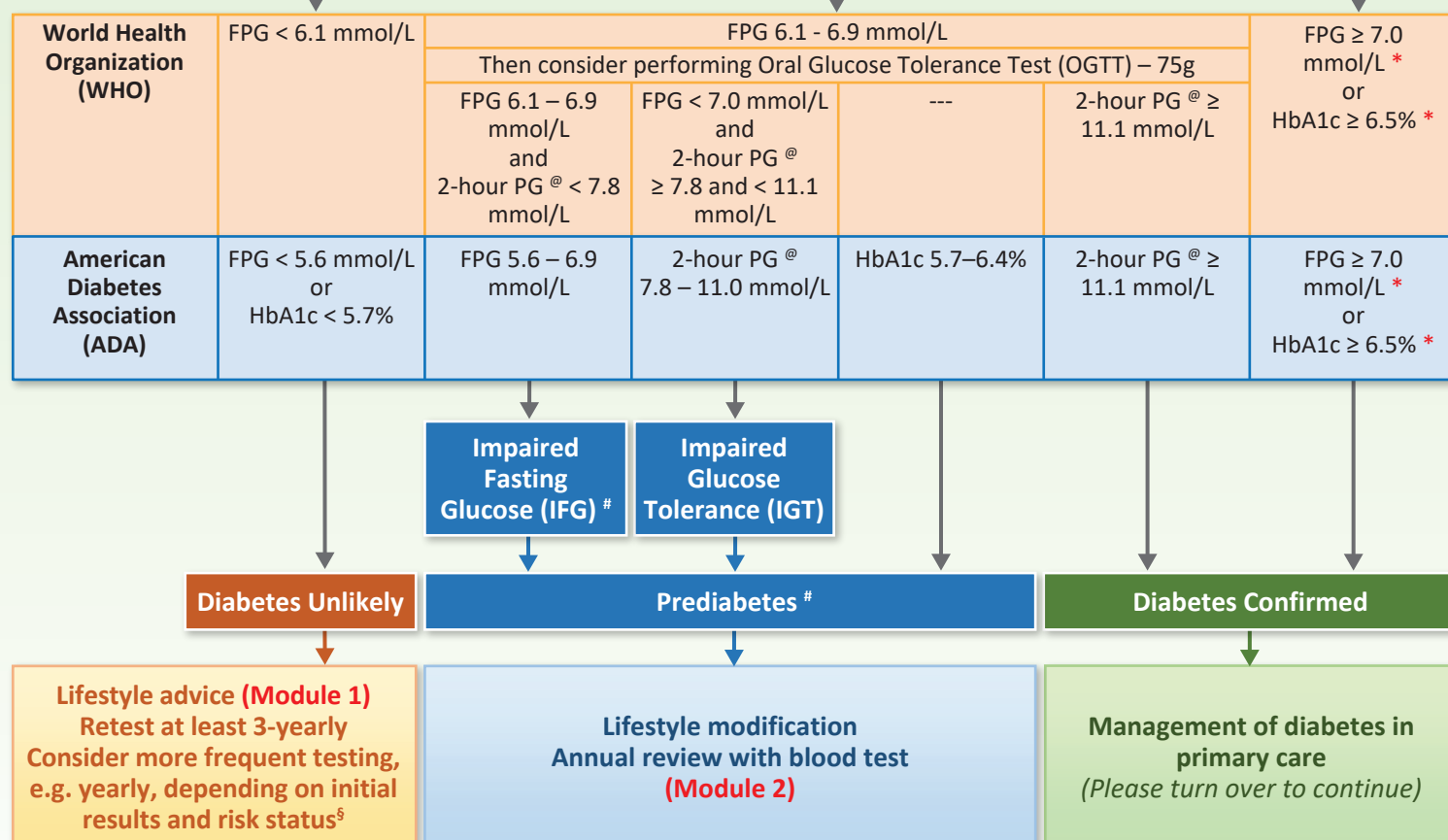
Early Identification of People with Diabetes (Module 3)

- 1) Age ≥ 45 years old; or
- 2) Anyone with risk factors for diabetes[§]; or
- 3) Anyone with symptoms or signs of diabetes

*Need an additional HbA1c or plasma glucose test result in diabetic range in asymptomatic person for confirmation of diagnosis

Diabetes Mellitus (DM)

Check Fasting Plasma Glucose (FPG) or Glycated Haemoglobin (HbA1c)



[@] 2-hour PG: 2 hours plasma glucose level after Oral Glucose Tolerance Test (OGTT)

[#] Definition of IFG and prediabetes vary according to different guidelines (e.g. WHO or ADA as presented in this chart)

§ Risk Factors for Diabetes (Module 3)

- Age ≥ 45 years old
- Family history (first-degree relatives) of diabetes
- Overweight or obesity
- Previous Impaired Fasting Glucose (IFG) or Impaired Glucose Tolerance (IGT)
- Abdominal circumference: ≥ 80 cm in females, ≥ 90 cm in males
- Hypertension (HT) - blood pressure (BP) $\geq 140/90$ mmHg
- Metabolic syndrome
- Clinical cardiovascular diseases (e.g. coronary heart disease, stroke, peripheral vascular disease)
- Presence of other cardiovascular risk factors
- Women with history of gestational diabetes or delivery of a big baby ≥ 4 kg
- Polycystic ovarian syndrome
- Long-term systemic steroid therapy

Diabetes Mellitus (DM)

Extracted from the Hong Kong Reference Framework for Diabetes Care for Adults in Primary Care Settings.

Available at www.healthbureau.gov.hk/pho/

2023 Edition

Management of Diabetes Mellitus (DM) in Primary Care

Management Strategy

- Promote lifestyle modification, e.g. diet (Module 4), exercise (Module 5) and smoking cessation
- Check HbA1c preferably half yearly, but not more than 1 year or more frequently to 3-6 monthly intervals if glycaemic control is suboptimal (Module 6) and arrange regular follow up
- Measure BP every visit. Start ACEI / ARB for patients with HT (BP $\geq$ 130/80 mmHg) (Module 8), microalbuminuria or proteinuria (Module 10)
- Consider statin if lifestyle modification fails to achieve target LDL-C $<$ 2.6 mmol/L (Module 9)
- Consider referral if indicated (Core Document Ch. 8.1)

[^] HbA1c Goal (Module 6)

Individualised, balancing benefits and risks

- General: **$<$ 7%**
- Limited life expectancy, functional impairment, significant comorbidities, older or frail: **7-8.5%**

Step 1: mono-therapy

HbA1c above target[^]

- Use **Metformin** as monotherapy (Module 7)
- Consider other alternative if:
 - Metformin not tolerated or contraindicated

Step 2: dual therapy

HbA1c above target[^]

- Add one of these agents (**Sulphonylurea, Pioglitazone, DPP4 inhibitor or SGLT2 inhibitor**) with consideration of the followings: (Module 7)
 - presence of comorbidities
 - hypoglycaemic risk
 - impact on weight
 - risk for side effects
 - patient's preference
 - cost

Step 3: triple therapy or insulin based

HbA1c above target[^]

- Consider **Insulin** (Appendix of Module 7)
- Add **Pioglitazone, DPP4 inhibitor, SGLT2 inhibitor or Sulphonylurea** when insulin is unacceptable or inappropriate
- Add **GLP-1 receptor agonist** if BMI $\geq$ 27.5kg/m² and weight loss would benefit comorbidities

Annual Assessment and Complication Screening (Core Document Ch. 8.3)

- | | |
|---|---|
| <ul style="list-style-type: none">• Glycaemic control<ul style="list-style-type: none">- HbA1c- Compliance / diabetes knowledge• Co-existing cardiovascular risk factors<ul style="list-style-type: none">- Obesity (BMI / waist circumference)- Smoking / alcohol- HT (BP)- Dyslipidaemia (lipid profile) | <ul style="list-style-type: none">• Complications<ul style="list-style-type: none">- Diabetic kidney disease (serum creatinine / random spot urine albumin: creatinine ratio) (Module 10)- Retinopathy (Module 11)- Foot (foot pulse / foot ulcer / neuropathy) (Module 12)• Medication review, dietary assessment |
|---|---|