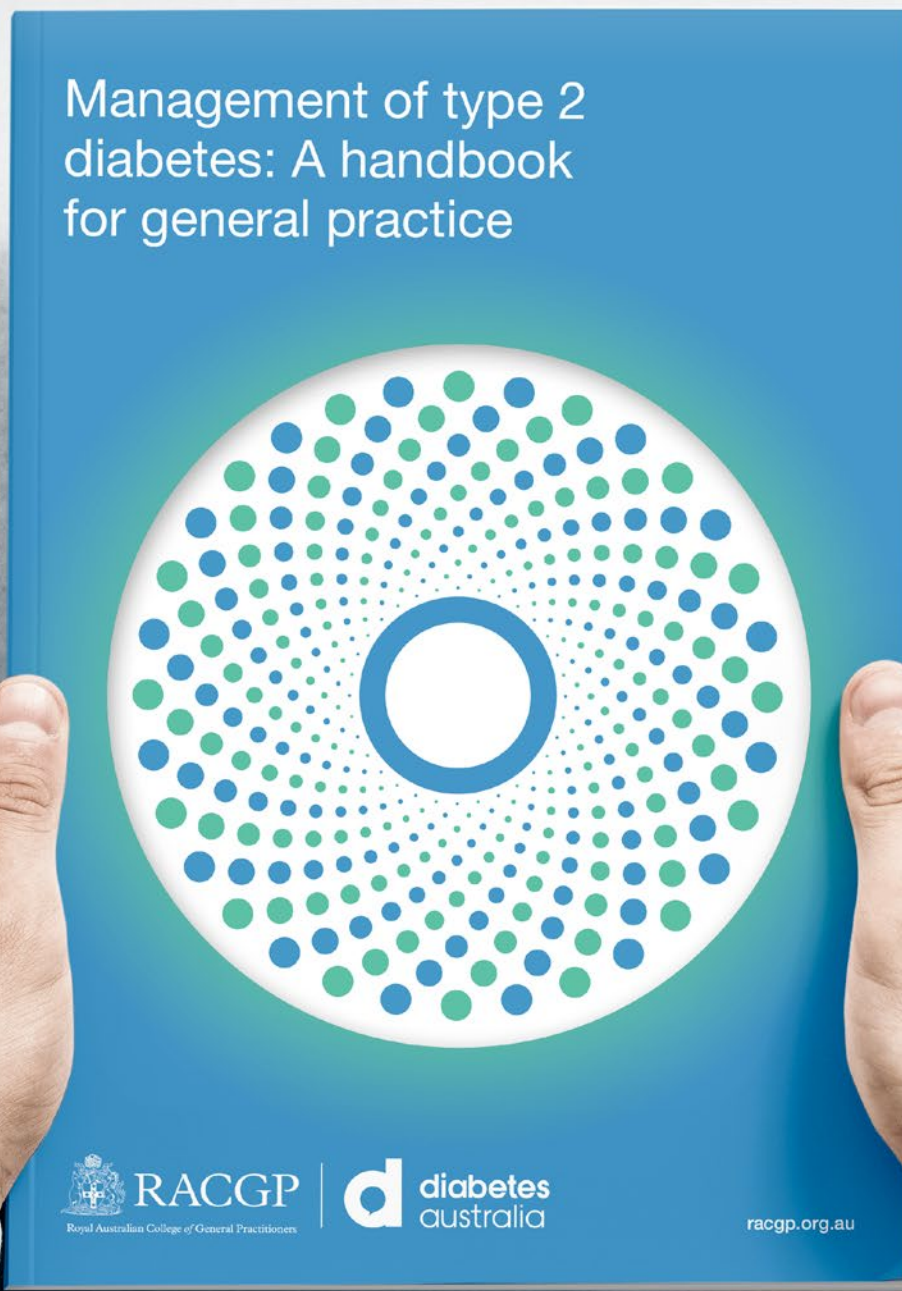


New edition now online

Management of type 2 diabetes: A handbook for general practice

Clinical summary



Updated Diabetes Handbook out now

The latest edition of *Management of type 2 diabetes: A handbook for general practice* (Diabetes Handbook) is now available – in a new, online format.

As always, the handbook, published by The Royal Australian College of General Practitioners (RACGP) and Diabetes Australia, provides practical, evidence-based recommendations for managing type 2 diabetes in general practice.

What's new?

This clinical summary explains the major changes in the new edition, and contains the following clinical aids:

- Type 2 diabetes screening and diagnosis algorithm
- Goals for optimal management of type 2 diabetes
- The latest Australian type 2 diabetes management algorithm

The new handbook at a glance

Updates to the Diabetes Handbook include completely new sections on the following topics:

- Early-onset type 2 diabetes
- Mental health and type 2 diabetes
- Management of type 2 diabetes in older people and residential aged care facilities
- The use of technology in managing type 2 diabetes

Significant updates to pre-existing sections include the following.

- **Managing risks and other impacts of diabetes:**
 - New recommendations regarding cessation of sodium glucose co-transporter 2 (SGLT2) inhibitors in people with type 2 diabetes who are undergoing surgery or endoscopic procedures, and during intercurrent illness
 - A new subsection on diabetes management for people fasting during Ramadan
- **Managing cardiovascular risk:** new recommendation for the use of SGLT2 inhibitors and glucagon-like peptide-1 receptor agonists (GLP-1 RAs) in people with type 2 diabetes in the setting of cardiovascular disease and suboptimal glucose control
- **Reproductive health:** removal of advice on management of polycystic ovary syndrome (PCOS); GPs can refer to international guidelines for management of PCOS (www.monash.edu/medicine/sphpm/mchri/pcos/guideline).

Access the full handbook at www.racgp.org.au/diabetes-handbook

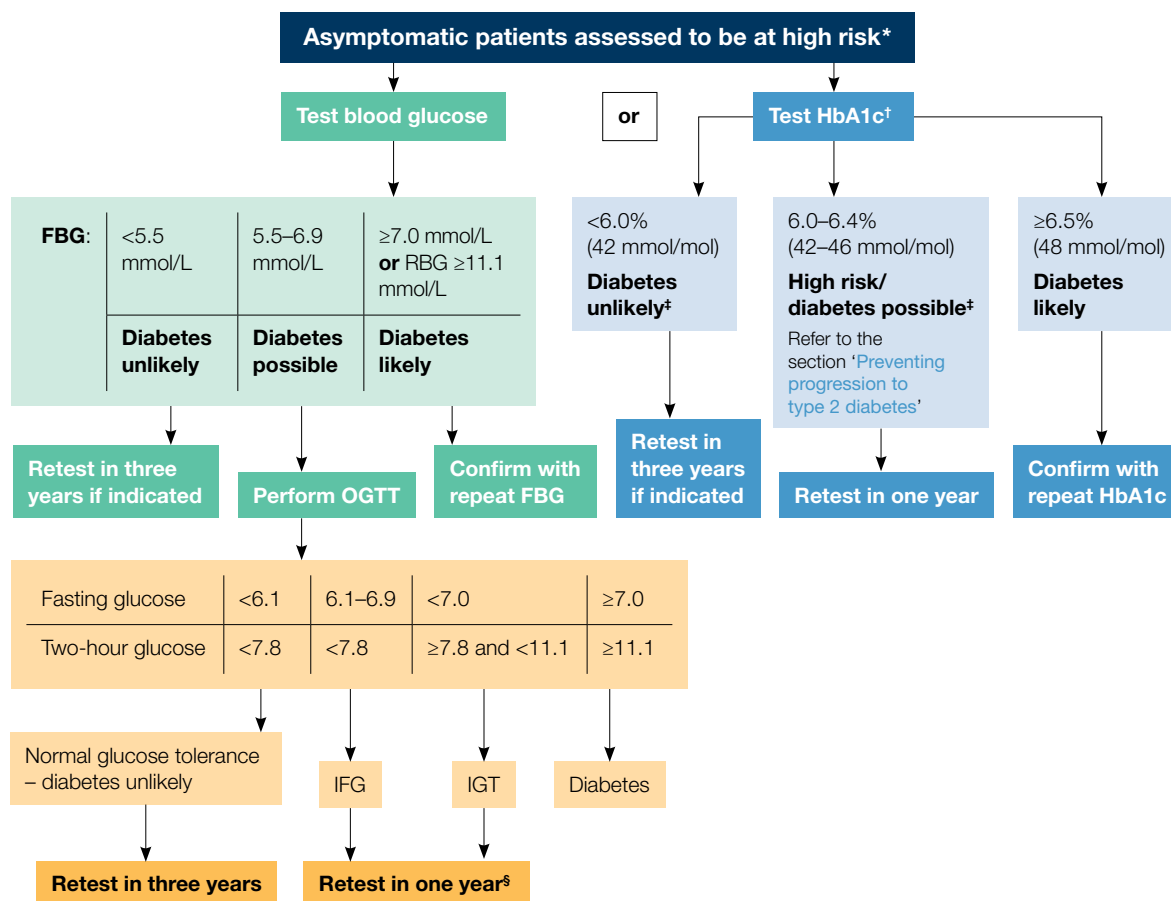
Type 2 diabetes: Goals for optimum management

The following table lists goals for optimum management for all people with type 2 diabetes. For guidance on specific assessment intervals, advice and arrangements, refer to the relevant sections of the handbook.

| Individual goals | |
|---|---|
| Encourage all people with type 2 diabetes to approach/reach these goals. | |
| Diet | Advise eating according to the <i>Australian dietary guidelines</i> , with attention to quantity and type of food Advise individual dietary review for people with difficulty managing weight, difficulty maintaining glucose levels in target range, CVD risk, or if otherwise concerned |
| BMI | Advise a goal of 5–10% weight loss for people who are overweight or obese with type 2 diabetes For people with BMI >35 kg/m ² and comorbidities, or BMI >40 kg/m ² , consider facilitating greater weight-loss measures |
| Physical activity | Children and adolescents: at least 60 min/day of moderate-to-vigorous physical activity, plus muscle- and bone-strengthening activities at least three days/week Adults: 150 minutes of aerobic activity, plus 2–3 sessions of resistance exercise (to a total ≥60 minutes) per week |
| Cigarette consumption | Zero per day |
| Alcohol consumption | Advise ≤2 standard drinks (20 g of alcohol) per day for men and women |
| Blood glucose monitoring | Advise 4–7 mmol/L fasting and 5–10 mmol/L postprandial SMBG is recommended for patients with type 2 diabetes who are using insulin. Education should be provided regarding frequency and timing of insulin dose For people not on insulin, the need for and frequency of SMBG should be individualised, depending on type of glucose-lowering medications, level of glycaemic control and risk of hypoglycaemia, as an aid to self-management SMBG is recommended in pregnancy complicated by diabetes or gestational diabetes SMBG is also recommended for people with hyperglycaemia arising from intercurrent illness. It may be helpful in haemoglobinopathies or other conditions where HbA1c measurements may be unreliable |

| Clinical management goals | |
|--|---|
| Treatment targets for people with type 2 diabetes include the following. For a comprehensive list of assessments and screening intervals, refer to the section 'Assessment of the patient with type 2 diabetes'. | |
| HbA1c | Target needs individualisation according to patient circumstances Generally $\leq 7\%$ (53 mmol/mol) |
| Lipids | Initiation of pharmacotherapy is dependent on the assessment of absolute CVD risk (refer to the Australian absolute cardiovascular disease risk calculator). This uses multiple risk factors, which is considered more accurate than the use of individual parameters Once therapy is initiated, the specified targets apply; however, these targets should be used as a guide to treatment and not as a mandatory target |
| Total cholesterol | <4.0 mmol/L |
| HDL-C | ≥ 1.0 mmol/L |
| LDL-C | <2.0 mmol/L; <1.8 mmol/L if established CVD is present |
| Non-HDL-C | <2.5 mmol/L |
| Triglycerides | <2.0 mmol/L |
| Blood pressure | $\leq 140/90$ mmHg Lower blood pressure targets may be considered for younger people and for secondary prevention in those at high risk of stroke The target for people with diabetes and albuminuria/proteinuria remains <130/80 mmHg. As always, treatment targets should be individualised and monitored for side effects from medications used to lower blood pressure |
| Urine albumin excretion | UACR: <ul style="list-style-type: none"> women: <3.5 mg/mmol men: <2.5 mg/mmol Timed overnight collection: <20 $\mu\text{g}/\text{min}$; spot collection: <20 mg/L |
| Vaccination | Recommended immunisations: influenza, pneumococcus, diphtheria-tetanus-acellular pertussis (dTpa). Consider: hepatitis B (if travelling), herpes zoster |
| <i>BMI, body mass index; CVD, cardiovascular disease; GPs, general practitioners; HbA1c, glycated haemoglobin; HDL-C, high-density lipoprotein cholesterol; LDL-C, low-density lipoprotein cholesterol; SMBG, self-monitoring of blood glucose; UACR, urine albumin-to-creatinine ratio.</i> | |

Screening and diagnosing type 2 diabetes in asymptomatic people¹⁻⁴



FBG, fasting blood glucose; HbA1c, glycated haemoglobin; IFG, impaired fasting glucose; IGT, impaired glucose tolerance; OGTT, oral glucose tolerance test; RBG, random blood glucose

Note: IGT and IFG cannot be diagnosed using HbA1c.

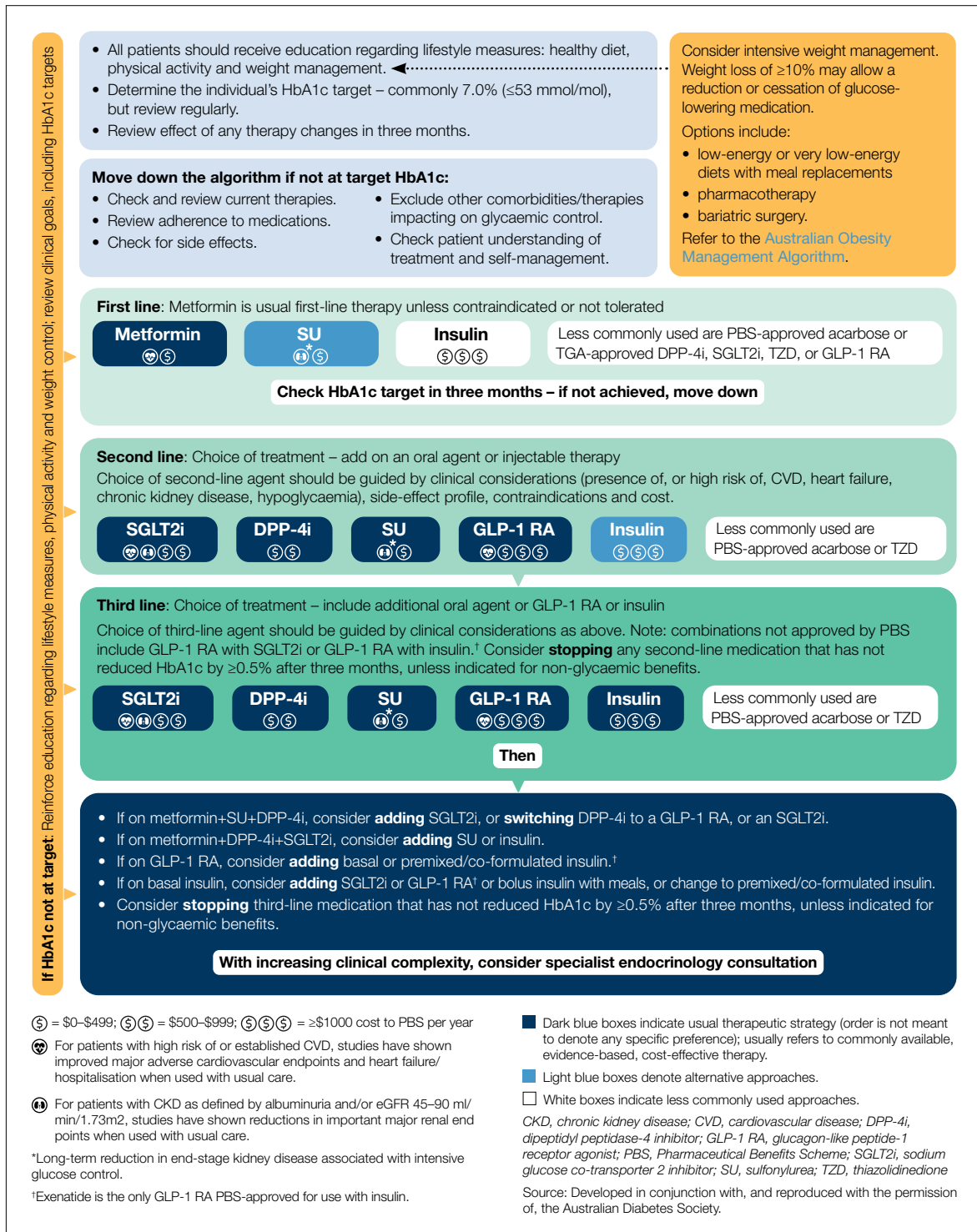
*Using AUSDRISK (score ≥12) or in specific high-risk categories

¹Medicare Benefits Schedule (MBS) item number 66841 allows for diagnostic use only, once every 12 months. The request slip should be annotated as HbA1c or for Service Incentive Payment (SIP) and Practice Incentives Program (PIP) purposes. However, a confirmatory HbA1c test (MBS item number 66551) should be ordered before treatment initiation²

[†]HbA1c results <6.5% do not exclude diabetes diagnosed by glucose tests²

[§]If confirmatory test is negative, repeat assessment one year or earlier if symptomatic

The Australian type 2 diabetes management algorithm



References

1. Colagiuri S, Davies D, Girgis S, Colagiuri R. National evidence based guideline for case detection and diagnosis of type 2 diabetes. Canberra: Diabetes Australia and the National Health and Medical Research Council, 2009.
2. World Health Organization. Use of glycosylated haemoglobin (HbA1c) in the diagnosis of diabetes mellitus. Geneva: WHO, 2011.
3. d'Emden MC, Shaw JE, Colman PG, et al. The role of HbA1c in the diagnosis of diabetes mellitus in Australia. *Med J Aust* 2012;197(4):220–21.
4. Diabetes Canada Clinical Practice Guidelines Expert Committee. Diabetes Canada 2018 clinical practice guidelines for the prevention and management of diabetes in Canada. *Can J Diabetes* 2018;42:S1–S325.

Disclaimer

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