What's new in Diabetes (2022)

Some of the new information and major changes included in Therapeutic Guidelines.

Therapeutic Guidelines has recently launched its 'living approach' to updating guidelines, which involves updates to specific content when changes in evidence or practice occur, rather than waiting until the scheduled full guideline review. In line with this, a number of updates to the Diabetes guidelines have been made in response to important new evidence and changes in practice since the guidelines were last published in 2019.

Classifying and diagnosing diabetes

A glycated haemoglobin (HbA1c) threshold for prediabetes in Australia has now been defined. This topic now includes advice on interpreting an HbA1c that indicates prediabetes and the implications for management.

Type 1 diabetes in adults

- The handy table on action profiles of insulin formulations has been updated to include the new faster-acting insulin aspart (Fiasp), which is classified as a rapidacting insulin. Insulins in the table are now ordered by brand name, rather than generic name, to assist in selecting the correct insulin when prescribing.
- Self-administration of insulin is preferred, but may not always be possible; a new section is included on specific considerations when insulin is not self-administered.
- To address the role of faster-acting insulin aspart (Fiasp), the topic includes a discussion on why administration of rapid-acting insulins before meals is preferred over administration after starting a meal.

Screening and management of people at risk of developing type 2 diabetes

This new topic highlights the increased risk of type 2 diabetes in Aboriginal, Torres Strait Islander, Māori and Pacific children and adolescents compared to non-Indigenous children and adolescents. Advice on screening for type 2 diabetes in children and adolescents with risk factors for type 2 diabetes is included, with a lower threshold for screening Aboriginal, Torres Strait Islander, Māori and Pacific children and adolescents.

Type 2 diabetes in children and adolescents

- Microvascular and macrovascular complications can occur at a much younger age in people with paediatric-onset type 2 diabetes; the importance of managing diabetes and screening for complications in this age group is emphasised.
- The indications for insulin for type 2 diabetes in children and adolescents have been updated in line with the latest advice from the Australasian Paediatric Endocrine Group.

Type 2 diabetes in adults

This topic has been extensively revised, including a full update to the well-used algorithm for antihyperglycaemic treatment. Important changes discussed in detail in the text, and reflected in the algorithm, include:

- treatment with metformin for all adults with type 2 diabetes, regardless of initial (HbA1c), at the maximum tolerated dose
- use of sodium-glucose co-transporter 2 (SGLT2) inhibitors (dapagliflozin or empagliflozin) and glucagon-like peptide-1 (GLP-1) receptor agonists (dulaglutide, liraglutide or semaglutide), independent of their antihyperglycaemic effect, for cardiovascular and renal benefits in patients with atherosclerotic cardiovascular disease (established or a high risk of), heart failure, or chronic kidney disease
- practically focused advice on considerations when adding or changing antihyperglycaemic drugs to improve glycaemic management, summarised in a new section to be read alongside the algorithm
- discussion on weight loss associated with GLP-1 receptor agonists.

Pregnancy in women with pre-existing diabetes

- Aspirin and calcium supplementation are now recommended for all women with pre-existing type 1 or type 2 diabetes from 12 weeks gestation for pre-eclampsia prophylaxis, in line with advice from the Australasian Diabetes in Pregnancy Society (ADIPS).
- Blood glucose concentration and HbA1c targets before conception and during pregnancy have been updated in line with ADIPS recommendations.

Hyperglycaemia in pregnancy (including gestational diabetes)

- An oral glucose tolerance test should not be undertaken in women who have a sleeve gastrectomy, Roux-en-Y or omega loop gastric bypass, or biliopancreatic diversion because of the risk of dumping syndrome and hypoglycaemia. Alternative methods of glucose tolerance assessment are discussed for these women.
- Advice on postpartum screening of women who had hyperglycaemia in pregnancy (including gestational diabetes) has been updated, with the approach stratified according to whether further pregnancy is likely.

Other changes

- Targets for interstitial glucose concentration have been included for type 1 diabetes, type 2 diabetes and pre-existing diabetes in pregnancy for patients using continuous glucose monitoring (CGM) or flash glucose monitoring. Expanded subsidy for CGM and flash glucose monitoring consumables through the National Diabetes Services Scheme (NDSS) is also covered.
- Rarely SGLT2 inhibitors can cause diabetic ketoacidosis (DKA). Advice on the risk of DKA and how this should be managed has been updated for a range of scenarios, including type 1 diabetes, type 2 diabetes, sick-day management, hospitalised patients, and periprocedural management.

For more information and orders visit www.tg.org.au or freecall 1800 061 260 (within Australia)





Download the Therapeutic Guidelines app

What's new in Diabetes 1 (2019)

Some of the new information and major changes included in *Therapeutic Guidelines: Diabetes*, version 1.

The Diabetes guidelines have been extensively revised. The focus is on individualised, patient-centred management of hyperglycaemia and diabetes in community and hospital settings.

The management of **first presentation with hyperglycaemia** is outlined in a new topic. It alerts practitioners that suspected diabetes in children and adolescents is a medical emergency requiring immediate specialist assessment and management.

First presentation of severe hyperglycaemia in an unwell adult is also a medical emergency. Information is included to help practitioners recognise and manage acute complications of diabetes such as life-threatening **diabetic ketoacidosis** or hyperosmolar hyperglycaemia.

Management of **type 1 diabetes** in children, adolescents and adults should be guided by a multidisciplinary diabetes team. Information has been added on blood glucose concentration monitoring using traditional blood glucose monitors and the newer interstitial fluid monitors (continuous glucose monitoring systems and flash glucose monitors). Practical advice on causes and management of disruption of pump-delivered subcutaneous insulin is also included, and safety considerations for insulin use are highlighted throughout the guidelines.

For type 2 diabetes, diet and exercise are cornerstones of management. When **antihyperglycaemic drugs** are added, the choice depends on patient- and drug-related factors. Advantages and disadvantages of antihyperglycaemic drugs are tabulated for easy reference and a flowchart gives a suggested approach to glycaemic management for patients with type 2 diabetes.

A revised table of **glycaemic targets for adults with type 2 diabetes** allows individualisation of glycaemic targets according to the patient's clinical condition. Users are reminded throughout the guidelines of the importance of ensuring optimal glycaemic control and of assessing for and managing cardiovascular disease risk factors for patients with all types of diabetes, including drug-induced hyperglycaemia.

Patients are empowered by self-management of their diabetes. **Patient instruction sheets** (printable from *eTG complete*) are provided for starting and titrating insulin doses for both basal insulin regimens and twice-daily mixed insulin regimens for adults with type 2 diabetes. Links to patient information from reputable sites, such as Diabetes Australia and the Baker Heart and Diabetes Institute, are also included throughout the guidelines.

Hyperglycaemia and diabetes in hospitalised adults is associated with increased morbidity and a higher mortality rate. New guidance has been added on recognising and managing these patients to improve their outcomes.

Hospitals should have management protocols in place for patients with hyperglycaemia or diabetes. For instances when local protocols are not available, examples of **insulin dosing protocols** have been provided in the guidelines. These include protocols for starting a multiple daily injection (basal–bolus) insulin regimen in hospital, dosing of subcutaneous insulin on the day of a procedure, and use of intravenous insulin infusions for patients undergoing a procedure or during labour (printable from eTG complete).

If hypoglycaemia occurs, prompt treatment is vital. Detailed information is available in the revised and expanded topic on hypoglycaemia in patients with diabetes.

The topic on **drug-induced hyperglycaemia** has been expanded to include more information about the common clinical problem of **glucocorticoidinduced hyperglycaemia**, and suggested insulin dosage regimens for management of significant prednisolone-induced hyperglycaemia.

Information is given about managing **pregnant women** with pre-existing diabetes, including pre-conception planning. Management of women who develop hyperglycaemia in pregnancy (including gestational diabetes) is also discussed.

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