

## Type 2 diabetes in adults overview

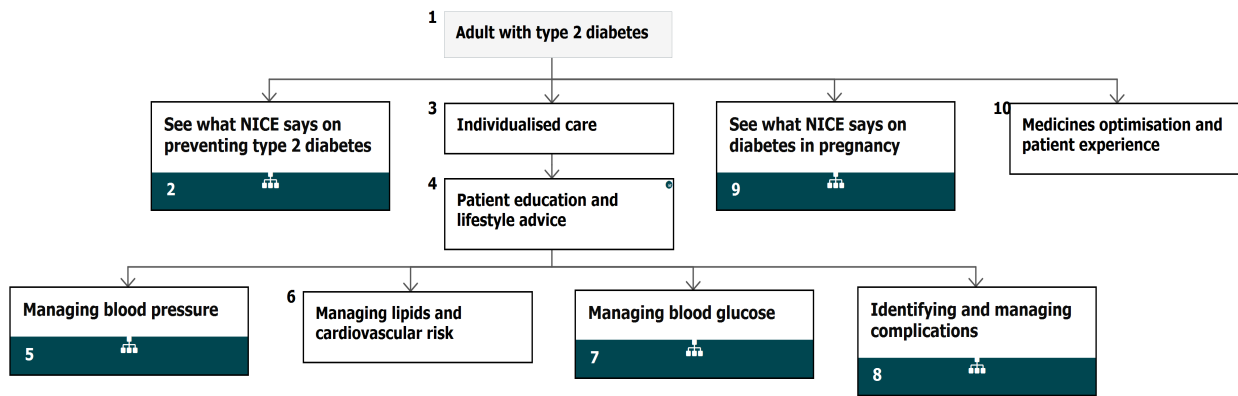
NICE Pathways bring together everything NICE says on a topic in an interactive flowchart. NICE Pathways are interactive and designed to be used online.

They are updated regularly as new NICE guidance is published. To view the latest version of this NICE Pathway see:

<http://pathways.nice.org.uk/pathways/type-2-diabetes-in-adults>

NICE Pathway last updated: 26 March 2019

This document contains a single flowchart and uses numbering to link the boxes to the associated recommendations.



## 1 Adult with type 2 diabetes

No additional information

## 2 See what NICE says on preventing type 2 diabetes

[See Preventing type 2 diabetes](#)

## 3 Individualised care

Adopt an individualised approach to diabetes care that is tailored to the needs and circumstances of adults with type 2 diabetes, taking into account their personal preferences, comorbidities, risks from polypharmacy, and their ability to benefit from long term interventions because of reduced life expectancy. Such an approach is especially important in the context of multimorbidity. Reassess the person's needs and circumstances at each review and think about whether to stop any medicines that are not effective.

Take into account any disabilities, including visual impairment, when planning and delivering care for adults with type 2 diabetes.

See what NICE says on [depression](#) and [multimorbidity](#).

## 4 Patient education and lifestyle advice

### Patient education

Offer structured education to adults with type 2 diabetes and/or their family members or carers (as appropriate) at and around the time of diagnosis, with annual reinforcement and review. Explain to people and their carers that structured education is an integral part of diabetes care.

Ensure that any structured education programme for adults with type 2 diabetes includes the following components:

- It is evidence-based, and suits the needs of the person.
- It has specific aims and learning objectives, and supports the person and their family members and carers in developing attitudes, beliefs, knowledge and skills to self-manage diabetes.

- It has a structured curriculum that is theory-driven, evidence-based and resource-effective, has supporting materials, and is written down.
- It is delivered by trained educators who have an understanding of educational theory appropriate to the age and needs of the person, and who are trained and competent to deliver the principles and content of the programme.
- It is quality assured, and reviewed by trained, competent, independent assessors who measure it against criteria that ensure consistency.
- The outcomes are audited regularly.

Ensure the patient-education programme provides the necessary resources to support the educators, and that educators are properly trained and given time to develop and maintain their skills.

Offer group education programmes as the preferred option. Provide an alternative of equal standard for a person unable or unwilling to participate in group education.

Ensure that the patient-education programmes available meet the cultural, linguistic, cognitive and literacy needs within the local area.

Ensure that all members of the diabetes healthcare team are familiar with the patient-education programmes available locally, that these programmes are integrated with the rest of the care pathway, and that adults with type 2 diabetes and their family members or carers (as appropriate) have the opportunity to contribute to the design and provision of local programmes.

### **Dietary advice**

Provide individualised and ongoing nutritional advice from a healthcare professional with specific expertise and competencies in nutrition.

Provide dietary advice in a form sensitive to the person's needs, culture and beliefs, being sensitive to their willingness to change and the effects on their quality of life.

Emphasise advice on healthy balanced eating that is applicable to the general population when providing advice to adults with type 2 diabetes. Encourage high-fibre, low-glycaemic-index sources of carbohydrate in the diet, such as fruit, vegetables, wholegrains and pulses; include low-fat dairy products and oily fish; and control the intake of foods containing saturated and trans fatty acids.

Integrate dietary advice with a personalised diabetes management plan, including other aspects of lifestyle modification, such as increasing physical activity and losing weight.

For adults with type 2 diabetes who are overweight, set an initial body weight loss target of 5–10%. Remember that lesser degrees of weight loss may still be of benefit, and that larger degrees of weight loss in the longer term will have advantageous metabolic impact.

Individualise recommendations for carbohydrate and alcohol intake, and meal patterns. Reducing the risk of hypoglycaemia should be a particular aim for a person using insulin or an insulin secretagogue.

Advise adults with type 2 diabetes that limited substitution of sucrose-containing foods for other carbohydrate in the meal plan is allowable, but that they should take care to avoid excess energy intake.

Discourage the use of foods marketed specifically for people with diabetes.

When adults with type 2 diabetes are admitted to hospital as inpatients or to any other care setting, implement a meal planning system that provides consistency in the carbohydrate content of meals and snacks.

For recommendations on lifestyle advice, see what NICE says on [diet](#), [lifestyle weight management services for overweight or obese adults](#), [obesity](#), [physical activity](#) and [smoking](#).

## Quality standards

The following quality statement is relevant to this part of the interactive flowchart.

2. Structured education programmes for adults with type 2 diabetes

### 5 Managing blood pressure

[See Type 2 diabetes in adults / Managing blood pressure in adults with type 2 diabetes](#)

### 6 Managing lipids and cardiovascular risk

Do not offer antiplatelet therapy (aspirin or clopidogrel) for adults with type 2 diabetes without cardiovascular disease.

For guidance on the primary and secondary prevention of cardiovascular disease in adults with type 2 diabetes, see what NICE says on [cardiovascular disease prevention](#) and [myocardial](#)

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infarction: rehabilitation and preventing further cardiovascular disease.

## 7 Managing blood glucose

See Type 2 diabetes in adults / Managing blood glucose in adults with type 2 diabetes

## 8 Identifying and managing complications

See Type 2 diabetes in adults / Identifying and managing complications in adults with type 2 diabetes

## 9 See what NICE says on diabetes in pregnancy

See Diabetes in pregnancy

## 10 Medicines optimisation and patient experience

Use these recommendations with NICE's recommendations on:

- medicines optimisation
- patient experience in adult NHS services.

**ACE**

angiotensin-converting enzyme

**DPP-4**

dipeptidyl peptidase-4

**DVLA**

Driver and Vehicle Licensing Agency

**eGFR**

estimated glomerular filtration rate

**GLP-1**

glucagon-like peptide-1

**SGLT-2**

sodium–glucose cotransporter 2

**Sources**

Type 2 diabetes in adults: management (2015 updated 2017) NICE guideline NG28

**Your responsibility****Guidelines**

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals and practitioners are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or the people using their service. It is not mandatory to apply the recommendations, and the guideline does not override the responsibility

to make decisions appropriate to the circumstances of the individual, in consultation with them and their families and carers or guardian.

Local commissioners and providers of healthcare have a responsibility to enable the guideline to be applied when individual professionals and people using services wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with complying with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

## Technology appraisals

The recommendations in this interactive flowchart represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, health professionals are expected to take these recommendations fully into account, alongside the individual needs, preferences and values of their patients. The application of the recommendations in this interactive flowchart is at the discretion of health professionals and their individual patients and do not override the responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or their carer or guardian.

Commissioners and/or providers have a responsibility to provide the funding required to enable the recommendations to be applied when individual health professionals and their patients wish to use it, in accordance with the NHS Constitution. They should do so in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

## Medical technologies guidance, diagnostics guidance and interventional procedures



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**guidance**

The recommendations in this interactive flowchart represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, healthcare professionals are expected to take these recommendations fully into account. However, the interactive flowchart does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

Commissioners and/or providers have a responsibility to implement the recommendations, in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity, and foster good relations. Nothing in this interactive flowchart should be interpreted in a way that would be inconsistent with compliance with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.