NICE National Institute for Health and Care Excellence

NICE Pathways

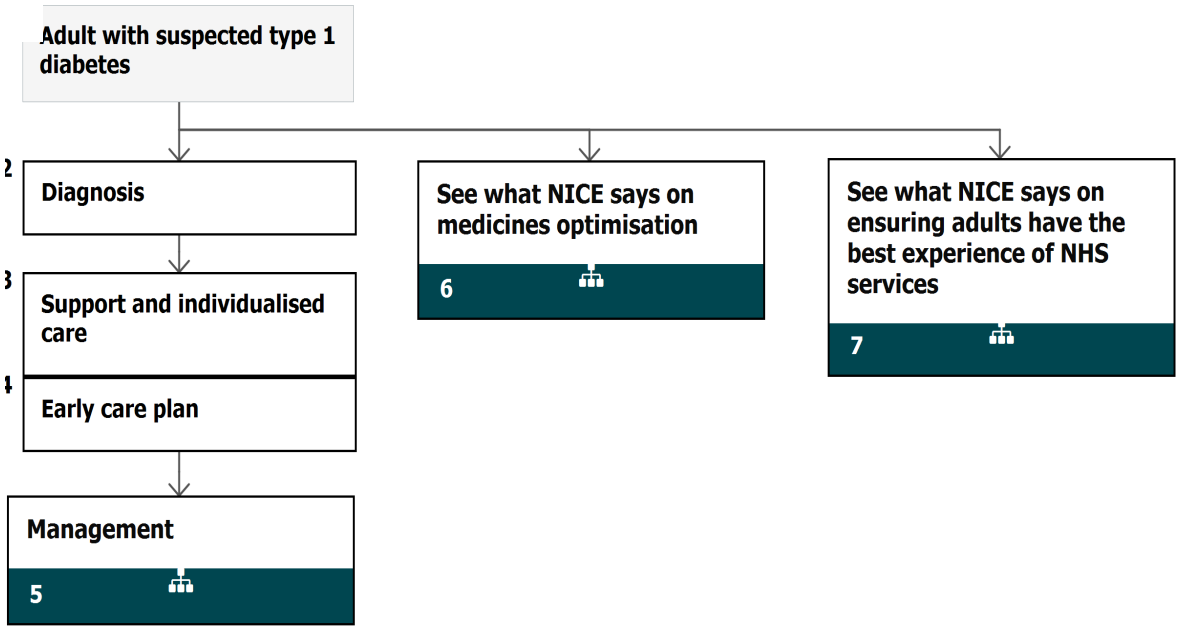
Type 1 diabetes in adults overview

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-1-diabetes-in-adults
NICE Pathway last updated: 31 May 2018

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



1 Adult with suspected type 1 diabetes

No additional information

2 Diagnosis

Diagnose type 1 diabetes on clinical grounds in adults presenting with hyperglycaemia, bearing in mind that people with type 1 diabetes typically (but not always) have one or more of:

- ketosis
- rapid weight loss
- age of onset below 50 years
- BMI below 25 kg/m^2
- personal and/or family history of autoimmune disease.

Do not discount a diagnosis of type 1 diabetes if an adult presents with a BMI of 25 kg/m^2 or above or is aged 50 years or above.

Do not measure C-peptide and/or diabetes-specific autoantibody titres routinely to confirm type 1 diabetes in adults.

Consider further investigation in adults that involves measurement of C-peptide and/or diabetes-specific autoantibody titres if:

- type 1 diabetes is suspected but the clinical presentation includes some atypical features (for example, age 50 years or above, BMI of 25 kg/m^2 or above, slow evolution of hyperglycaemia or long prodrome) **or**
- type 1 diabetes has been diagnosed and treatment started but there is a clinical suspicion that the person may have a monogenic form of diabetes, and C-peptide and/or autoantibody testing may guide the use of genetic testing **or**
- classification is uncertain, and confirming type 1 diabetes would have implications for availability of therapy (for example, continuous subcutaneous insulin infusion [CSII or 'insulin pump'] therapy).

When measuring C-peptide and/or diabetes-specific autoantibody titres, take into account that:

- autoantibody tests have their lowest false negative rate at the time of diagnosis, and that the false negative rate rises thereafter
- C-peptide has better discriminative value the longer the test is done after diagnosis

- with autoantibody testing, carrying out tests for 2 different diabetes-specific autoantibodies, with at least 1 being positive, reduces the false negative rate.

3 Support and individualised care

Take account of any disabilities, including visual impairment, when planning and delivering care for adults with type 1 diabetes.

Advice to adults with type 1 diabetes should be provided by a range of professionals with skills in diabetes care working together in a coordinated approach. A common environment (diabetes centre) is an important resource in allowing a diabetes multidisciplinary team to work and communicate efficiently while providing consistent advice.

Provide adults with type 1 diabetes with:

- open-access services on a walk-in and telephone-request basis during working hours
- a helpline staffed by people with specific diabetes expertise on a 24-hour basis
- contact information for these services.

Regard each adult with type 1 diabetes as an individual, rather than as a member of any cultural, economic or health-affected group (see also recommendations about the cultural preferences of individual adults with type 1 diabetes in dietary management and insulin regimens).

Use population, practice-based and clinic diabetes registers (as specified by the National service framework for diabetes) to assist programmed recall for annual review and assessment of complications and cardiovascular risk.

Also see delivery of care in care in hospital.

NICE has written information for the public on type 1 diabetes in adults: diagnosis and management.

4 Early care plan

At the time of diagnosis (or if necessary after the management of critically decompensated metabolism), the diabetes professional team should develop with and explain to the adult with type 1 diabetes a plan for their early care. To agree such a plan will generally require:

- medical assessment to:
  - ensure security of diagnosis of type of diabetes
  - ensure appropriate acute care is given when needed
  - review and detect potentially confounding disease and medicines
  - detect adverse vascular risk factors
- environmental assessment to understand:
  - the social, home, work and recreational circumstances of the person and carers
  - their preferences in nutrition and physical activity
  - other relevant factors, such as substance use
- cultural and educational assessment to identify prior knowledge and to enable optimal advice and planning about:
  - treatment modalities
  - diabetes education programmes
- assessment of emotional state to determine the appropriate pace of education

The results of the assessment should be used to agree a future care plan. Some items of the initial diabetes assessment:

- acute medical history
- social, cultural and educational history/lifestyle review
- complications history/symptoms
- long-term/recent diabetes history
- other medical history/systems
- family history of diabetes/cardiovascular disease
- medication history/current medicines
- vascular risk factors
- smoking
- general examination
- weight/BMI
- foot/eye/vision examination
- urine albumin excretion/urine protein/serum creatinine
- psychological wellbeing
- attitudes to medicine and self-care
- immediate family and social relationships and availability of informal support.

Elements of an individualised and culturally appropriate plan will include:

- sites and timescales of diabetes education, including nutritional advice (see education and information and dietary management)
- initial treatment modalities, including guidance on insulin injection and insulin regimens (see insulin therapy for adults with type 1 diabetes)
- means of self-monitoring and targets (see blood glucose measurement and targets)
- symptoms, risk and treatment of hypoglycaemia
- management of special situations, such as driving
- means and frequency of communication with the diabetes professional team
- management of cardiovascular risk factors (see managing cardiovascular disease risk in adults with type 1 diabetes)
- for women of childbearing potential, implications for pregnancy and family planning advice (see what NICE says on diabetes in pregnancy)
- frequency and content of follow-up consultations, including review of HbA1c levels and experience of hypoglycaemia, and annual review.

After the initial plan is agreed, put arrangements in place to implement it without inappropriate delay, and to provide for feedback and modification of the plan over the ensuing weeks.

At the time of diagnosis and periodically thereafter, provide adults with type 1 diabetes with up-to-date information about diabetes support groups (local and national), how to contact them and the benefits of membership.

Also see associated illness in individual care plan.

5 Management

See Type 1 diabetes in adults / Managing type 1 diabetes in adults

6 See what NICE says on medicines optimisation

See Medicines optimisation

7 See what NICE says on ensuring adults have the best experience of NHS services

See Patient experience in adult NHS services

Sources

Type 1 diabetes in adults: diagnosis and management (2015 updated 2016) NICE guideline NG17

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 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.