

NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Guideline scope

Type 1 diabetes in adults: diagnosis and management (update)

This guideline will update the NICE guideline on type 1 diabetes in adults: diagnosis and management (NG17).

The guideline will be developed using the methods and processes outlined in [developing NICE guidelines: the manual](#).

This guideline will also be used to update the [NICE quality standard for diabetes in adults](#).

1 Why the update is needed

New evidence that could affect recommendations was identified through the surveillance process. Topic experts, including those who helped to develop the existing guideline, advised NICE on whether areas should be updated or new areas added. Full details are set out in the [surveillance review decision](#).

Why the guideline is needed

Please see original guideline [scope](#).

2 Who the guideline is for

This guideline is for:

- healthcare professionals who care for adults with type 1 diabetes
- commissioners and providers of NHS-funded healthcare services
- adults with type 1 diabetes and their families and carers.

NICE guidelines cover health and care in England. Decisions on how they apply in other UK countries are made by ministers in the [Welsh Government](#), [Scottish Government](#) and [Northern Ireland Executive](#).

Equality considerations

NICE carried out [an equality impact assessment](#) during development of the original guideline. The assessment:

- lists equality issues identified, and how they have been addressed
- explains why any groups are excluded from the guideline.

3 What the updated guideline will cover

3.1 Who is the focus?

Groups that will be covered

- Adults (aged 18 years and older) with type 1 diabetes.

Specific consideration will be given to:

- People in specific ethnic groups.
- People who are unable to inject themselves for whatever reason.
- People whose religious beliefs may affect the management of their diabetes.
- People with literacy or numeracy difficulties.

3.2 Settings

Settings that will be covered

All settings where NHS-funded care is provided.

3.3 *Activities, services or aspects of care*

Key areas that will be covered in this update

We will look at evidence in the areas below when developing this update. We will consider making new recommendations or updating existing recommendations in these areas only.

- 1 Diagnosis and early care plan.
 - Diagnosis.
- 2 Blood glucose management.
 - Self-monitoring of blood glucose.
 - Blood glucose monitoring.
- 3 Insulin therapy.
 - Long-acting insulin.
- 4 Managing complications.
 - Periodontal disease.

Proposed outline for the guideline

The table below outlines all the areas that will be included in the guideline. It sets out what NICE plans to do for each area in this update.

Area in the guideline	What NICE plans to do
1.1 Diagnosis and early care plan	
Diagnosis	Review evidence and update existing recommendations as needed
Early care plan	No evidence review: retain recommendations from existing guideline
1.2 Support and individualised care	
Support and individualised care	No evidence review: retain recommendations from existing guideline
1.3 Education and information	
Education and information	No evidence review: retain recommendations from existing guideline
1.4 Dietary management	

Area in the guideline	What NICE plans to do
Carbohydrate counting	No evidence review: retain recommendations from existing guideline
Glycaemic index diets	No evidence review: retain recommendations from existing guideline
Dietary advice	No evidence review: retain recommendations from existing guideline
1.5 Physical activity	
Physical activity	No evidence review: retain recommendations from existing guideline
1.6 Blood glucose management	
HbA1c measurement and targets	No evidence review: retain recommendations from existing guideline
Self-monitoring of blood glucose	<p>Review evidence for use of technologies to empower people to self-monitor blood glucose.</p> <p>No evidence reviews for frequency of self-monitoring of blood glucose, blood glucose targets, sites for self-monitoring of blood glucose: retain recommendations from existing guideline</p>
Continuous glucose monitoring	<p>Review evidence and update existing recommendations 1.6.21 and 1.6.22 as needed</p> <p>Review evidence and update existing recommendation 1.6.23 as needed</p> <p>No evidence review: retain recommendation 1.6.24 from existing guideline</p> <p>Refer to the NICE diagnostics guidance on integrated sensor-augmented pump therapy systems for managing blood glucose levels in type 1 diabetes (the MiniMed Paradigm Veo system and the Vibe and G4 PLATINUM CGM system)</p>
1.7 Insulin therapy	
Insulin regimens	No evidence review: retain recommendations from existing guideline

Area in the guideline	What NICE plans to do
Long-acting insulin	Review evidence and update existing recommendations as needed
Continuous subcutaneous insulin infusion (CSII or insulin pump) therapy	No evidence review: retain recommendation from existing guideline Refer to the NICE diagnostics guidance on integrated sensor-augmented pump therapy systems for managing blood glucose levels in type 1 diabetes (the MiniMed Paradigm Veo system and the Vibe and G4 PLATINUM CGM system)
Rapid-acting insulin	No evidence review: retain recommendations from existing guideline
Mixed insulin	No evidence review: retain recommendations from existing guideline
Optimising insulin therapy	No evidence review: retain recommendations from existing guideline Refer to the NICE diagnostics guidance on integrated sensor-augmented pump therapy systems for managing blood glucose levels in type 1 diabetes (the MiniMed Paradigm Veo system and the Vibe and G4 PLATINUM CGM system)
Adjuncts	No evidence review: retain recommendation from existing guideline Refer to the NICE pathway for SGLT-2 and SGLT-1 inhibitors
1.8 Insulin delivery	
Insulin delivery	No evidence review: retain recommendations from existing guideline Refer to the NICE diagnostics guidance on integrated sensor-augmented pump therapy systems for managing blood glucose levels in type 1 diabetes (the MiniMed Paradigm Veo system and the Vibe and G4 PLATINUM CGM system)
1.9 Referral for islet or pancreas transplantation	

Area in the guideline	What NICE plans to do
Referral for islet or pancreas transplantation	No evidence review: retain recommendations from existing guideline
1.10 Awareness and management of hypoglycaemia	
Identifying and quantifying impaired awareness of hypoglycaemia	No evidence review: retain recommendations from existing guideline
Strategies for managing impaired awareness of hypoglycaemia	No evidence review: retain recommendations from existing guideline
Preventing and managing hypoglycaemia	No evidence review: retain recommendations from existing guideline
1.11 Ketone monitoring and management of diabetic ketoacidosis (DKA)	
Ketone self-monitoring for prevention of DKA	No evidence review: retain recommendation from existing guideline
Ketone monitoring in hospital	No evidence review: retain recommendations from existing guideline
Management of DKA	No evidence review: retain recommendations from existing guideline
1.12 Associated illness	
Associated illness	No evidence review: retain recommendations from existing guideline
1.13 Control of cardiovascular risk	
Aspirin	No evidence review: retain recommendation from existing guideline
Identifying cardiovascular risk	No evidence review: retain recommendations from existing guideline

Area in the guideline	What NICE plans to do
Interventions to reduce risk and manage cardiovascular disease	No evidence review: retain recommendations from existing guideline
Blood pressure management	No evidence review: retain recommendations from existing guideline
1.14 Care of adults with type 1 diabetes in hospital	
Blood glucose control	No evidence review: retain recommendations from existing guideline
Delivery of care	No evidence review: retain recommendations from existing guideline
1.15 Managing complications	
Eye disease	No evidence review: retain recommendations from existing guideline.
Diabetic kidney disease	No evidence review: retain recommendations from existing guideline
Chronic painful diabetic neuropathy	No evidence review: retain recommendation from existing guideline
Autonomic neuropathy	No evidence review: retain recommendations from existing guideline
Gastroparesis	No evidence review: retain recommendations from existing guideline
Acute painful neuropathy of rapid improvement of blood glucose control	No evidence review: retain recommendations from existing guideline
Diabetic foot problems	No evidence review: retain recommendation from existing guideline
Erectile dysfunction	No evidence review: retain recommendations from existing guideline
Thyroid disease monitoring	No evidence review: retain recommendation from existing guideline

Area in the guideline	What NICE plans to do
Psychological problems	No evidence review: retain recommendations from existing guideline
Eating disorders	No evidence review: retain recommendations from existing guideline
Periodontal disease (New area)	Review evidence for periodontal treatment to improve diabetic control. Refer to the NICE guideline on dental checks: intervals between oral health reviews

Recommendations in areas that are being retained from the existing guideline may be edited to ensure that they meet current editorial standards, and reflect the current policy and practice context.

Related NICE guidance

Published

- [Sotagliflozin with insulin for treating type 1 diabetes](#) (2020) NICE technology appraisal 622
- [Fluocinolone acetonide intravitreal implant for treating chronic diabetic macular oedema in phakic eyes after an inadequate response to previous therapy](#) (2019) NICE technology appraisal 613
- [Hypertension in adults: diagnosis and management](#) (2019) NICE guideline NG136
- [Dapagliflozin with insulin for treating type 1 diabetes](#) (2019) NICE technology appraisal 597
- [Stop smoking interventions and services](#) (2018) NICE guideline NG92
- [Integrated sensor-augmented pump therapy systems for managing blood glucose levels in type 1 diabetes \(the MiniMed Paradigm Veo system and the Vibe and G4 PLATINUM CGM system\)](#) (2016) NICE diagnostics guidance 21
- [Type 2 diabetes in adults: management](#) (2015) NICE guideline NG28

- [Coeliac disease recognition, assessment and management](#) (2015) NICE guideline NG20
- [Diabetic foot problems: prevention and management](#) (2015) NICE guideline NG19
- [Diabetes \(type 1 and 2\) in children and young people: diagnosis and management](#) (2015) NICE guideline NG18
- [Diabetes in pregnancy: management from preconception to the postnatal period](#) (2015) NICE guideline NG3
- [Aflibercept for treating diabetic macular oedema](#) (2015) NICE technology appraisal 346
- [Dexamethasone intravitreal implant for treating diabetic macular oedema](#) (2015) NICE technology appraisal 349
- [Chronic kidney disease in adults: assessment and management](#) (2014) NICE guideline CG182
- [Fluocinolone acetonide intravitreal implant for treating chronic diabetic macular oedema after an inadequate response to prior therapy](#) (2013) NICE technology appraisal 301
- [Ranibizumab for treating visual impairment caused by macular oedema secondary to retinal vein occlusion](#) (2013) NICE technology appraisal 283
- [Ranibizumab for treating diabetic macular oedema](#) (2013) NICE technology appraisal 274
- [Peripheral arterial disease: diagnosis and management](#) (2012) NICE guideline CG147
- [Hyperglycaemia in acute coronary syndromes: management](#) (2011) NICE guideline CG130
- [Dexamethasone intravitreal implant for the treatment of macular oedema secondary to retinal vein occlusion](#) (2011) NICE technology appraisal 229
- [Clopidogrel and modified-release dipyridamole for the prevention of occlusive vascular events](#) (2010) NICE technology appraisal guidance 210
- [Depression with adults with a chronic physical health problem: recognition and management](#) (2009) NICE guideline CG91
- [Depression in adults: recognition and management](#) (2009) NICE guideline CG90

- [Continuous subcutaneous insulin infusion for the treatment of diabetes mellitus](#) (2008) NICE technology appraisal 151
- [Allogeneic pancreatic islet cell transplantation for type 1 diabetes mellitus](#) (2008) NICE interventional procedure guideline 257
- [Obesity prevention](#) (2006) NICE guideline CG43
- [Nutrition support in adults: oral nutrition support, enteral tube feeding and parenteral nutrition](#) (2006) NICE guideline CG32
- [Dental checks: intervals between oral health reviews](#) (2004) NICE guideline CG19

In development

- [Chronic kidney disease: assessment and management](#). NICE guideline. Publication expected 2021
- [Shared decision making](#). NICE guideline. Publication expected 2021.
- [Diabetes – buccal insulin](#). NICE technology appraisal guidance. Publication date to be confirmed.
- [Empagliflozin for type 1 diabetes mellitus, adjunct to insulin](#). NICE technology appraisal guidance. Publication date to be confirmed.

NICE guidance that will be updated by this guideline

- [Type 1 diabetes in adults: diagnosis and management](#) (2015) NICE guideline NG17

NICE guidance about the experience of people using NHS services

NICE has produced the following guidance on the experience of people using the NHS. This guideline will not include additional recommendations on these topics unless there are specific issues related to type diabetes:

- [Medicines optimisation](#) (2015) NICE guideline NG5
- [Patient experience in adult NHS services](#) (2012) NICE guideline CG138
- [Service user experience in adult mental health](#) (2011) NICE guideline CG136
- [Medicines adherence](#) (2009) NICE guideline CG76

3.4 Economic aspects

We will take economic aspects into account when making recommendations. We will develop an economic plan that states for each review question (or key area in the scope) whether economic considerations are relevant, and if so whether this is an area that should be prioritised for economic modelling and analysis. We will review the economic evidence and carry out economic analyses, using an NHS, public sector and other perspectives, as appropriate.

Key issues and draft questions

While writing the scope for this updated guideline, we have identified the following key issues and draft questions related to them:

- 1 Diagnosis and early care plan: diagnosis
 - 1.1 In adults with diabetes, what is the best combination of clinical characteristics to distinguish between a diagnosis of type 1 diabetes, type 2 diabetes and other forms of diabetes?
 - 1.2 In adults with diabetes, what is the best marker (c-peptides plus or minus antibodies) to distinguish between a diagnosis of type 1 diabetes, type 2 diabetes and other forms of diabetes?
- 2 Blood glucose management
 - 2.1 In adults with type 1 diabetes, what is the most effective method of blood glucose monitoring to improve diabetic control:
 - continuous glucose monitoring
 - flash glucose monitoring
 - intermittent capillary blood glucose monitoring?
 - 2.2 In adults with type 1 diabetes, what is the effectiveness of digital technologies for self-monitoring of blood glucose?
- 3 Insulin therapy
 - 3.1 In adults with type 1 diabetes, what is the most effective long-acting insulin (detemir versus degludec versus glargine versus NPH) for optimal diabetic control?
- 4 Managing complications
 - 4.1 In adults with type 1 diabetes, what is the effectiveness of periodontal treatment to improve diabetic control?

The key issues and draft questions will be used to develop more detailed review questions, which guide the systematic review of the literature.

3.5 *Main outcomes*

The main outcomes that may be considered when searching for and assessing the evidence are:

- Health-related quality of life.
- Adverse events and complications.
- Mortality.
- HbA1c.
- Hypoglycaemia.

4 NICE quality standards and NICE Pathways

4.1 *NICE quality standards*

NICE quality standards that may need to be revised or updated when this guideline is published

- [Diabetes in adults](#) (2011) NICE quality standard 6

4.2 *NICE Pathways*

When this guideline is published, we will update the existing NICE Pathway on [type 1 diabetes in adults](#). NICE Pathways bring together everything NICE has said on a topic in an interactive flowchart.

5 Further information

This is the final scope.

The guideline is expected to be published: to be confirmed.

You can follow progress of the [guideline](#).

Our website has information about how [NICE guidelines](#) are developed.

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