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NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Guideline

Type 2 diabetes in adults: management

Draft for consultation, March 2022

This is an update to NICE guideline NG28 (published December 2015). We have:

- reviewed the evidence on periodontal treatment
- made new recommendations.

Who is it for?

- Healthcare professionals who care for adults with type 2 diabetes, including those working in dental services
- Commissioners and providers
- Adults with type 2 diabetes, and their families and carers

It may also be relevant for non-NHS healthcare providers of dental services.

What does it include?

- the new recommendations
- rationale and impact sections that explain why the committee made the recommendations and how they might affect practice
- the guideline context.

Information about how the guideline was developed is on the [guideline's webpage](#). This includes the evidence reviews, the scope, details of the committee and any declarations of interest.

Commenting on this update

We have reviewed the evidence on periodontal disease for adults with type 2 diabetes. You are invited to comment on the new recommendations.

Sections of the guideline that have had no changes at all have been temporarily removed for this consultation and will be re-instated when the final guideline is published. See the [current version of the guideline](#).

See [update information](#) for a full explanation of what is being updated.

Full details of the evidence and the committee's discussion on the 2022 recommendations are in the [evidence review](#).

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1 Recommendations

People have the right to be involved in discussions and make informed decisions about their care, as described in [NICE's information on making decisions about your care](#).

[Making decisions using NICE guidelines](#) explains how we use words to show the strength (or certainty) of our recommendations, and has information about prescribing medicines (including off-label use), professional guidelines, standards and laws (including on consent and mental capacity), and safeguarding.

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3 **1.7 Managing complications**

4 **Periodontal disease**

5 1.7.1 Advise adults with type 2 diabetes [at their annual review](#) that:

- 6 • they are at higher risk of periodontal disease
- 7 • if they get periodontal disease, treating it can improve their blood
- 8 glucose management and can reduce their risk of
- 9 hyperglycaemia and hypoglycaemia (abnormalities in blood
- 10 glucose levels), and their risk of insulin resistance. **[2022]**

11 1.7.2 Advise all adults with type 2 diabetes to have frequent oral health

12 reviews (their dental team will tell them how often, in line with the

13 [NICE guideline on dental checks](#)). **[2022]**

14 1.7.3 For guidance for dental teams on how to provide oral health advice,

15 see the [NICE guidance on oral health promotion](#). **[2022]**

16 1.7.4 For adults with type 2 diabetes who have been diagnosed with

17 periodontal disease by a dental team, offer frequent dental

18 appointments to manage and treat their periodontal disease. **[2022]**

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For a short explanation of why the committee made these recommendations see the [rationale and impact section on periodontal disease](#).

Full details of the evidence and the committee's discussion are in [evidence review D: periodontal treatment to improve diabetic control](#).

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2 **Rationale and impact**

3 These sections briefly explain why the committee made the updated
4 recommendations and how they might affect practice.

5 **Periodontal disease**

6 [Recommendations 1.7.1 to 1.7.4](#)

7 **Why the committee made the recommendations**

8 The evidence showed that people with diabetes are at increased risk of
9 periodontal disease, and that periodontal treatment improves diabetic control.

10 In the committee's experience, people with diabetes are often unaware of their
11 increased risk of periodontal disease, and they may not be having regular oral
12 health reviews. To address this, the committee recommended making
13 discussions about the risk of periodontal disease a routine part of annual
14 reviews, alongside eye disease and foot problems.

15 The evidence also showed that periodontal treatment is cost effective for
16 people with type 2 diabetes, assuming improvements in HbA1c are
17 maintained. This was tested with health economic modelling in a range of
18 different scenarios. There were some scenarios where periodontal treatment
19 was not cost effective, but the committee did not think these scenarios were
20 realistic because they used numbers that did not reflect practice.

21 **How the recommendations might affect practice**

22 For dental professionals, the recommendations should not lead to a significant
23 long-term increase in the number of oral health reviews, as they specify that

1 people should follow existing guidance (the [NICE guideline on dental checks](#)).
2 There may be a short-term increase if the guideline increases awareness of
3 periodontal disease. Any increase in the number of oral health reviews will
4 potentially impact on the service, as NHS dental services already have
5 capacity issues. Dental teams will need clear advice on what they need to do
6 for people with diabetes, and clear care pathways to improve quality of care
7 and service delivery.

8 For diabetes professionals, the recommendations should not lead to an
9 increase in costs, as they are about raising awareness and including new
10 information in existing reviews.

11 [Return to recommendations](#)

12 **Context**

13 Type 2 diabetes is a chronic metabolic condition characterised by insulin
14 resistance (that is, the body's inability to effectively use insulin) and
15 insufficient pancreatic insulin production, resulting in high blood glucose levels
16 (hyperglycaemia). Type 2 diabetes is commonly associated with obesity,
17 physical inactivity, raised blood pressure, periodontal disease, disturbed blood
18 lipid levels and a tendency to develop thrombosis, and therefore is recognised
19 to have an increased cardiovascular risk. It is associated with long-term
20 microvascular and macrovascular complications, together with reduced quality
21 of life and life expectancy.

22 In 2013, over 3.2 million adults were diagnosed with diabetes, with prevalence
23 rates of 6% and 6.7% in England and Wales respectively. It is estimated that
24 about 90% of adults currently diagnosed with diabetes have type 2 diabetes.
25 Type 2 diabetes is more common in people of African, African-Caribbean and
26 South Asian family origin. It can occur in all age groups and is increasingly
27 being diagnosed in children.

28 Multiple vascular risk factors and wide-ranging complications make diabetes
29 care complex and time consuming, and many areas of healthcare services
30 must be involved for optimal management. Necessary lifestyle changes, the

1 complexities and possible side effects of therapy make patient education and
2 self-management important aspects of diabetes care. Diabetes care is
3 estimated to account for at least 5% of UK healthcare expenditure, and up to
4 10% of NHS expenditure.

5 This guideline contains recommendations for managing type 2 diabetes in
6 adults, and focuses on patient education, dietary advice, managing
7 cardiovascular risk, managing blood glucose levels, and identifying and
8 managing long-term complications. The guideline does not cover diagnosis,
9 secondary diabetes, type 1 diabetes in adults, diabetes in pregnancy and
10 diabetes in children and young people.

11 **Finding more information and committee details**

12 To find NICE guidance on related topics, including guidance in development,
13 see the [NICE webpage on diabetes](#).

14 For details of the guideline committee see the [committee member list](#).

15 **Update information**

16 This guideline is an update of NICE guideline NG28 (published December
17 2015). We have reviewed the evidence on periodontal disease for adults with
18 type 2 diabetes.

19 Recommendations are marked **[2022]** if the evidence has been reviewed.

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