NICE National Institute for Health and Care Excellence

Surveillance proposal consultation document

2018 surveillance of Oral health promotion: general dental practice (2015) NICE guideline NG30

Surveillance background

This 2018 surveillance review has taken into account 4 NICE guidelines on the theme of oral health:

- Oral health promotion: general dental practice. NICE guideline NG30 (December 2015)
- Oral health: local authorities and partners. NICE guideline PH55 (October 2014)
- Oral health for adults in care homes. NICE guideline NG48 (July 2016)
- Dental checks: intervals between oral health reviews. NICE guideline CG19 (October 2004)

This report details the surveillance proposal for one of these guidelines, NICE guideline NG30. Details of the review proposals of the other three oral health guidelines, PH55, NG48 and CG19 can be found on the respective websites.

Surveillance decision

We propose to not update the guideline on Oral health promotion: general dental practice.

The following table describes an overview of the impact that evidence identified in surveillance has in each area of NICE guideline NG30. No evidence was identified in areas not covered by current recommendations.

Section of the guideline	New evidence identified	Impact
Section 1.1		
Oral health advice given by dentists and dental care professionals	Yes	No
Section 1.2		
How dentists and dental care professionals can adopt a patient-centred approach	Yes	No

During surveillance, editorial or factual corrections were identified. Details are included in appendix A: summary of evidence from surveillance.

Reasons for the decision

The majority of evidence found supports the current recommendations. We also found limited evidence on specific methods of information delivery which are not currently included in the guideline; however, this small volume of evidence is not likely to impact the current recommendations.

Overview of 2018 surveillance methods

NICE's surveillance team checked whether recommendations in Oral health promotion: general dental practice (NICE guideline NG30) remain up to date.

The surveillance process consisted of:

- Initial feedback from topic experts and voluntary and community sector organisations via a questionnaire.
- Literature searches to identify relevant evidence.
- Assessment of new evidence against current recommendations.
- Deciding whether or not to update sections of the guideline, or the whole guideline.
- Consultation on the decision with stakeholders (this document).

After consultation on the decision we will consider the comments received and make any necessary changes to the decision. We will then publish the final surveillance report containing the decision, the summary of the evidence used to reach the decision, and responses to comments received in consultation.

For further details about the process and the possible update decisions that are available, see ensuring that published guidelines are current and accurate in developing NICE guidelines: the manual.

See appendix A: summary of evidence from surveillance below for details of all evidence considered, with references.

Evidence considered in surveillance

Search and selection strategy

We searched for new evidence related to the whole guideline.

We found 28 relevant studies in a search for systematic reviews, randomised controlled trials and observational studies published between 01 January 2015 and 24 January 2018.

This included evidence on prevention of harmful behaviour (smoking and drinking); tailoring advice to individual needs; behaviour change interventions; different formats of information delivery; barriers and facilitators to oral health promotion, and interventions to ease dental anxiety.

Selecting relevant studies

The standard surveillance review process of using RCT and systematic review selection criteria would not capture relevant studies investigating barriers and facilitators to oral health promotion. In line with the selection criteria used in the guideline, we included qualitative evidence in this area.

Ongoing research

We checked for relevant ongoing research; no trials were assessed as having the potential to change recommendations.

Advice considered in surveillance

Views of topic experts

We considered the views of topic experts, including those who helped to develop the guideline.

For this surveillance review, topic experts completed a questionnaire about developments in evidence, policy and services related to the guideline.

Feedback from 5 topic experts did not indicate a need to update the guideline at this time.

Views of voluntary and community sector organisations

For this surveillance review, a questionnaire about the use of the guideline in practice, and the needs and opinions of people using the services was sent to voluntary and community sector organisations with an interest in oral health.

No relevant intelligence was received.

Views of stakeholders

We obtain the views of stakeholders on surveillance decisions through consultation.

See ensuring that published guidelines are current and accurate in developing NICE guidelines: the manual for more details on our consultation processes.

Equalities

No equalities issues were identified during the surveillance process.

Appendix A: Summary of evidence from surveillance

2018 surveillance of Oral health promotion: general dental practice (2015) NICE guideline NG30

Summary of evidence from surveillance

Studies identified in searches are summarised from the information presented in their abstracts.

Feedback from topic experts who advised us on the approach to this surveillance review was considered alongside the evidence to reach a final decision on the need to update each section of the guideline.

1.1 Oral health advice given by dentists and dental care professionals

1.1.1 Give all patients (or their parents or carers) advice during dental examinations based on the oral health messages in Public Health England's Delivering better oral health. This includes:

- advice on oral hygiene practices and the use of fluoride
- advice about diet, smoking, smokeless tobacco and alcohol intake.

1.1.2 Ensure the advice is tailored to meet individual needs. (See section 1.2 in this guideline and recommendation 8 in NICE's guideline on behaviour change: individual approaches.)

1.1.3 Ask and record whether the person uses tobacco. Follow recommendation 6 in NICE's guideline on smoking cessation services and, if necessary, offer brief advice and offer to refer them to the local stop smoking service.

1.1.4 Consider asking people about their alcohol use, following recommendations in NICE's guideline on alcohol use disorders: preventing-harmful drinking.

1.1.5 Consider delivering oral health improvement messages in a variety of formats and using different media to meet the needs of different groups.

Surveillance decision

This section of the guideline should not be updated.

Oral health advice

2018 surveillance summary

Promotion of smoking cessation

A systematic review (1) including 7 other systematic reviews, evaluated the efficacy of behaviour change approaches for tobacco use cessation, in dental practices. Brief interventions, which included: counselling, giving advice, cognitive behavioural therapy, provision of leaflets and motivational interviewing, were shown to be effective, although comparators were not reported in the abstract.

A cluster randomised control trial (RCT) (2) (n=467) evaluated the effectiveness of very brief counselling for tobacco cessation in

dentistry clinics. Intervention clinics provided structured brief advice based on the 5 A's model (Ask, Advise, Assess, Assist, and Arrange) and control clinics provided usual care. There was a significant reduction of tobacco consumption in the intervention group compared to usual care. However, there was no difference between groups in the number of people abstinent from tobacco at 6 month follow up.

An RCT (3) evaluated the effect of brief counselling in dental clinics on tobacco use cessation compared to usual care. A significant effect on reduction in tobacco consumption was found with brief counselling, however no effect was shown for other outcomes measured (7-day abstinence, 3-month abstinence and quit attempts). In an as-treated analysis, receiving more counselling components increased the likelihood of half-reduction compared to no tobacco counselling.

An RCT (4) evaluated tobacco cessation counselling educational programmes for dental students, comparing role play and problem based learning methods. There was no significant difference between the 2 education types on scores of knowledge, attitude and skill, as both groups showed improvement in these domains following intervention.

An RCT (5) (n=197) evaluated different approaches to referring adolescents (aged 13-18) presenting at a medical and dental clinic to smoking cessation services. Participants were either referred to the smoking cessation programme by a link via e-mail or by a printed card. Both referral approaches were found to be equally effective.

A qualitative study (6) investigated the barriers facing 262 dental students when providing smoking cessation advice. Patient disinterest and lack of time were quoted as important barriers. While not discussed specifically as a barrier, knowledge of smoking cessation advice among dental students was low.

A qualitative study (7) investigated the barriers and attitudes towards delivery of smoking cessation interventions, through questionnaires given to dental hygienists, dental therapists and oral health therapists. The most prevalent barriers were lack of knowledge of pharmacological treatments and lack of access to smoking cessation resources. Time and financial incentives were not commonly cited barriers to delivering smoking cessation interventions.

A qualitative study (8) (n=726) investigated patients attitudes towards receiving smoking behaviour advice from dentists. Almost all participants indicated they would be comfortable with their dentist asking about their smoking and that the dentist should advise them to quit if their smoking was effecting their oral health.

Prevention of harmful drinking

A cluster RCT (9) (n=103) evaluated the effectiveness of screening and brief intervention in dental practices for heavy drinkers. At 6 month follow up, there was a significant improvement in total drinks per week in people exposed to the intervention compared to people who were not. Improvement was also seen in the quantity and frequency of drinking among people exposed to the intervention, compared to control groups.

Tailoring advice to individual needs

An RCT (10) (n=120) evaluated the delivery of oral hygiene awareness instructions in dental practices, for visually impaired children. Combinations of verbal and tactile messaging; verbal and braille messaging; and verbal, braille and tactile messaging where compared. Instructions regarding maintenance of good oral hygiene and brushing technique were explained to all children using the different intervention methods. Children who were given instructions with verbal, braille and tactile messaging showed the highest percentage of reduction in plaque scores, whereas children given instructions with verbal

and braille messaging showed the highest decrease in gingival scores.

A qualitative study (11) (n=149) used questionnaire led interviews with dental professionals, to understand the perceived barriers to providing oral health care for children with special needs. The greatest barriers were the level of training and a lack of motivation of the children's caretakers.

Behaviour change interventions

A systematic review (12) including 5 RCTs evaluated the effectiveness of motivational interviewing as an adjunct to periodontal therapy in dental practices (the comparator was not reported). Mixed results were reported across the included studies. 2 studies reported a significant positive effect with motivational interviewing, on the outcomes bleeding on probing and plaque values. One study showed improvement of self-efficacy in interdental cleaning with motivational interviewing, and 2 studies reported that motivational interviewing showed no effect on periodontal outcomes.

A systematic review (13) including 8 studies evaluated the use of motivational interviewing in general dental practice. 5 RCTs were included in the review, all of which demonstrated that interventions including motivational interviewing had a positive effect on oral health and health behaviour.

A qualitative study (14) (n=9) used semi-structured interviews to gain insight into the experiences of dental hygienists trained in motivational interviewing. The main barriers to delivering motivational interviewing were described as time, difficulty and managing patient resistance.

An RCT (15) (n=855) evaluated the effect of presenting gain- and loss-framed information videos about oral health and how they influenced self-reported flossing behaviour, compared to people who received no health message. The intervention was delivered in a dental practice setting. Susceptibility to messaging was measured as either low or high. People who watched a video where the frame (gain or loss) matched their susceptibility, were significantly more likely to floss at recommended levels at 6 month follow up, compared to people who watched a video not matched to their susceptibility or watched no video at all.

Format of information delivery

A systematic review (16) including 44 studies found that oral health promotion in the dental practice setting based on behavioural and psychological models was effective for improving oral health. Different methods of advice delivery were evaluated, with verbal advice leading to improvements in knowledge and reported behaviour, and written advice increasing oral health knowledge. Evidence was also identified which indicated that the sender of an oral health promotion message influenced its effectiveness (although sender preferences were not reported in the abstract).

An RCT (17) (n= 50) evaluated the use of text message reminders sent from dental practices compared to an undefined control group. Twelve text messages were sent over the course of 4 weeks, and 1 text message for 8 weeks thereafter. A significant improvement in plaque coverage was observed in people receiving text message reminders.

An RCT (18) (n=60) compared computerised oral hygiene instruction with verbal instruction as methods of oral health promotion for fixed orthodontic patients, delivered in a dental practice. At 3 weeks follow up, mean score for plaque index and bleeding on probing index was significantly decreased and dental health knowledge was significantly increased in people given computerised instruction, whereas this was not the case for those provided with verbal instruction.

An RCT (19) (n=191) evaluated methods of oral health promotion by dentists, comparing information delivery using verbal description, video and pictures. People shown a video gained a greater understanding of what oral impression taking was than people given verbal

information or pictures. Understanding, measured by questionnaire, was significantly higher in people shown pictures than people given verbal information, however there was no significant difference between these groups when patient performance was measured. A higher rate of satisfaction was reported by people who were shown a video or pictures compared to people given verbal information.

An RCT (20) (n=89) aimed to investigate the effectiveness of a poster and a mobile healthcare application for improving knowledge about dental trauma management. Participants used both a poster and mobile application, but were randomly assigned as to which was used first. Both tools were deemed effective, with the majority of participants answering trauma management questions correctly.

Barriers and facilitators to oral health promotion

A qualitative study (21) (n=426) used a questionnaire to investigate the attitudes of dental hygienists and oral health therapists towards providing dietary advice, and the barriers that limit its delivery. Generally, positive beliefs regarding the importance of dietary counselling were reported. Barriers included time, patient compliance, patient knowledge of nutrition, personal counselling skills and the practitioners' knowledge of nutrition.

A qualitative study (22) investigated the barriers and facilitators to dentists in the English NHS following oral health prevention guidance (n=26). Emerging themes included that dentists were motivated to provide prevention advice but financial and time constraints stop them from doing so; they may use prevention guidance but restrict it to certain patients and that dentists appeared 'health focused'. Importance was placed on working to prevention guidance, but greater patient and professional support is desired.

A qualitative study (23) investigated clinical director and health service manager's perceptions, regarding the factors which could support the delivery of preventive care to adolescents. It was reported that fiscal accountability and meeting performance targets impacts the levels and types of preventive care oral health and dental therapists provided. Suggestions were made that professional clinical structures for continuous quality improvement should be implemented and monitored and that an adequate workforce mix and more resources would enhance the ability to provide appropriate levels of preventive care. Facilitators to achieving oral health promotion included capitalising on the strengths of visiting paediatric dental specialists and working with local health district clinical leaders.

A qualitative study (24) (n=1,037) evaluated barriers and facilitators for dental hygienists to providing oral hygiene instructions and patient motivation. Lack of time, remuneration and patient interest were reported as barriers. It was indicated that assistants should provide preventive care.

A qualitative study (25) investigated NHS dentists' knowledge, attitudes and behaviours in providing preventive care. Limited knowledge was found in key aspects of prevention, but generally positive attitudes towards preventive care were expressed. The main perceived barriers were related to organisational factors including insufficient remuneration, lack of time and poor patient compliance.

Intelligence gathering

The Public Health England (PHE) toolkit, Delivering better oral health (2014), was updated in 2017 to incorporate an update to the Chief Medical Officer for England's guideline on lower risk drinking and the Scientific Advisory Committee on Nutrition's evidence review regarding healthy eating advice.

The PHE guidance, Child oral health: applying All Our Health (2017), discusses interventions

at a family and individual level, a population level and a community level. The guidance described for dental healthcare professionals at a family and individual level include:

- knowing the needs of individuals
- thinking about available resources
- understanding specific activities that can prevent, protect and promote
- ensuring that all staff promote good oral health and have access to relevant training that is regularly updated
- knowing the evidence based advice and treatment which should be given to deliver better oral health
- understanding how to help people change behaviour
- making every contact count

The PHE guidance, Health matters: child dental health (2017) reports how dental health professionals can help prevent tooth decay in children under 5. As part of this guidance, it is recommended that:

- all members of the dental team, including dental nurses, can deliver oral health advice
- dental teams can signpost to PHE's Be food smart app

Impact statement

Promotion of smoking cessation

The evidence identified for promoting smoking cessation supports the recommendations in this section of the guideline, specifically recommendation 1.1.3 which states that NICE's guideline on smoking cessation services should be followed and brief advice and referral provided. Therefore, no impact from this evidence is anticipated.

Prevention of harmful drinking

The evidence identified regarding reduction of harmful drinking supports the current recommendation (1.1.4) which signposts to NICE's guidance on alcohol use disorders where screening and brief interventions are recommended. Therefore, no impact from this evidence is anticipated.

Tailoring advice to individual needs

Evidence was identified on methods of delivering oral health promotion aimed at people with specific needs. Recommendation 1.1.2 states that advice should be tailored to meet individual needs. The evidence on interventions for specific populations in this area is limited, therefore it is unlikely that there would be an impact on the recommendation, which already allows for individual needs.

Behaviour change interventions

Mixed evidence was identified regarding behaviour change interventions for oral health promotion, including motivational interviewing and gain and loss framed information. While the current recommendations do not specify motivational interviewing as a method of advice delivery, it is recommended that a variety of formats are considered, to meet the needs of different groups (recommendation 1.1.5). As a limited volume of mixed evidence has been identified, it is unlikely that there would be an impact in this area.

Format of information delivery

Evidence was identified on the effectiveness of media by dental practices to improve oral health, including text message services and computerised oral hygiene instruction. However, only 1 small RCT was identified in each area and this limited evidence is unlikely to have an impact on the current recommendations, which do not specify the use of particular forms of media. Further evidence which evaluated forms of information delivery, such as a mobile app, verbal information and written information, indicated mixed effectiveness. Therefore, there is unlikely to be an impact on the recommendations.

Barriers and facilitators to oral health promotion

The main barriers which were identified to delivering oral health promotion included a lack of time, knowledge, remuneration and patient interest. The recommendations in this guideline do not specifically address barriers to oral health promotion, although evidence was identified in this area during guideline development. The information identified during surveillance confirms the findings considered by the guideline committee during development, and therefore there is unlikely to be any impact on the guideline.

Intelligence gathering

The identified PHE guidance describes the importance of oral health promotion and how dental health professionals can approach this. This PHE guidance supports the current recommendations and therefore there is unlikely to be any impact on the guideline. There is also unlikely to be any impact from the update of PHE's toolkit: Delivering better oral health, as the guideline focuses on how to best deliver advice from this toolkit.

New evidence is unlikely to change guideline recommendations.

1.2 How dentists and dental care professionals can adopt a patient-centred approach

1.2.1 Encourage the dental practice team to develop a good relationship with patients so they can help them maintain good oral health. All staff, including reception and support staff, should understand the importance of creating a welcoming environment for everyone. This includes:

- families with babies or very young children
- children and adults with a physical or sensory impairment.

1.2.2 Recognise that contact with those who do not attend regularly (for example, when they attend for emergency care) provides an important opportunity to establish a positive relationship.

1.2.3 Provide information about how people can find a local dentist or find out if they qualify for free or subsidised NHS dental care. If they do qualify for free or subsidised care, tell them where they can find out how to make a claim (see NHS Choices information on dental costs).

1.2.4 Listen to patients' needs and offer tailored advice, without judging them if their oral health is poor or if some of their behaviours adversely affect their health (see NICE's quality standard for patient experience in adult NHS services).

1.2.5 Create an individually tailored dental care plan with the patient or their parent or carer. This should combine strategies to prevent, as well as to treat, oral health problems. To develop the preventive part of the plan, ask about the patient's:

- personal circumstances and their oral health (in the past and now) to gauge their risk of poor oral health
- oral hygiene practices and how often they use fluoride

- behaviours that may affect their oral health in the short or long term, including their diet, smoking, or using smokeless tobacco or alcohol (see more information in the context section)
- existing health conditions or any disabilities or other difficulties that might prevent them from maintaining or improving their own oral health, or the oral health of someone they care for.

1.2.6 Ensure the patient, or their parent or carer, understands the plan to maintain or improve their oral health.

1.2.7 Be aware of the personal, cultural, social, environmental and economic barriers to good oral health. This includes:

- the links between poor oral health and socioeconomic deprivation
- recognising that some people may not think it is important to go to the dentist regularly
- understanding that some parents or carers may not realise that it is important to keep children's primary teeth healthy
- being aware that people may need help to use dental services.

Surveillance decision

This section of the guideline should not be updated.

An editorial correction is needed for this section:

- Reference to NHS choices is made in recommendation 1.2.3, which should be removed.

Patient-centred approach

2018 surveillance summary

A qualitative study (26) (n=1,360) investigated the factors affecting dental anxiety among adults seeking dental care. Questionnaires were given to participants while in a dental waiting room to explore reasons for anxiety. Female participants and younger participants were more likely to be anxious, as were people who had previously had a negative dental experience. When asked specifically about undergoing tooth extraction, anxiety was significantly associated with gender, age, education level, employment status, income, self-perceived oral health status and their history of visits to the dentist.

An RCT (27) (n=40) evaluated visual teaching methods and preventative practices during dental check-ups, for children (aged 6-12) with autism. A significant increase in children's cooperation during fluoride therapy was shown with repeated visits and teaching sessions.

An RCT (28) evaluated the use of dental sign language during an oral examination, for hearing impaired children. In the intervention group, dental sign language education was provided at two consecutive dental clinic visits. On the second visit, oral prophylaxis and dental restoration was also performed. The control group was given oral prophylaxis and dental restoration at their initial visit, with no sign language used. Anxiety levels were measured using facial image scale, pulse oximeter and electronic blood pressure equipment. A significant reduction in anxiety was reported in children who had sign language education.

Intelligence gathering

No topic expert feedback or additional information was relevant to this section.

Impact statement

Evidence was identified which evaluated the impact of interventions on anxiety and cooperation in dental practices, in children with individual needs. However, as this evidence was specific to populations with individual needs it was limited in each area. The limited evidence identified is not sufficient to prompt an update, as the recommendations currently state that individual needs should be taken into consideration, and that a welcoming environment is an important consideration, including for people with a physical or sensory impairment. Although there is evidence to suggest that specific groups may be more likely to experience dental anxiety, as the current recommendations suggest that a welcoming environment should be provided for everyone, it is unlikely that this evidence would have an impact on the recommendations.

New evidence is unlikely to change guideline recommendations.

Editorial and factual corrections

Reference to NHS choices is made in recommendation 1.2.3 which should be removed. This recommendation should be updated to read:

> "Provide information about how people can find a local dentist or find out if they qualify for free or subsidised NHS dental care. If they do qualify for free or subsidised care, tell them where they can find out how to make a claim."

Research recommendations

Research recommendations considered in surveillance

RR - 01 For groups at high risk of poor oral health, how effective and cost effective is it to extend an existing appointment by a few minutes, or to offer separate sessions on oral health advice?

Summary of findings

No new evidence relevant to the research recommendation was found and no ongoing studies were identified.

Surveillance decision

This research recommendation will be considered again at the next surveillance point.

RR - 02 What interventions are effective and cost effective at encouraging people who usually only go to emergency dental services to use general dental services regularly, in a bid to improve their oral health?

Summary of findings

No new evidence relevant to the research recommendation was found and no ongoing studies were identified.

Surveillance decision

This research recommendation will be considered again at the next surveillance point.

RR - 03 What behaviour change methods and resources (such as phone apps, leaflets and messaging) help dental teams to provide people with support to improve their oral health?

Summary of findings

Mixed evidence was identified regarding behaviour change interventions and resources for oral health promotion, including motivational interviewing and gain and loss framed information, text messages and phone apps. However, the evidence identified is not likely to have an impact on the current guideline recommendations (see impact statements on behaviour change interventions and format of information delivery for further details).

Surveillance decision

This research recommendation will be considered again at the next surveillance point.

RR - 04 What triggers and other factors encourage groups at high risk of poor oral health to change their behaviours in response to oral health messages?

Summary of findings

No new evidence relevant to the research recommendation was found and no ongoing studies were identified.

Surveillance decision

This research recommendation will be considered again at the next surveillance point.

RR - 05 What would motivate dental practice teams to take a preventive approach to oral health – especially with high risk groups – and how does this fit into the dental practice business model?

Summary of findings

No new evidence relevant to the research recommendation was found and no ongoing studies were identified.

Surveillance decision

This research recommendation will be considered again at the next surveillance point.

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