Smoking cessation in NHS dentistry
The evidence summary is based on the original summary published in the BDJ (February 2011). The aim is to understand whether smoking cessation in dental practice is an effective treatment strategy to increase tobacco cessation and abstinence. It includes information published since the original summary but does not include detailed descriptions of the studies cited nor does it include information that was not presented in the literature.

The Curious about website encourages dental professionals to raise issues where a review of the available evidence would provide a useful resource for other dental professionals. Where there is a lack of evidence, the topic is considered for research and an award is made available.

These activities are sponsored by the Shirley Glasstone Hughes Fund, a restricted fund within the BDA Trust Fund.
Key findings

- Behavioural intervention for smoking cessation involving oral health professionals is an effective method of reducing tobacco use in smokers and smokeless tobacco users.
- Private dental practices deliver more smoking cessation activities than their NHS counterparts.
- NHS practitioners report lack of reimbursement from the NHS, lack of time and training and fears over patient response as barriers to delivering smoking cessation interventions.
- There is not enough evidence available to assess whether these interventions are cost-effective and the effectiveness of one intervention (or component of the intervention) over another is not clear.
- No studies evaluating the cost-effectiveness of the intervention in the UK were found.

Review question

This evidence summary was prepared in response to the following questions: Is smoking cessation an effective and cost-effective service to be introduced in NHS dentistry?

In order to answer this question the following sub questions were posed:

- Is smoking cessation an effective service to be introduced in NHS dentistry?
- How cost-effectiveness is the intervention?
- What are the current practise and barriers and facilitators to implementing smoking cessation?

Key terms

**Nicotine replacement therapy:**
Products that deliver controlled nicotine doses, reduced over time.

**Five A’s model of smoking cessation:**
1. Ask the patient about their tobacco usage
2. Advise them to quit
3. Assess their willingness to quit
4. Assist them in quitting
5. Arrange follow-ups.

**Three A’s model of smoking cessation:**
1. As above
2. As above
3. Act to refer the patient to specialist support.

**Smokeless tobacco:**
Tobacco that is orally chewed or ‘snuffed’ through the nose.

The case for action

In the UK, just under 20 per cent per cent of the population smoke. The number of smokers has declined in recent years but the prevalence is still high in some disadvantaged parts of the country.

In the UK tobacco use is the single biggest behavioural risk factor for premature death with smoking causing nearly a fifth of all cancers including over 80 per cent of lung cancers. Smoking is a significant risk factor for cardiovascular diseases including coronary heart disease and stroke and tobacco use is linked to the development of oral diseases including cancer and periodontitis.

General dental practice provides an ideal opportunity to support smokers in smoking cessation, however, lack of knowledge, time and financial reimbursement have been barriers to implementing tobacco cessation services.
The evidence

Effectiveness of smoking cessation intervention in dental practice
Overall behavioural intervention for smoking cessation involving oral health professionals is effective in increasing abstinence rates amongst tobacco users. The findings collected for this question have been summarised and an overview, grouped by publication type, is below.

Systematic reviews
Smoking cessation interventions in the dental setting for tobacco users increase the odds of quitting tobacco. This holds for both tobacco users and smokeless tobacco (ST) users. Providing brief counselling in the dental practice does not appear to improve quit rates over referral to telephone quit lines.

Addressing interventions specifically for ST use cessation dentists and hygienists may help their patients to stop ST use especially when patients are shown the damage that it causes in their mouths. Telephone counselling may assist ST use cessation.

Randomised controlled trials
Intensive cessation-intervention in the dental setting is an effective strategy to increase abstinence rates. Both the five A’s and three A’s models of smoking cessation see participants more likely to quit and abstain than those receiving usual tobacco advice. Referral to a telephone quit line, together with advice, may be beneficial.

The randomised controlled trials looked at three types of intervention. The comparator in each case was usual tobacco cessation practice:

- Five A’s model of smoking cessation
- three A’s model of smoking cessation
- behavioural intervention.

Abstinence at 12-months is a good predictor for long term abstinence.

Cost-effectiveness of the intervention
No information covering this was located.

Current practise and barriers and facilitators to implementing smoking cessation
Nine studies addressed this question. Dental students, practitioners (including retirees) and hygienists were all questioned. A descriptive summary is provided below.

Current practice
Private practices provide more smoking cessation services and report fewer barriers than NHS or mixed practices. Although a large number of dentists ask about patients’ smoking habits advice to stop, nicotine replacement therapy and referral to specialist services are provided less frequently. Tobacco cessation activities, as recommended by national guidelines, are not always performed by dental hygienists.

Barriers
The most common reported barrier to providing smoking cessation interventions is a lack of time. Others identified were:

- lack of training/expertise/knowledge
- lack of patient interest
- remuneration
- lack of confidence in delivering cessation advice
- supervising staff not supportive
- damage to practitioner - patient relationship

Facilitators
Two factors facilitate delivering smoking cessation in dental practice

- Patients with oral health problems are more motivated than other patients.
- Reimbursement of smoking cessation advice or nicotine replacement therapy prescribed by dentists can increase the interest of the dentist in delivering smoking cessation activities.
Methods

Search strategy
The following resources were searched:

- Database of Abstracts of Reviews of Effects
- Cochrane library
- MEDLINE (OVID).

Search terms included Dentistry; Smoking Cessation; Oral Health; Tobacco Use Cessation; Dental staff.
Initial searches are current as of November 2010. Searches repeated August 2012 and February 2015.

Results
Fourteen relevant studies were originally located. Subsequent searches located three studies including an update of the original Cochrane review and a long term follow up study for a RCT covered originally in the Cochrane review.

References
20. Clareboets S, Sivarajasingam V, Chestnutt IG.


