

## Managing Smoking Cessation in Primary Care

### Introduction

Smoking is one of the most effective known killers, with more than half of long-term smokers dying of a smoking-related disease. It is the single greatest cause of preventable illness and premature death in the UK.<sup>1</sup> Each puff contains 250 toxic substances and over 50 carcinogens.<sup>2</sup> All these are absorbed rapidly through the lungs and distributed systemically without filtering in the liver – hence the high level of morbidity. An estimated 112,000 people are killed by smoking annually.<sup>3</sup> These deaths are caused by respiratory conditions, cancers, circulatory diseases, and gastro-intestinal diseases.<sup>4</sup>

Yet mortality and morbidity from smoking are entirely preventable. Lung cancer is the biggest preventable cause of death in both men and women, and COPD is the second biggest cause in women and the third in men with 84% of deaths from both conditions being attributed to smoking.<sup>5</sup> According to recent mortality figures, this means that more than 50,000 premature deaths could have been prevented annually from these conditions alone.

The challenge lies in the power of nicotine addiction. The Royal College of Physicians describes cigarette smoking as 'a serious form of drug addiction which, on the whole, is second to no other'.<sup>4</sup> The physical basis for this addiction is that the number of nicotinic receptors in the brain increases in response to stimulation from nicotine, thereby resulting in physical dependence, tolerance, and withdrawal symptoms. Habit, social cues and nicotine addiction all contribute to an individual's impulse to smoke, but addiction is the most powerful of the three.

### Identification of Smokers

Around 25% of men and 23% of women smoke,<sup>6</sup> a number which has not declined significantly since the 1990s.<sup>7</sup> The Quality and Outcomes Framework (QOF) component of the 2003 general practice contract in the UK is made up of a series of evidence-based standards covering a wide range of patient services and disease areas. When a standard is met, the practice receives a commensurate payment. The QOF offers an incentive to general practitioners (GPs) to target smokers in six key disease areas: coronary

heart disease; stroke; hypertension; diabetes mellitus; COPD; and asthma. However, smoking has an impact on most health outcomes and so, as a 'vital sign', a GP should target all smokers who walk into the surgery. The GP's role is not usually to deliver smoking cessation therapy themselves but to explain that the best way to stop is with support and treatment, to direct smokers to a trained advisor, and to provide prescriptions as requested by the advisor. But this is not always achieved since time is a major factor.

Ninety-three percent of GPs rate helping their patients to stop smoking as the single best thing they could do for their health, and smokers value GP's smoking cessation advice. However, 91% of GPs feel deterred because of time pressures.<sup>8</sup> One user-friendly way of overcoming this is the following algorithm designed for opportunistic use by GPs in less than 30 seconds:

- Do you smoke? [Record status for QOF – Read code 137 or 137L]
- Would you like to stop?
- Did you know the best way is with a combination of support and treatments from a trained stop smoking advisor?
- Advise self referral to an in-house or local stop-smoking advisor. [Record advice given for QOF – Read code 8CAL]

This method allows smokers who are motivated to engage in the best evidence-based type of quit attempt and also gives the GP maximum smoking cessation QOF points. The closed questions enable the GP to stick to the intervention in less than 30 seconds and recommend a separate consultation if a smoker wishes to talk more fully about their smoking.

### Implementing smoking cessation programmes

The most common form of quit attempt is 'cold turkey', with no support and no pharmacotherapy, with an unsurprisingly low one-year success rate of 4%.<sup>9</sup> Behavioural support can improve success in quitting by two-and-a-half to five times.<sup>10</sup> Optimum outcomes are with support plus

**Table 1. Where to get further information**

<b>Helplines</b>	Quit – 0800 002200 (trained advisors) NHS Go smoke free 0800 1690169 (Can tell callers where to get local support) Pregnancy quitline – 0800 1699169
<b>Websites</b>	NHS <a href="http://www.gosmokefree.co.uk">http://www.gosmokefree.co.uk</a> (good for practical tips) Pharmaceutical manufacturers have web and text based support programmes Action on Smoking and Health (ASH) – <a href="http://www.newash.org.uk">http://www.newash.org.uk</a>

pharmacotherapy, giving up to a 25% chance of long-term cessation.<sup>10</sup> Ideally, a smoker should be given both support and treatment. The best support is with a trained adviser but if this is not possible, telephone and internet support are available (see Table 1).

A smoking cessation advisor is indispensable. Ideally he/she should be based in the general practice, since familiar surroundings are less threatening to the patient. A healthcare assistant may be a good choice for the role – both in terms of the time available and financial viability.

Local Primary Care Trust (PCT) Stop Smoking Services usually offer a free two-day course to train your own smoking cessation advisor. If you do not have your own advisor there are community advisors you can access.

### Motivating change in behaviour

Of the 10 million smokers in the UK, 72% say they would like to give up.<sup>11</sup> So, on the whole, smokers do not need to be told to stop – they need to be told how to stop.

The role of the smoking cessation advisor is crucial to this: advisors do not need medical training but they do need to have good knowledge of the subject, motivation, good communication skills, and to be sympathetic. Logistically they need to be accessible and to have enough time available for the job.

Group support is effective, but one-to-one intervention is generally favoured by patients, and patient preference plays an important part in the success of a quit attempt. One-to-one advice gives privacy and means that meeting arrangements can be flexible. The importance of the bond between quitter and their smoking cessation advisor cannot be over-

emphasised. Speaking to individuals with empathy and making it clear that they will be supported throughout the process of stopping smoking is pivotal. Keeping the same smoking advisor during the process is a great help to the patient.

Support should be offered over the 2- to 3-month period of nicotine withdrawal symptoms. The 4-week quit targets used by the National Stop Smoking Service (NSSS) with weekly meetings with their advisor can be too short a period for many patients who feel withdrawal symptoms and cravings for longer. You can stick to the four or five meetings suggested by the NSSS, but schedule a couple of meetings early on and then perhaps on a monthly basis up to 12 weeks.

### Pharmacotherapy

The smoking cessation advisor should go through all available treatments at the first meeting so that the patient can make a well-informed choice about which treatment they would prefer to use. All the treatments listed below have been recommended by the National Institute for Health and Clinical Excellence (NICE) and should be used for nine to 12 weeks.

### Nicotine Replacement Therapy (NRT)

NRT is available as chewing gum, nasal spray, patch, microtab, lozenge or inhalator. There is no evidence to suggest that any one form is more effective than any other,<sup>12</sup> so patient preference should dictate which one or which combination is used. The degree of nicotine addiction and therefore the required dosage of NRT is best decided by asking how long after waking the first cigarette is smoked, the so called "Time To First Cigarette" (TTFC).<sup>13</sup> If the TTFC is less than 30 minutes, the maximum dose should be used. NRT is available over the counter as well as by prescription, and like bupropion below, it increases a smoker's chances of quitting by 1.5 to 2 times.<sup>14</sup>

Localised reactions can occur depending on the form taken; e.g. skin irritation with patches. NRT can be prescribed in pregnancy, breastfeeding, from the age of 12 years, and in cardiovascular disease, which is not the case with the other therapy options.

### Bupropion (Zyban®)

Originally developed as an anti-depressant, bupropion works as a dopamine re-uptake inhibitor, reducing the need for the next cigarette because of the fall in dopamine levels. Side effects include insomnia,

headache, dry mouth and nausea. It is reported to cause seizures in one per 1,000 people.<sup>14</sup> Some patients express a preference for bupropion if they have used it before or if it has been recommended by a friend.

### Varenicline Tartrate (Champix®)

Varenicline tartrate is the newest of the smoking cessation drugs. It is a first-in-class, non-nicotine drug, not related to bupropion. It has long-term quit rates of 22.5% compared with 15.7% on bupropion and 9.4% on placebo.<sup>15</sup>

Varenicline tartrate has no known drug interactions. The main side effect is nausea which affects about a third of patients, so warning of this before prescribing is a good idea. It often occurs as the dose goes up on days 4 and 8, usually lasts for about an hour after taking the tablet for the first two or three weeks, and is mild to moderate with 97% of patients tolerating it.<sup>15</sup> Taking treatment with drink or food can help, and if it becomes difficult to tolerate then anti-emetics such as prochlorperazine can be used for a short period or the dosage may be reduced from 1mg bd to 0.5mg bd.

The smoking cessation treatment options, both pharmacological and advisory, are all inexpensive and are judged by NICE to be highly cost effective in terms of life years gained.<sup>14,17</sup> The number needed to treat (NNT) for successful cessation gives an indication of how effective this treatment is in reducing smoking-related mortality and morbidity. Behavioural support combined with therapy gives an average NNT of around 14.<sup>18</sup> Compare this to another worthwhile intervention: an NNT of 1,140 for a cervical smear preventing a death over 10 years.<sup>19</sup> When we consider that one of two smokers die from long-term smoking,<sup>4</sup> we see that properly-delivered smoking cessation is one of the most cost effective of all healthcare interventions.<sup>14</sup>

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