NICE National Institute for Health and Care Excellence

NICE guideline

Stop smoking services

Public health guideline

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Your responsibility

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals and practitioners are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or the people using their service. It is not mandatory to apply the recommendations, and the guideline does not override the responsibility to make decisions appropriate to the circumstances of the individual, in consultation with them and their families and carers or guardian.

Local commissioners and providers of healthcare have a responsibility to enable the guideline to be applied when individual professionals and people using services wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with complying with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

Contents

This guideline replaces TA39.

This guideline is replaced by NG92.

This guideline is partially replaced by PH45 and PH48.

This guideline should be read in conjunction with PH5.

Update information

November 2021: NICE guideline PH10 (February 2008) has been updated and replaced by NG209.

This guideline contains the evidence and committee discussion for recommendations from PH10 dated [2008] and [2008, amended 2021].

See www.nice.org.uk/guidance/NG209 for all the current recommendations and the evidence behind them.

Overview

This guideline covers services to help people quit smoking. It aims to reduce the number of people who smoke by ensuring that stop smoking services are as effective as possible. It seeks to raise awareness of the range and types of support available.

In November 2013, some recommendations in this guidance were replaced by tobacco: harm-reduction approaches to smoking and smoking cessation in secondary care: acute, maternity and mental health services.

Who is it for?

- Health, social care and other practitioners who advise people on how to stop smoking
- Organisations commissioning, planning, providing or supporting stop smoking services
- People who smoke (or use another form of tobacco) and want to quit, and their families and carers

Introduction

Some of the recommendations in this guidance have been replaced by:

- Tobacco: harm-reduction approaches to smoking (NICE public health guidance 45)
- Smoking cessation in secondary care: acute, maternity and mental health services (NICE public health guidance 48).

For recommendations on the use of smokeless tobacco see Smokeless tobacco cessation - South Asian communities (NICE public health guidance 39).

See the guidance for more information.

The Department of Health (DH) asked the National Institute for Health and Clinical Excellence (NICE or the Institute) to produce public health guidance on smoking cessation services.

This guidance supersedes 'Guidance on the use of nicotine replacement therapy (NRT) and bupropion for smoking cessation' (NICE technology appraisal guidance 39). It cross-references and is consistent with 'Brief interventions and referral for smoking cessation in primary care and other settings' (NICE public health guidance 1),'Workplace health promotion: how to help employees to stop smoking' (NICE public health guidance 5) and 'Varenicline for smoking cessation' (NICE technology appraisal guidance 123).

The guidance is for NHS and other professionals who have a direct or indirect role in – and responsibility for – smoking cessation services. This includes those working in local authorities and the community, voluntary and private sectors. It may also be of interest to members of the public who wish to give up smoking, including specific groups such as pregnant women and mothers of young children.

The Programme Development Group (PDG) has considered five reviews of the evidence on smoking cessation services, two reviews on nicotine replacement therapy, an expert paper, an economic appraisal, stakeholder comments and the results of fieldwork in developing these recommendations.

Details of membership of the PDG are given in appendix A. The methods used to develop the guidance are summarised in appendix B. Supporting documents used in the preparation of this document are listed in appendix E. Full details of the evidence collated, including fieldwork data and

activities and stakeholder comments, are available on the NICE website, along with a list of the stakeholders involved and the Institute's supporting process and methods manuals.

1 Key priorities

This section lists the four recommendations that have been identified as key priorities for implementation, on the basis of the following criteria:

- impact on health inequalities
- impact on health of the target population
- cost effectiveness
- balance of risks and benefits.
- ease of implementation
- speed of impact

Smoking cessation services

Recommendation 1

Who is the target population?

Everyone who smokes or uses any other form of tobacco.

Who should take action?

- Primary care trusts (PCTs), strategic health authorities (SHAs).
- Commissioners of publicly funded smoking cessation services.

What action should they take?

- Determine the characteristics of the local population of people who smoke or use other forms of tobacco. Determine the prevalence of all forms of tobacco use locally.
- Ensure NHS Stop Smoking Services target minority ethnic and socioeconomically disadvantaged communities in the local population.
- Ensure NHS Stop Smoking Services provide a good service by maintaining adequate staffing levels, including a full-time coordinator (or the equivalent).

- Set realistic performance targets for both the number of people using the service and the proportion who successfully quit smoking. These targets should reflect the demographics of the local population. Services should:
  - aim to treat at least 5% of the estimated local population of people who smoke or use tobacco in any form each year
  - aim for a success rate of at least 35% at 4 weeks, validated by carbon monoxide monitoring. This figure should be based on all those who start treatment, with success defined as not having smoked in the third and fourth week after the quit date. Success should be validated by a CO monitor reading of less than 10 ppm at the 4-week point. This does not imply that treatment should stop at 4 weeks.
- Audit performance data routinely and independently and make the results publicly available. Audits should also be carried out on exceptional results – 4-week quit rates lower than 35% or above 70% – to determine the reasons for unusual performance, and to help identify best practice and ensure it is being followed.
- Establish links between contraceptive services, fertility clinics and ante- and postnatal services. These links should ensure health professionals use the many opportunities available to them (at various stages of the woman's life) to offer smoking advice or referral to a specialist service, where appropriate.

(See also NICE public health guidance 1 on smoking cessation in primary care and other settings)

Recommendation 2

Who is the target population?

Everyone who smokes or uses tobacco in any other form.

Who should take action?

Managers and providers of NHS Stop Smoking Services.

What action should they take?

- Offer behavioural counselling, group therapy, pharmacotherapy or a combination of treatments that have been proven to be effective (see the list at the start of section 4).

- Ensure clients receive behavioural support from a person who has had training and supervision that complies with the 'Standard for training in smoking cessation treatments' or its updates.
- Provide tailored advice, counselling and support, particularly to clients from minority ethnic and disadvantaged groups. Provide services in the language chosen by clients, wherever possible.
- Ensure the local NHS Stop Smoking Service aims to treat minority ethnic and disadvantaged groups at least in proportion to their representation in the local population of tobacco users.

(See also NICE public health guidance 1 on smoking cessation)

Pharmocotherapies

Recommendation 4

Who is the target population?

People who want to stop smoking.

Who should take action?

Healthcare professionals who advise on, or prescribe, nicotine replacement therapy (NRT), varenicline or bupropion.

What action should they take?

- Offer NRT, varenicline or bupropion, as appropriate, to people who are planning to stop smoking.
- Offer advice, encouragement and support, including referral to the NHS Stop Smoking Service, to help people in their attempt to quit.
- NRT, varenicline or bupropion should normally be prescribed as part of an abstinent-contingent treatment, in which the smoker makes a commitment to stop smoking on or before a particular date (target stop date). The prescription of NRT, varenicline or bupropion should be sufficient to last only until 2 weeks after the target stop date. Normally, this will be after 2 weeks of NRT therapy, and 3–4 weeks for varenicline or bupropion, to allow for the different methods of administration and mode of action. Subsequent prescriptions should be given only to people who have demonstrated, on re-assessment, that their quit attempt is continuing.

- Explain the risks and benefits of using NRT to young people aged from 12 to 17, pregnant or breastfeeding women, and people who have unstable cardiovascular disorders. To maximise the benefits of NRT, people in these groups should also be strongly encouraged to use behavioural support in their quit attempt.
- Neither varenicline or bupropion should be offered to young people under 18 nor to pregnant or breastfeeding women.
- Varenicline or bupropion may be offered to people with unstable cardiovascular disorders, subject to clinical judgement.
- If a smoker's attempt to quit is unsuccessful using NRT, varenicline or bupropion, do not offer a repeat prescription within 6 months unless special circumstances have hampered the person's initial attempt to stop smoking, when it may be reasonable to try again sooner.
- Do not offer NRT, varenicline or bupropion in any combination.
- Consider offering a combination of nicotine patches and another form of NRT (such as gum, inhalator, lozenge or nasal spray) to people who show a high level of dependence on nicotine or who have found single forms of NRT inadequate in the past.
- Do not favour one medication over another. The clinician and patient should choose the one that seems most likely to succeed.
- When deciding which therapies to use and in which order, discuss the options with the client and take into account:
  - whether a first offer of referral to the NHS Stop Smoking Service has been made
  - contra-indications and the potential for adverse effects
  - the client's personal preferences
  - the availability of appropriate counselling or support
  - the likelihood that the client will follow the course of treatment
  - their previous experience of smoking cessation aids.

This supersedes NICE technology appraisal guidance 39 on NRT and bupropion. (See also NICE technology appraisal guidance 123 on varenicline)

Pregnancy

Recommendation 8

Who is the target population?

Women who smoke and who are either pregnant or are planning a pregnancy, and their partners and family members who smoke.

Who should take action?

All those responsible for providing health and support services for pregnant women, for those wishing to become pregnant, and for their partners. This includes: those working in fertility clinics, midwives, GPs, dentists, hospital and community pharmacists, and those working in children's centres, voluntary organisations and occupational health services.

What action should they take?

- At the first contact with the woman, discuss her smoking status, provide information about the risks of smoking to the unborn child and the hazards of exposure to secondhand smoke. Address any concerns she and her partner or family may have about stopping smoking.
- Offer personalised information, advice and support on how to stop smoking. Encourage pregnant women to use local NHS Stop Smoking Services and the NHS Pregnancy Smoking Helpline by providing details on when, where and how to access them. Consider visiting pregnant women at home if it is difficult for them to attend specialist services.
- Monitor smoking status and offer smoking cessation advice, encouragement and support throughout the pregnancy and beyond.
- Discuss the risks and benefits of NRT with pregnant women who smoke, particularly those who do not wish to accept the offer of help from the NHS Stop Smoking Service. If a woman expresses a clear wish to receive NRT, use professional judgement when deciding whether to offer a prescription.
- Advise pregnant women using nicotine patches to remove them before going to bed.

This supersedes NICE technology appraisal guidance 39 on NRT and bupropion. (See also NICE public health guidance 1 on smoking cessation)

2 Public health need and practice

Smoking remains the main cause of preventable morbidity and premature death in England, leading to an estimated annual average of 86,500 deaths between 1998 and 2002 (Twigg et al. 2004). It is the primary reason for the gap in healthy life expectancy between rich and poor. Among men, smoking is responsible for over half the excess risk of premature death between the social classes (Jarvis and Wardle 1999).

A wide range of diseases and conditions are caused by cigarette smoking, including cancers, respiratory diseases, coronary heart and other circulatory diseases, stomach and duodenal ulcers, erectile dysfunction and infertility, osteoporosis, cataracts, age-related macular degeneration and periodontitis (US Department of Health and Human Services 2004). Following surgery, smoking contributes to lower survival rates, delayed wound healing and post-operative respiratory complications (US Department of Health and Human Services 2004).

Women who smoke during pregnancy have a substantially higher risk of spontaneous abortion (miscarriage) than those who do not smoke. Smoking can also cause complications in pregnancy and labour, including ectopic pregnancy, bleeding during pregnancy, premature detachment of the placenta and premature rupture of the membranes (British Medical Association 2004).

The health risks for babies are substantial. Those born to women who smoke are on average 200–250g lighter than babies born to mothers who do not smoke (British Medical Association 2004); the more cigarettes smoked, the greater the probable reduction in birth weight. This can increase the risk of death and disease in childhood: smoking in pregnancy increases infant mortality by about 40% (DH 2007) and more than a quarter of the risk of sudden unexpected death in infancy is attributable to smoking (British Medical Association 2004).

Breathing secondhand smoke ('passive smoking') can affect the health of people who do not smoke. For example, it can exacerbate respiratory symptoms and trigger asthma attacks. Longer term, it increases the risk of lung cancer, respiratory illnesses (especially asthma), heart disease and stroke (International Agency for Research on Cancer 2002; Scientific Committee on Tobacco and Health 2004; US Environmental Protection Agency 1993). Exposure to secondhand smoke in pregnancy can reduce fetal growth and increase the risk of preterm birth (British Medical Association 2004).

Smoking is estimated to cost the NHS £1.5 billion a year (Parrott et al. 1998). This estimate does not include other costs to government such as payment of sickness or invalidity benefits. Nor does it include the costs to industry or to individuals who smoke.

In England about 24% of people aged 16 and over in 2006 smoked (Lader 2007). Although smoking prevalence has dropped sharply since the 1970s, the decline has been much slower in the last decade. Recent estimates suggest that it is dropping by 0.4% a year (Jarvis 2003).

The government target to reduce smoking prevalence among manual[1] working groups to 26% or less by 2010 will be challenging (HM Treasury 2004). In England in 2005 about 29% of those in routine or manual occupations smoked (Goddard 2006).

Smoking prevalence is also high among some minority ethnic groups (Erens et al. 2000). Among all groups, it is age-related. For example, among pregnant women smoking prevalence is highest for those under 35 (Penn and Owen 2002; Sproston and Primatesta 2004); and 45% of mothers aged under 20 smoke during their pregnancy (DH 2007). Among adults aged 16 and over, smoking prevalence for men was highest among those aged 20–34 (43% for both 20–24 year olds and 25–34 year olds) and for women highest among those aged 25–34 (29%) (Lader 2007).

This guidance is aimed at those working in the NHS, local authorities, other public sector organisations, and the community, voluntary and private sectors who have a direct or indirect role or responsibility for smoking cessation.

[1] From 2001, the classification system used to describe social class based on occupation was replaced by the National Statistics Socio-economic Classification (NS-SEC). 'Manual' households are now described as 'routine and manual' households: the phrase 'routine and manual' is now used for PSA targets.

3 Considerations

The PDG took account of a number of factors and issues in making the recommendations.

3.1 Social inequalities in tobacco use make a significant contribution to inequalities in health. Interventions that are effective in reducing social inequalities in tobacco use are therefore central to the government's public health strategy and to the broader goal of promoting health equity.

3.2 Smoking cessation interventions tailored for people from minority ethnic or disadvantaged groups may be slightly more effective than generic interventions aimed at these groups. However, it is unlikely that tailored interventions alone would make a large impression on the social gradient in smoking prevalence. It is important to ensure that NHS Stop Smoking Services are easily accessible by people from these groups and that they are encouraged to use them.

3.3 Learning from social marketing theory suggests that efforts to combat smoking should be multifaceted. Media campaigns should be coordinated with other activities such as smoking cessation services, policy change and school interventions, and all stakeholders should be involved. Above all, the needs of target groups should be put first. Initiatives should aim to bring about sustained individual and social change, which takes time. It is important to take a strategic perspective, developing relationships with target groups and stakeholders and encouraging full community engagement.

3.4 Community pharmacies serve local communities and have the potential to reach and treat large numbers of people who use tobacco. They are able to meet the needs of minority ethnic and disadvantaged groups and those who may have difficulty accessing other community services. Community pharmacies are contractually obliged to take part each year in up to six public campaigns organised by primary care trusts (PCTs), so they also have an important role to play in local education and communication campaigns.

3.5 NHS Stop Smoking Services have helped large numbers of people to quit smoking. However, smoking cessation rates are still lower among people in routine and manual groups than among those in higher socioeconomic groups. This suggests that some groups face social and economic barriers that may

inhibit their ability to quit. Reducing smoking prevalence among people in routine and manual groups, some minority ethnic groups and disadvantaged communities will help reduce health inequalities more than any other public health measure.

3.6 Pregnant women in routine and manual groups and those aged 20 or under may need additional support to give up smoking. By registering with their midwife or health visitor for Healthy Start, pregnant women and mothers of children under 4 years who are eligible for certain benefits, and all pregnant women under 18 years, can obtain food vouchers and vitamin supplements. When women register for Healthy Start, professionals are encouraged to provide health and lifestyle advice and to continue advising during pregnancy and beyond. The PDG believes health professionals should use Healthy Start registration as an opportunity to offer information, advice and support on stopping smoking, including details of when, where and how to use local NHS Stop Smoking Services. The emphasis must be on quitting and not on cutting down.

3.7 It may take many attempts before people can successfully quit smoking and they need to be encouraged in all of these endeavours. However, the interval between quit attempts needs careful discussion with the client to minimise the risk of a previous failure adversely affecting the next attempt to stop smoking.

3.8 Many people attempt to quit smoking using a variety of methods. The PDG believes quitting should always be encouraged, but that only proven treatments should be provided by the NHS. Treatments that have not been rigorously evaluated and found to be effective should not be available through the NHS. The PDG cannot recommend that the NHS should provide:

- 'Rapid smoking'– although there is good evidence that this form of aversion therapy improves abstinence rates, its practice is not now recommended because it conflicts with smokefree regulations and the PDG was also concerned about exposing practitioners to clients' tobacco smoke.
- Acupuncture, acupressure, laser therapy and electro-stimulation – there is evidence that these techniques do not improve long-term abstinence rates more than a placebo.
- Hypnotherapy – there is evidence that hypnotherapy does not improve long-term abstinence rates more than other interventions that give the same amount of time and attention to the participant, such as individual counselling.

- Glucose – although there is some evidence that glucose may reduce the desire to smoke and increase cessation rates if taken when using a nicotine patch, the evidence is not robust.

3.9 The PDG examined two other means to help people stop smoking: cytisine and Allen Carr's Easyway method. There is not enough evidence from well-conducted studies to recommend these aids and the PDG thought it appropriate to call for further research on both.

3.10 In 2005, the Medicines and Healthcare Regulatory Authority (MHRA) undertook a review of the licensing arrangements for nicotine replacement therapy (NRT). The changes were:

- all forms of NRT can be used for young people aged 12–17 who smoke
- NRT can be used by pregnant women who smoke
- NRT can be used by breastfeeding mothers who smoke
- all forms of NRT can be used by people with cardiovascular disease
- more than one form of NRT can be used concurrently
- NRT can be used by people who are unable to quit smoking abruptly with NRT but want to cut smoking frequency as a prelude to quitting (the 'nicotine assisted reduction to stop' [NARS] strategy).

3.11 The PDG considered evidence from trials where NRT was used by people who simply wanted to reduce the amount they smoked but had no intention of stopping. Compared with a placebo, the use of NRT significantly increased long-term abstinence. However, these trials were conducted in highly controlled circumstances.

3.12 The NARS strategy (also known as cut down to quit) was discussed extensively. The PDG had concerns about recommending it for those who want to stop smoking but have found it difficult to quit. Until further evidence is available, the PDG recommended that NARS is only used in properly designed and conducted research studies (see below).

3.13 Studies are needed to determine how the NARS method could help individuals who have unsuccessfully tried to quit smoking in the past and those who want to

stop, but are adamant that they cannot – or will not – attempt to stop immediately. Studies are also needed to determine which health professionals can best support the NARS strategy – and on how to give advice on this method without deterring people from attempting to stop completely.

3.14 The PDG recognised the potential public health benefits of using the NARS strategy as a prelude to quitting. It may help those who have repeatedly tried and failed to stop smoking. It may also help those who do not want – or feel unable – to quit abruptly. People who only want to reduce their smoking may also benefit from using NRT as research studies have found that a proportion of this group will quit even though it is not their original intention. However, the PDG stressed the need for careful consideration of how it would fit with existing treatment services. Care is also needed to ensure that any promotion of NARS does not imply that cutting down is an appropriate substitute for stopping smoking completely.

3.15 The PDG stressed that health professionals should know about the NARS strategy and its likelihood of success compared with abrupt quitting. Such knowledge will ensure they are fully equipped to discuss individuals' doubts and fears about the difficulties of quitting and can inform them about the support mechanisms available. These include the local NHS Stop Smoking Service, as well as telephone quitlines and postal self-help services, all of which are free.

3.16 The NARS strategy is not seen as an appropriate smoking cessation method for pregnant women who smoke. Pregnant women must be encouraged to quit as soon as possible.

3.17 Evidence used in formulating the guidance suggested that the NARS strategy was highly cost effective when compared with continued smoking, but not compared with abrupt quitting. This suggests that NARS would only be cost effective if most people using this method would not otherwise have attempted to stop smoking.

3.18 The PDG recognised that there may be a large group of people who only wish to cut down their smoking (and do not expect to quit). Others may be interested in using NARS to cut down as a preliminary step before quitting. Properly conducted research is needed to ascertain the effectiveness and cost effectiveness of these methods combined with current quit strategies.

3.19 Studies of the NARS strategy might consider including: data on short and long-term quit rates, biochemically validated, if appropriate; an assessment of behavioural support (content, duration and frequency); and the sociodemographic characteristics of participants, including their age, gender, socioeconomic status and ethnicity.

3.20 The PDG believes that the NHS should provide all effective pharmacotherapies to people trying to quit smoking (therapies currently available are NRT, varenicline and bupropion). They agreed that healthcare professionals should consider prescribing a combination of NRT patches with other NRT products such as gum, inhalers or nasal spray in appropriate clinical circumstances (see recommendation 4).

3.21 The most effective smoking cessation interventions in workplace settings are those interventions that have been proven to be effective more broadly, such as group therapy, individual counselling and pharmacological treatment.

3.22 Effective smoking cessation aids and services are also highly cost effective.

3.23 There were not sufficient data to estimate the cost effectiveness of services for pregnant women who smoke. Specifically, it was not possible to determine which of the following would be more cost effective:

- encourage pregnant women to use NHS stop smoking services or other publicly-funded smoking cessation services
- train midwives to a standard that would allow them to act as smoking cessation advisors
- send members of a dedicated team from the NHS or another publicly-funded smoking cessation service to the women's homes.

3.24 Standard economic analysis is inappropriate for mass media campaigns because each campaign is unique and it is not possible to predict what the effect will be. Therefore, the cost effectiveness of a campaign cannot be guaranteed in advance. However, the more successful campaigns will be extremely cost effective.

4 Recommendations

This document is the Institute's formal guidance on smoking cessation services. When writing the recommendations, the PDG (see appendix A) considered the evidence of effectiveness (including cost effectiveness), fieldwork data and comments from stakeholders. Full details are available on the Institute's website.

The evidence statements that underpin the recommendations are listed in appendix C.

The evidence reviews, supporting evidence statements and economic appraisal are available on the Institute's website.

The PDG considers all of the recommended interventions to be cost effective.

The PDG also considered whether a recommendation should only be implemented as part of a research programme, where evidence was lacking. For the research recommendations and other gaps in the research, see section 6 and appendix D respectively.

Effective interventions

The following smoking cessation interventions have been proven to be effective.

Brief interventions

Brief interventions for smoking cessation involve opportunistic advice, discussion, negotiation or encouragement and referral to more intensive treatment, where appropriate. They are delivered by a range of primary and community care professionals, typically in less than 10 minutes. The package provided depends on a number of factors including the individual's willingness to quit, how acceptable they find the intervention and previous methods they have used. It may include one or more of the following:

- simple opportunistic advice
- an assessment of the individual's commitment to quit
- pharmacotherapy and/or behavioural support
- self-help material

- referral to more intensive support such as the NHS Stop Smoking Service.

(NICE 2006a and NICE 2006b)

Individual behavioural counselling

Individual behavioural counselling involves scheduled face-to-face meetings between someone who smokes and a counsellor trained in smoking cessation. Typically, it involves weekly sessions over a period of at least 4 weeks after the quit date and is normally combined with pharmacotherapy. (Lancaster and Stead 2005a; NICE 2006b; NICE 2006c)

Group behaviour therapy

Group behaviour therapy involves scheduled meetings where people who smoke receive information, advice and encouragement and some form of behavioural intervention (for example, cognitive behavioural therapy). This therapy is offered weekly for at least the first 4 weeks of a quit attempt (that is, for 4 weeks following the quit date). It is normally combined with pharmacotherapy.
(NICE 2006b; NICE 2006c; Stead and Lancaster 2005)

Pharmacotherapies

Smoking cessation advisers and healthcare professionals may recommend and prescribe nicotine replacement therapy (NRT), varenicline or bupropion as an aid to help people to quit smoking, along with giving advice, encouragement and support, or referral to a smoking cessation service. Before prescribing a treatment, they take into account the person's intention and motivation to quit and how likely it is they will follow the course of treatment. They should also consider which treatments the individual prefers, whether they have attempted to stop before (and how), and if there are medical reasons why they should not be prescribed particular pharmacotherapies. (NICE 2002; NICE 2006b; NICE 2007)

Self-help materials

Self-help materials comprise any manual or structured programme, in written or electronic format, that can be used by individuals in a quit attempt without the help of health professionals, counsellors or group support. Materials can be aimed at anyone who smokes, particular populations (for example, determined by age or ethnic group) or may be interactively tailored to individual need. (Lancaster and Stead 2005b; NICE 2006b)

Telephone counselling and quitlines

Telephone counselling and quitlines provide encouragement and support over the telephone to anyone who smokes who wants to quit, or who has recently quit. Counsellors can call the client (a proactive service) or the client can call the service (a reactive service). (Stead et al 2006;NICE 2006b; NICE 2006c)

Mass media

Mass-media campaigns combine multiple types of media, such as TV, radio and national newspaper advertising. They can be used alone to encourage and support quit attempts or combined with other activities at local, regional and national levels.
(Gutierrez 2007)

Different levels of service

Department of Health guidance on how to develop effective stop smoking services covers three levels: brief interventions, intensive one-to-one support and advice, and group interventions. These are frequently referred to as level one, level two and level three services, respectively. For a full explanation of each level of advice, see the 'Standard for training in smoking cessation treatments').

Smoking cessation services

Recommendation 1

Who is the target population?

Everyone who smokes or uses any other form of tobacco.

Who should take action?

- Primary care trusts (PCTs), strategic health authorities (SHAs).
- Commissioners of publicly funded smoking cessation services.

What action should they take?

- Determine the characteristics of the local population of people who smoke or use other forms of tobacco. Determine the prevalence of all forms of tobacco use locally.

- Ensure NHS Stop Smoking Services target minority ethnic and socioeconomically disadvantaged communities in the local population.
- Ensure NHS Stop Smoking Services provide a good service by maintaining adequate staffing levels, including a full-time coordinator (or the equivalent).
- Set realistic performance targets for both the number of people using the service and the proportion who successfully quit smoking. These targets should reflect the demographics of the local population. Services should:
  - aim to treat at least 5% of the estimated local population of people who smoke or use tobacco in any form each year
  - aim for a success rate of at least 35% at 4 weeks, validated by carbon monoxide monitoring. This figure should be based on all those who start treatment, with success defined as not having smoked in the third and fourth week after the quit date. Success should be validated by a CO monitor reading of less than 10 ppm at the 4-week point. This does not imply that treatment should stop at 4 weeks.
- Audit performance data routinely and independently and make the results publicly available. Audits should also be carried out on exceptional results – 4-week quit rates lower than 35% or above 70% – to determine the reasons for unusual performance, and to help identify best practice and ensure it is being followed.
- Establish links between contraceptive services, fertility clinics and ante- and postnatal services. These links should ensure health professionals use the many opportunities available to them (at various stages of the woman's life) to offer smoking advice or referral to a specialist service, where appropriate.

(See also NICE public health guidance 1 on smoking cessation in primary care and other settings)

Recommendation 2

Who is the target population?

Everyone who smokes or uses tobacco in any other form.

Who should take action?

Managers and providers of NHS Stop Smoking Services.

What action should they take?

- Offer behavioural counselling, group therapy, pharmacotherapy or a combination of treatments that have been proven to be effective (see the list at the start of this section).
- Ensure clients receive behavioural support from a person who has had training and supervision that complies with the 'Standard for training in smoking cessation treatments' or its updates.
- Provide tailored advice, counselling and support, particularly to clients from minority ethnic and disadvantaged groups. Provide services in the language chosen by clients, wherever possible.
- Ensure the local NHS Stop Smoking Service aims to treat minority ethnic and disadvantaged groups at least in proportion to their representation in the local population of tobacco users.

(See also NICE public health guidance 1 on smoking cessation)

Recommendation 3

Who is the target population?

People who want to stop smoking.

Who should take action?

Commissioners and managers of telephone quitline services.

What action should they take?

- Ensure publicly sponsored telephone quitlines offer a rapid, positive and authoritative response. Where possible, callers whose first language is not English should have access to information and support in their chosen language.
- All staff should receive smoking cessation training (at least in brief interventions to help people stop smoking).
- Staff who offer counselling should be trained to at least level two (individual behavioural counselling) and preferably, they should hold an appropriate counselling qualification. Training should comply with the 'Standard for training in smoking cessation treatments' or its updates.

Pharmocotherapies and other treatments

Recommendation 4

Who is the target population?

People who want to stop smoking.

Who should take action?

Healthcare professionals who advise on, or prescribe, nicotine replacement therapy (NRT), varenicline or bupropion.

What action should they take?

- Offer NRT, varenicline or bupropion, as appropriate, to people who are planning to stop smoking.
- Offer advice, encouragement and support, including referral to the NHS Stop Smoking Service, to help people in their attempt to quit.
- NRT, varenicline or bupropion should normally be prescribed as part of an abstinent-contingent treatment, in which the smoker makes a commitment to stop smoking on or before a particular date (target stop date). The prescription of NRT, varenicline or bupropion should be sufficient to last only until 2 weeks after the target stop date. Normally, this will be after 2 weeks of NRT therapy, and 3–4 weeks for varenicline or bupropion, to allow for the different methods of administration and mode of action. Subsequent prescriptions should be given only to people who have demonstrated, on re-assessment, that their quit attempt is continuing.
- Explain the risks and benefits of using NRT to young people aged from 12 to 17, pregnant or breastfeeding women, and people who have unstable cardiovascular disorders. To maximise the benefits of NRT, people in these groups should also be strongly encouraged to use behavioural support in their quit attempt.
- Neither varenicline or bupropion should be offered to young people under 18 nor to pregnant or breastfeeding women.
- Varenicline or bupropion may be offered to people with unstable cardiovascular disorders, subject to clinical judgement.

- If a smoker's attempt to quit is unsuccessful using NRT, varenicline or bupropion, do not offer a repeat prescription within 6 months unless special circumstances have hampered the person's initial attempt to stop smoking, when it may be reasonable to try again sooner.
- Do not offer NRT, varenicline or bupropion in any combination.
- Consider offering a combination of nicotine patches and another form of NRT (such as gum, inhalator, lozenge or nasal spray) to people who show a high level of dependence on nicotine or who have found single forms of NRT inadequate in the past.
- Do not favour one medication over another. The clinician and patient should choose the one that seems most likely to succeed.
- When deciding which therapies to use and in which order, discuss the options with the client and take into account:
  - whether a first offer of referral to the NHS Stop Smoking Service has been made
  - contra-indications and the potential for adverse effects
  - the client's personal preferences
  - the availability of appropriate counselling or support
  - the likelihood that the client will follow the course of treatment
  - their previous experience of smoking cessation aids.

This supersedes NICE technology appraisal guidance 39 on NRT and bupropion. (See also NICE technology appraisal guidance 123 on varenicline)

Recommendation 5

This recommendation has been replaced by Tobacco: harm reduction approaches to smoking (NICE public health guidance 45).

Specific groups

Recommendation 6

Who is the target population?

People receiving care and advice from a health professional in primary care or secondary care.

Who should take action?

- PCTs.
- Healthcare professionals.

What action should they take?

Primary care providers

- Healthcare professionals should be trained to give brief advice on stopping tobacco use and should have contact with the local NHS Stop Smoking Service to which they can refer people.
- Healthcare professionals should identify and record the smoking and/or tobacco use status of all their patients. Those who use tobacco should be:
- reminded at every suitable opportunity of the health benefits of stopping
- offered brief advice and, if they want to stop using tobacco, referred to the local NHS Stop Smoking Service. If patients do not wish to attend the service, they should be offered brief advice and support to help them quit, and pharmacotherapy as appropriate.
- Patients referred for elective surgery should be encouraged to stop smoking before the operation. Patients who want to stop smoking for good should also be referred to the local NHS Stop Smoking Service.
- See also recommendations 1, 7 and 9 from Smoking cessation in secondary care: acute, maternity and mental health services (NICE public health guidance 48).

Secondary care providers

- See Smoking cessation in secondary care: acute, maternity and mental health services (NICE public health guidance 48).

(See also NICE public health guidance 1 on smoking cessation)

Recommendation 7

Who is the target population?

People with cardiovascular or respiratory disease who smoke.

Who should take action?

- Healthcare professionals or counsellors who advise on, prescribe or dispense pharmacotherapies for stopping smoking.
- Cardiac rehabilitation teams.

What action should they take?

Primary care providers

- Offer brief advice or, preferably, behavioural support from the local NHS Stop Smoking Service and prescriptions of NRT, varenicline or bupropion, according to clinical judgement.
- This supersedes NICE technology appraisal guidance 39 on NRT and bupropion. (See also NICE technology appraisal guidance 123 on varenicline and NICE clinical guideline 12 on chronic obstructive pulmonary disease [replaced by NICE clinical guideline 101).
- See also recommendations 1, 7 and 9 from Smoking cessation in secondary care: acute, maternity and mental health services (NICE public health guidance 48).

Secondary care providers

- See Smoking cessation in secondary care: acute, maternity and mental health services (NICE public health guidance 48).

Recommendation 8

Who is the target population?

Women who smoke and who are either pregnant or are planning a pregnancy, and their partners and family members who smoke.

Who should take action?

All those responsible for providing health and support services for pregnant women, for those wishing to become pregnant, and for their partners. This includes: those working in fertility clinics, midwives, GPs, dentists, hospital and community pharmacists, and those working in children's centres, voluntary organisations and occupational health services.

What action should they take?

- At the first contact with the woman, discuss her smoking status, provide information about the risks of smoking to the unborn child and the hazards of exposure to secondhand smoke. Address any concerns she and her partner or family may have about stopping smoking.
- Offer personalised information, advice and support on how to stop smoking. Encourage pregnant women to use local NHS Stop Smoking Services and the NHS Pregnancy Smoking Helpline by providing details on when, where and how to access them. Consider visiting pregnant women at home if it is difficult for them to attend specialist services.
- Monitor smoking status and offer smoking cessation advice, encouragement and support throughout the pregnancy and beyond.
- Discuss the risks and benefits of NRT with pregnant women who smoke, particularly those who do not wish to accept the offer of help from the NHS Stop Smoking Service. If a woman expresses a clear wish to receive NRT, use professional judgement when deciding whether to offer a prescription.
- Advise pregnant women using nicotine patches to remove them before going to bed.

This supersedes NICE technology appraisal guidance 39 on NRT and bupropion. (See also NICE public health guidance 1 on smoking cessation)

Recommendation 9

Who is the target population?

Mothers of infants and young children, particularly breastfeeding mothers who smoke, and partners and family members who smoke.

Who should take action?

GPs, midwives, health visitors, community pharmacists and smoking cessation counsellors who advise on, or prescribe, NRT.

What action should they take?

- At the first contact, discuss the smoking status of the woman and her partner, provide information about the risks of secondhand smoke to young children and address any concerns about stopping smoking.

- Offer information, advice and support on how to quit smoking and encourage use of local NHS Stop Smoking Services by providing details on when, where and how to access them.
- Use any opportunity to offer those mothers who are (or who may be) eligible for the Healthy Start scheme practical and personalised information, advice and support to help them stop smoking.
- Discuss the risks and benefits of NRT with breastfeeding mothers who have tried but have been unable to stop smoking unaided. Use professional judgement to decide whether or not to advise use of NRT or to offer an NRT prescription.
- Advise breastfeeding women using nicotine patches to remove them before going to bed.

This supersedes NICE technology appraisal guidance 39 on NRT and bupropion. (See also NICE public health guidance 1 on smoking cessation)

Recommendation 10

Who is the target population?

Young people aged 12–17 who show a strong commitment to quit smoking.

Who should take action?

Healthcare professionals or counsellors who advise on, or prescribe, NRT.

What action should they take?

- Offer young people aged 12–17 information, advice and support on how to stop smoking. Encourage use of local NHS Stop Smoking Services by providing details on when, where and how to access them.
- Use professional judgement to decide whether or not to offer NRT to young people over 12 years who show clear evidence of nicotine dependence. If NRT is prescribed, offer it as part of a supervised regime.

This supersedes NICE technology appraisal guidance 39 on NRT and bupropion. (See also NICE public health guidance 1 on smoking cessation and NICE technology appraisal guidance 123 on varenicline)

Education and training

Recommendation 11

Who is the target population?

NHS Stop Smoking Services advisers and coordinators.

Who should take action?

Commissioners and managers of NHS Stop Smoking Services.

What action should they take?

- Ensure training and continuing professional development is available for all those involved in providing stop smoking advice and support.
- Ensure training complies with the 'Standard for training in smoking cessation treatments' or its updates.

Recommendation 12

Who is the target population?

Doctors, nurses, midwives, pharmacists, dentists, telephone quitline counsellors and others who advise people on how to quit smoking.

Who should take action?

Those responsible for the education and training of healthcare workers and others who advise people how to quit smoking.

What action should they take?

Primary care providers

- Train all frontline healthcare staff to offer brief advice on smoking cessation in accordance with NICE guidance ('Brief interventions and referral for smoking cessation in primary care and other settings'). Also train them to make referrals, where necessary and possible, to NHS Stop Smoking Services and other publicly funded smoking cessation services.

- Ensure training on how to support people to quit smoking is part of the core curriculum for healthcare undergraduates and postgraduates.
- Train all NHS Stop Smoking Services practitioners using a programme that complies with the 'Standard for training in smoking cessation treatments' or its updates.
- Provide additional, specialised training for those working with specific groups, for example, people with mental health problems and pregnant women who smoke.
- Encourage and train healthcare professionals to ask patients or clients about all forms of tobacco use and to advise them of the dangers of exposure to secondhand smoke.

Secondary care providers

- See Smoking cessation in secondary care: acute, maternity and mental health services (NICE public health guidance 48).

Strategies, policies and plans

Recommendation 13

Who is the target population?

Everyone who smokes or uses tobacco in any other form.

Who should take action?

PCTs, SHAs, local authorities, local strategic partnerships.

What action should they take?

- Set local targets for reducing tobacco use based on the characteristics of the local population and the prevalence of smoking and other forms of tobacco consumption, such as oral tobacco. Embed these targets in any partnership arrangements between local authorities and PCTs (for example, local area agreements).
- Develop a policy to ensure that effective smoking cessation services are provided as part of the local tobacco control strategy.

For recommendations on the use of smokeless tobacco see Smokeless tobacco cessation - South Asian communities (NICE public health guidance 39).

Recommendation 14

Who is the target population?

Everyone who smokes or uses tobacco in any other form.

Who should take action?

Organisers and planners of local, regional and national public education and communications campaigns.

What action should they take?

- Coordinate communications strategies to support the delivery of smoking cessation services, telephone quitlines, school-based interventions, forthcoming tobacco control policy changes and any other activities designed to help people to stop using tobacco.
- Develop and deliver communications strategies in partnership with the NHS, regional and local government and non-governmental organisations. The strategies should:
  - use the best available evidence of effectiveness, such as reviews by the Cochrane Collaboration and the Global Dialogue for Effective Stop Smoking Campaigns.
  - be developed and evaluated using audience research
  - use 'why to' and 'how to' quit messages that are non-judgemental, empathetic and respectful. For example, testimonials from people who smoke or used to smoke can work well
  - involve community pharmacies in local campaigns and maintain links with other professional groups such as dentists, fire services and voluntary groups
  - ensure campaigns are sufficiently extensive and sustained to have a reasonable chance of success
  - consider targeting and tailoring campaigns towards low income and minority ethnic groups to address inequalities.

For recommendations on the use of smokeless tobacco see Smokeless tobacco cessation - South Asian communities (NICE public health guidance 39).

For recommendations for secondary care providers see Smoking cessation in secondary care:

acute, maternity and mental health services (NICE public health guidance 48).

Recommendation 15

Who is the target population?

People who live or work in prisons, military establishments and care institutions, and who smoke or use tobacco in other forms.

Who should take action?

Managers of prisons, military establishments and long-stay health centres, such as mental healthcare units.

What action should they take?

Develop a policy, using guidance provided by the Department of Health, to ensure that effective smoking cessation services are provided and promoted.

(See also NICE public health guidance 1 on smoking cessation and NICE public health guidance 5 on workplace smoking cessation)

For recommendations for secondary care providers see Smoking cessation in secondary care: acute, maternity and mental health services (NICE public health guidance 48).

For recommendations for people who stay or work in closed institutions see Tobacco: harm-reduction approaches to smoking (NICE public health guidance 45).

Recommendation 16

Who is the target population?

Employees whose workplace is subject to regulations under the 2006 Health Act.

Who should take action?

Employers.

What action should they take?

Negotiate a smokefree workplace policy with employees or their representatives. This should:

- state whether or not smoking breaks may be taken during working hours and, if so, where, how often and for how long
- direct people who wish to stop smoking to services that offer appropriate support, for example, the NHS Stop Smoking Services
- implement the NICE public health guidance, 'Workplace interventions to promote smoking cessation'.

For recommendations for secondary care providers see Smoking cessation in secondary care: acute, maternity and mental health services (NICE public health guidance 48).

5 Implementation

NICE guidance can help:

- NHS organisations meet DH standards for public health as set out in the seventh domain of 'Standards for better health' (updated in 2006). Performance against these standards is assessed by the Healthcare Commission, and forms part of the annual health check score awarded to local healthcare organisations.
- NHS organisations and local authorities (including social care and children's services) meet the requirements of the government's 'National standards, local action, health and social care standards and planning framework 2005–2008 and the 'NHS stop smoking services: service and monitoring guidance – October 2007/8'.
- National and local organisations within the public sector meet government indicators and targets to improve health and reduce health inequalities.
- Local authorities fulfil their remit to promote the economic, social and environmental wellbeing of communities.
- Local NHS organisations, local authorities and other local public sector partners benefit from any identified cost savings, disinvestment opportunities or opportunities for re-directing resources.
- Provide a focus for children's trusts, health and wellbeing partnerships and other multi-sector partnerships working on health within a local strategic partnership.

NICE has developed tools to help organisations implement this guidance.

6 Recommendations for research

The Programme Development Group recommends that the following research questions should be addressed to fill the most important gaps in the evidence.

Recommendation 1

Who should take action?

Research commissioners and funders.

What action should they take?

Commission research on the most effective and cost effective ways to prevent relapse among those who have been able to quit smoking.

Recommendation 2

Who should take action?

Research commissioners and funders.

What action should they take?

Commission research to determine the long-term outcomes of NHS Stop Smoking Services, particularly among minority ethnic and disadvantaged communities. The research should analyse access to and uptake of the service, compliance with treatment and outcomes, according to people's socioeconomic status, age, gender, disability and ethnicity. It should also analyse the individual's experience of, and satisfaction with, the service.

Recommendation 3

Who should take action?

Research commissioners and funders.

What action should they take?

Commission research to determine whether the nicotine assisted reduction to stop (NARS) strategy helps individuals to stop smoking completely within a 12-month period – even though initially they were only willing to cut down.

Recommendation 4

Who should take action?

Research commissioners and funders.

What action should they take?

Commission research to determine the effectiveness of smoking cessation interventions delivered through new media such as podcasts, email and text messaging.

Recommendation 5

Who should take action?

Research commissioners and funders.

What action should they take?

Commission research to determine the comparative effectiveness and cost effectiveness of both types of telephone quitline – proactive (contact made by counsellors) and reactive (contact made by people who smoke).

Recommendation 6

Who should take action?

Research commissioners and funders.

What action should they take?

Commission high quality and, where appropriate, comparative studies to evaluate the long-term effectiveness of cytisine for smoking cessation.

Recommendation 7

Who should take action?

Research commissioners and funders.

What action should they take?

Commission high quality and, where appropriate, comparative studies to determine the short- and long-term effectiveness of Allen Carr's Easyway method of stopping smoking. Studies should also analyse the individual's experience of, and satisfaction with, the service.

7 Updating the recommendations

NICE public health guidance is updated as needed so that recommendations take into account important new information. We check for new evidence 2 and 4 years after publication, to decide whether all or part of the guidance should be updated. If important new evidence is published at other times, we may decide to update some recommendations at that time.

8 Related NICE guidance

MI: secondary prevention in primary and secondary care for patients following a myocardial infarction. NICE clinical guideline 48 (2007).

Varenicline for smoking cessation. NICE technology appraisal guidance 123 (2007).

Workplace health promotion: how to help employees to stop smoking. NICE public health intervention guidance 5 (2007).

Brief interventions and referral for smoking cessation in primary care and other settings. NICE public health intervention guidance 1 (2006).

Chronic obstructive pulmonary disease: management of chronic obstructive pulmonary disease in adults in primary and secondary care. NICE clinical guideline 12 (2004). [Replaced by NICE clinical guideline 101]

Guidance on the use of nicotine replacement therapy (NRT) and bupropion for smoking cessation. NICE technology appraisal 39 (2002). [Replaced by NICE public health intervention guidance 10]

Antenatal care: routine care for the healthy pregnant woman. NICE clinical guideline 62 (2008).

Preventing the uptake of smoking among children and young people. NICE public health guidance 14 (2008).

9 References

British Medical Association (2004) Smoking and reproductive life: the impact of smoking on sexual, reproductive and child health. London: British Medical Association.

Department of Health (2004) Spending review 2004: public service agreement. London: The Stationery Office.

Department of Health (2007) Review of the health inequalities infant mortality PSA target. London: Department of Health.

Erens B, Primatesta P, Prior G, editors (2000) Health survey for England 1999: the health of minority ethnic groups. London: The Stationery Office.

Goddard E (2006) Smoking and drinking among adults, 2005: General household survey 2005. London: Office for National Statistics.

Gutierrez K (2007) Mass media interventions to stimulate and promote smoking cessation.

HM Treasury (2004) 2004 spending review: public service agreements 2005–2008.

International Agency for Research on Cancer (2002) Tobacco smoke and involuntary smoking. IARC Monographs vol 83. Lyon: World Health Organization.

Jarvis M, Wardle J (1999) Social patterning of individual health behaviours: the case of cigarette smoking. In: Marmot M, Wilkinson R, editors. Social determinants of health. Oxford: Oxford University Press.

Jarvis MJ (2003) Monitoring cigarette smoking prevalence in Britain in a timely fashion. Addiction 98 (11): 1569–1574.

Lader D (2007) Smoking related behaviours and attitudes 2006. London: Office for National Statistics.

Lancaster T, Stead LF (2005a) Individual behavioural counselling for smoking cessation.

Lancaster T, Stead LF (2005b) Self-help interventions for smoking cessation.

NICE (2002) Guidance on the use of nicotine replacement therapy (NRT) and bupropion for smoking cessation. NICE technology appraisal 39. [Replaced by NICE public health intervention guidance 10]

NICE (2006a) Brief interventions and referral for smoking cessation in primary care and other settings. NICE public health intervention guidance 1.

NICE (2006b) Effectiveness review for workplace smoking cessation intervention.

NICE (2006c) Effectiveness review for smoking cessation programme.

Parrott S, Godfrey C, Raw M et al. (1998) Guidance for commissioners on the cost effectiveness of smoking cessation interventions. Thorax 53: 2–37.

Penn G, Owen L (2002) Factors associated with continued smoking during pregnancy: analysis of socio-demographic, pregnancy and smoking-related factors. Drug and Alcohol Review 21:17–25.

Scientific Committee on Tobacco and Health, Department of Health (2004) Secondhand smoke: review of the evidence since 1998. London: The Stationery Office.

Sproston K, Primatesta P editors (2004) Health survey for England 2003. Volume 2, risk factors for cardiovascular disease. London: The Stationery Office.

Stead LF, Lancaster T (2005) Group behaviour therapy programmes for smoking cessation.

Stead LF, Perera R, Lancaster T (2006) Telephone counselling for smoking cessation

Twigg L, Moon G, Walker S (2004) The smoking epidemic in England. London: Health Development Agency.

US Department of Health and Human Services (2004) The health consequences of smoking: a report of the Surgeon General. Washington DC: USA.

US Environmental Protection Agency (1993) Respiratory health effects of passive smoking: lung cancer and other disorders. Washington DC: US Environmental Protection Agency.

University of Birmingham (2006) Clinical and cost-effectiveness of nicotine replacement therapy for new licensed indications and combination therapy: a summary of best evidence

Wang D, Connoch M, Barton P et al. (2006) Cut down to quit with nicotine replacement therapies (NRT) in smoking cessation: systematic review of effectiveness and economic analysis.

West R (2005) Smoking prevalence, mortality and cessation in Great Britain.

Appendix A: membership of the Programme Development Group, the NICE Project Team and external contractors

The Programme Development Group

PDG membership is multidisciplinary. It comprises researchers, practitioners, stakeholder representatives and members of the public as follows:

Deborah Arnott Director, Action on Smoking and Health, London

Dr Paul Aveyard Senior Scientist, National Institute of Health Research, Department of Primary Care and General Practice, University of Birmingham

Professor John Britton Head, Division of Epidemiology and Public Health, University of Nottingham

Ron Gould Member, Liverpool City Council; Community Pharmacist

Professor Hilary Graham Professor of Health Sciences, University of York; Director, Department of Health Public Health Research Consortium

Ian Gray Policy Officer, Chartered Institute of Environmental Health

Professor Gerard Hastings Director, Institute for Social Marketing and Centre for Tobacco Control Research, University of Stirling & Open University

Andrew Hayes Tobacco Policy Manager, Regional Public Health Group for London

Paul Hooper Tobacco Policy Manager, Regional Public Health Group, West Midlands

(CHAIR) Sir Alexander Macara Public Health Physician; President, National Heart Forum Board of Trustees

Carmel O'Gorman Midwifery Lead, Smoking Cessation in Pregnancy, Goodhope Hospital, West

Midlands

Dr Kiran Patel Consultant Cardiologist, Sandwell Hospital, Sandwell and West Birmingham Hospitals NHS Trust; Honorary Senior Lecturer, University of Birmingham, Department of Cardiovascular Medicine; Chair, South Asian Health Foundation

Dr Mike Ward Consultant Physician, Sherwood Forest Hospitals

Professor Robert West Director, Tobacco Studies, UK Health Behaviour Research Centre, University College, London

Expert cooptees to the PDG:

Professor Peter Hajek Director, Tobacco Dependence Research Centre, Queen Mary University of London

Community members

Ruth Bosworth Director of Services, QUIT

David Geldard President of Heart Care Partnership (UK); Council Member, British Cardiovascular Society

Christine Owens Head of Tobacco Control, Roy Castle Lung Cancer Foundation

Pamela Rees Inequalities and Smoking Manager, Directorate of Public Health, Leicester City Primary Care Trust

NICE Project Team

Mike Kelly
CPHE Director

Tricia Younger
Associate Director

Patti White
Lead Analyst

Lesley Owen
Analyst

Hugo Crombie
Analyst

Alastair Fischer
Health Economics Adviser

External contractors

External reviewers: effectiveness reviews

Review 1: 'Rapid review of non NHS treatments of smoking cessation' carried by the University of Auckland and Queen Mary, University of London. The principal authors were: Professor Peter Hajek and Dr Hayden McRobbie (University of Auckland).

Review 2: 'The effectiveness of National Health Service intensive treatments for smoking cessation in England' carried out by the British Columbia Centre of Excellence for Women's Health. The principal authors were: Dr Linda Bauld, Dr Kirsten Bell, Karen DeVries, Dr Lorraine Greaves, Natasha Jatageonkar and Lucy McCullough.

Review 3: 'Workplace policies for smoking cessation' carried out from May–September 2006 and updated in January 2007 by the British Columbia Centre of Excellence for Women's Health. The principal authors were:
Dr Kirsten Bell, Karen DeVries, Dr Lorraine Greaves, Natasha Jatageonkar and Lucy McCullough.

Review 4: 'A review of the effectiveness of mass media interventions which both encourage quit attempts and reinforce current and recent attempts to quit smoking' carried out by the Cancer Care Research Centre and Centre for Social Marketing, the University of Stirling and the Alliance for Self Care Research, University of Abertay. The principal authors were: Fiona Harris, Gerard Hastings, Ruth Jepson, Nora Kearney, Steve MacGillivray and Neneh Rowa-Dewar.

Review 5: 'The impact of quitlines on smoking cessation' carried out by the British Columbia Centre of Excellence for Women's Health. The principal authors were: Dr Kirsten Bell, Dr Lorraine Greaves and Lindsay Richardson.

External reviewers: expert report

Expert paper: 'Mass media interventions to stimulate and promote smoking cessation' prepared by Karen K Gutierrez, Director, Global Dialogue for Effective Stop Smoking Campaigns.

External reviewers: economic reviews and analysis for the update of NICE technology appraisal guidance 39

'Cut down to quit with nicotine replacement therapies (NRT) in smoking cessation: systematic review of effectiveness and economic analysis' carried out by the West Midlands Health Technology Assessment Collaboration, Department of Public Health and Epidemiology, University of Birmingham. The principal authors were: Paul Aveyard, Pelham Barton, Martin Connock, Anne Fry-Smith, David Moore and Dechao Wang.

'Clinical and cost-effectiveness of nicotine replacement therapy for new licensed indications and combination therapy: a summary of best evidence' carried out by the Aggressive Research Intelligence Facility, West Midlands Health Technology Assessment Collaboration. The principal authors were: Anne Fry-Smith, Chris Hyde, David Moore, Jon Roberts and Josie Sandercock.

External reviewers: economic evaluations

The economic evaluation 'A rapid review of the cost effectiveness of non-National Health Service treatments for smoking cessation in England' was carried out by York Health Economics Consortium. The principal authors were: Sarah Flack, Matthew Taylor and Paul Trueman.

The economic evaluation 'A rapid review of the cost effectiveness of National Health Service treatments for smoking cessation in England' was carried out by York Health Economics Consortium. The principal authors were: Sarah Flack, Matthew Taylor and Paul Trueman.

The economic evaluation 'A rapid review of the cost effectiveness of workplace policies for smoking cessation in England' was carried out by York Health Economics Consortium. The principal authors were: Sarah Flack, Matthew Taylor and Paul Trueman.

The economic evaluation 'A rapid review of the cost effectiveness of mass media interventions for smoking cessation in England' was carried out by York Health Economics Consortium. The principal authors were: Sarah Flack, Matthew Taylor and Paul Trueman.

External reviewers: economic analyses

The economic analysis 'Cost effectiveness of interventions for smoking cessation' was carried out by the York Health Economic Consortium. The authors were: Sarah Flack, Matthew Taylor and Paul Trueman.

The economic analysis 'Cost effectiveness of interventions for smoking cessation: mass media' was carried out by the York Health Economic Consortium. The authors were: Sarah Flack, Matthew Taylor and Paul Trueman.

The economic analysis 'Cost impact analysis of interventions for smoking cessation aimed at pregnant women' was carried out by the York Health Economic Consortium. The authors were: Sarah Flack, Matthew Taylor and Paul Trueman.

Fieldwork

The fieldwork was carried out by Nigel Jackson of Dr Foster Intelligence.

Appendix B: summary of the methods used to develop this guidance

Introduction

The reports of the reviews, expert reports and economic analyses include full details of the methods used to select the evidence (including search strategies), assess its quality and summarise it. The minutes of the PDG meetings provide further detail about the Group's interpretation of the evidence and development of the recommendations.

All supporting documents are listed in appendix E and are available from the NICE website.

The guidance development process

The stages of the guidance development process are outlined in the box below:

1. Draft scope
2. Stakeholder meeting
3. Stakeholder comments
4. Final scope and responses published on website
5. Reviews and cost-effectiveness modelling
6. Synopsis report of the evidence (executive summaries and evidence tables) circulated to stakeholders for comment
7. Comments and additional material submitted by stakeholders
8. Review of additional material submitted by stakeholders (screened against inclusion criteria used in reviews)
9. Synopsis, full reviews, supplementary reviews and economic modelling submitted to the PDG
10. The PDG produces draft recommendations
11. Draft recommendations published on website for comment by stakeholders and for field testing
12. The PDG amends recommendations
13. Responses to comments published on website
14. Final guidance published on website

Key questions

The key questions were established as part of the scope. They formed the starting point for the reviews of evidence and facilitated the development of recommendations by the PDG. The overarching question was: 'What is the optimal provision of smoking cessation services, including the provision of nicotine replacement therapy (NRT), for primary care, pharmacies, local authorities and workplaces, with particular reference to manual working groups, pregnant women who smoke and hard to reach communities?' The subsidiary questions were:

1. What is the aim or objective?

2. What is the content and how does it influence effectiveness?

3. How does the way that the intervention is carried out influence effectiveness?

4. Does effectiveness depend on the job title/position of the person delivering the intervention? What are the significant features of an effective leader?

5. Does the site/setting influence effectiveness?

6. Does the intensity (or length or frequency) influence effectiveness or duration of effect?

7. How does effectiveness vary according to factors such as the age, sex, class or ethnicity of the target audience?

8. How much does the intervention cost (in terms of money, people, time)?

9. What evidence is there on cost effectiveness? Does the intervention offer value for money?

10. What are the facilitators and barriers to implementation?

These questions were refined further in relation to the topic of each review (see reviews for further details).

Reviewing the evidence of effectiveness

Five reviews of effectiveness were conducted.

Identifying the evidence

The following databases were searched for meta-analyses, systematic reviews of randomised controlled trials (RCTs), individual RCTs, systematic reviews of non-RCTs, case-control studies, cohort studies, interrupted time series studies, correlational studies, controlled before-and-after studies, non-analytic studies (for example case reports, case studies) and expert opinion (1900–2007):

- AMED
- ASSIA
- British Nursing Index
- CINAHL
- Cochrane Database of Systematic Reviews
- Cochrane Controlled Trials Register (CENTRAL)
- Controlled Clinical Trials
- Database of Abstracts of Reviews of Effects
- DARE
- DH-Data
- EMBASE
- Google Scholar
- Health Technology Assessment Database
- HSTAT
- King's Fund
- MEDLINE (Ovid)
- National Guideline Clearinghouse
- National Research Register (including CRD ongoing reviews database and unpublished reports)

- NICE web pages (published appraisals)
- PsycINFO
- SIGN Guidelines
- Sociological Abstracts
- TRIP.

In addition, for the NHS Stop Smoking Services review, telephone interviews were carried out with 12 people working in tobacco cessation.

These questions were refined further in relation to the topic of each review (see reviews for further details).

Expert report

The expert report on mass media interventions (see appendix A for details) identified both unpublished and published data produced between 1996 and 2006.

Further details of the databases, search terms and strategies are included in the review reports.

Selection criteria

Inclusion and exclusion criteria for each review (see appendix A for details) varied and details can be found online. However, in general:

- Review 1 included systematic reviews and meta-analyses that focused on the most widely advertised, commercially available smoking cessation treatments in the UK. This included pharmacological and behavioural treatments where there was published research available on their effects.
- Review 2 included reviews, RCTs and non-randomised studies that evaluated the effectiveness of intensive treatments for smoking within the NHS, in particular, those offered by the NHS Stop Smoking Services.
- Review 3 included reviews and other studies of selective or indicated interventions that evaluated the effectiveness of workplace policies in England to support smoking cessation.

- Review 4 included reviews and other studies on mass media and community interventions that both encourage quit attempts and reinforce current and recent attempts to quit smoking among all population groups.
- Review 5 included reviews and other studies of telephone interventions for smoking cessation where telephone support was a key intervention component, or an adjunct to brief advice, and where it could be evaluated independently of the other intervention components.
- The expert paper on mass media interventions for smoking cessation included data (both published and unpublished) produced over the last 10 years (1996–2006).

Quality appraisal

Included papers were assessed for methodological rigour and quality using the NICE methodology checklist, as set out in the NICE technical manual 'Methods for development of NICE public health guidance' (see appendix E). Each study was described by study type and graded (++, +, -) to reflect the risk of potential bias arising from its design and execution:

Study type

- Meta-analyses, systematic reviews of RCTs or RCTs (including cluster RCTs).
- Systematic reviews of, or individual, non-RCTs, case-control studies, cohort studies, controlled before-and-after studies, interrupted time series studies, correlation studies.
- Non-analytical studies (for example, case reports, case series).
- Expert opinion, formal consensus.

Study quality

++ All or most of the criteria have been fulfilled. Where they have not been fulfilled the conclusions are thought very unlikely to alter.

+ Some criteria have been fulfilled. Those criteria that have not been fulfilled or not adequately described are thought unlikely to alter the conclusions.

- Few or no criteria fulfilled. The conclusions of the study are thought likely or very likely to alter.

The studies were also assessed for their applicability to the UK.

Summarising the evidence and making evidence statements

The review data was summarised in evidence tables (see full reviews and the synopsis).

The findings from the reviews, interviews and expert report were synthesised and used as the basis for a number of evidence statements relating to each key question. The evidence statements reflect the strength (quantity, type and quality) of evidence and its applicability to the populations and settings in the scope.

Further details of the databases, search terms and strategies are included in the review reports.

Economic appraisal

The economic appraisal consisted of four economic evaluations and three economic analyses (See appendix A for details).

Review of economic evaluations

Three databases were searched for each cost-effectiveness review: NHS Economic Evaluation Database, Centre for Reviews and Dissemination (CRD) and the internal database results from the original effectiveness review.

The criteria for inclusion of papers were:

- studies used a defined intervention to assist smoking cessation
- the study population was smoking at the start of the study (although if drawn from a general population, it is accepted that some people may not smoke)
- studies reported both the costs and effectiveness of an intervention (although costs and effectiveness did not have to be combined into a single cost-effectiveness ratio).

Ten papers were identified for the mass media economic review, no papers were identified for the economic review of non-NHS interventions, 18 papers were identified for NHS interventions and 10 papers were identified for workplace interventions.

Cost-effectiveness analysis

A cohort simulation model was designed to estimate the costs and quality-adjusted life years (QALYs) associated with smoking cessation. The model was designed to compare different smoking

cessation interventions to determine their incremental cost-effectiveness.

To furnish the model with relevant data, the following databases were searched: MEDLINE and MEDLINE In-Process, NHS EED, HEED, CINAHL, HMIC, CRD (internal database) and PubMed. The World Wide Web and references listed in identified articles were also searched for relevant studies. Data were gathered on the following:

- mortality, by age, gender and smoking status
- prevalence of each comorbidity by age, gender and smoking status
- utilities for each comorbidity
- costs for each comorbidity
- the annual cessation and cost of each intervention modelled.

The results are reported in: 'Cost effectiveness of interventions for smoking cessation' (Flack et al. 2007a) and 'Cost impact analysis of workplace-based interventions for smoking cessation' (Flack et al. 2007b). These reports are available on the NICE website.

Review of NICE technology appraisal 39: reviewing the evidence of effectiveness

Two effectiveness reviews were conducted to inform the update of NICE technology appraisal 39.

Identifying the evidence

'Cut down to quit with nicotine replacement therapies (NRT) in smoking cessation: systematic review of effectiveness and economic analysis'.

Searches were carried out for systematic reviews and primary studies from 1992–2006 on the following databases: Cochrane reviews, Cochrane Collaboration (via Cochrane Library), Database of Abstracts of Reviews of Effectiveness (DARE), Cochrane Central Register of Controlled Trials (CENTRAL), Health Technology Assessment (HTA) database and ARIF Database, NHS CRD, Bandolier, TRIP, MEDLINE, EMBASE, CINAHL and PsycINFO.

Information was also gathered from theScience Citation Index (Web of Science), National Research Register and citations of relevant studies and reviews. In addition, further information was sought from regional experts, especially Pharmacy Prescribing Unit, Keele University (&MTRAC) and the

West Midlands Drug Information Service and from licensing authority and industry documents.

'Clinical and cost-effectiveness of nicotine replacement therapy for new licensed indications and combination therapy: a summary of best evidence'.

Specific searches related to the aims of each report were carried out in the following databases: The Cochrane Library, MEDLINE (1966–2006) and EMBASE (1980–2006). Generic searches were also conducted to gather cost-effectiveness information in: OHE HEED (August 2006) and MEDLINE. Searches for ongoing studies were conducted in the National Research Register.

Further details of the databases, search terms and strategies are included in the review reports.

Selection criteria

Inclusion and exclusion criteria for the Cut down to quit (CDTQ) reviews were:

- at least one electronic database (for example, MEDLINE) was scrutinised using a stated search strategy
- RCT studies of CDTQ were reviewed
- quit rates were quantitatively reviewed and/or meta-analysed.

Inclusion and inclusion criteria for primary studies of CDTQ were:

- RCTs were undertaken of people who were currently unable or unwilling to quit smoking abruptly
- interventions included the use of NRT gum or NRT inhalator alone, or as part of combination therapy (for example, motivational support)
- the comparator was: placebo or no treatment, non-NRT drugs for smoking cessation, psychological interventions (for example, motivational support) for quitting. Where an adjunct therapy was used in the intervention it had to be used with the comparator
- quit rates had to be provided.

Quality appraisal

Included papers were assessed for methodological rigour and quality using the NICE methodology checklist, as set out in the NICE technical manual 'Methods for development of NICE public health

guidance' (see appendix E). Each study was described by study type and graded (++, +, -) to reflect the risk of potential bias arising from its design and execution:

Study type

- Meta-analyses, systematic reviews of RCTs or RCTs (including cluster RCTs).
- Systematic reviews of, or individual, non-randomised controlled trials, case-control studies, cohort studies, controlled before-and-after studies, interrupted time series studies, correlation studies.
- Non-analytical studies (for example, case reports, case series).
- Expert opinion, formal consensus.

Study quality

++ All or most of the criteria have been fulfilled. Where they have not been fulfilled the conclusions are thought very unlikely to alter.

+ Some criteria have been fulfilled. Those criteria that have not been fulfilled or not adequately described are thought unlikely to alter the conclusions.

- Few or no criteria fulfilled. The conclusions of the study are thought likely or very likely to alter.

The studies were also assessed for their applicability to the UK.

Review of NICE technology appraisal 39: economic appraisal

The economic appraisal consisted of two effectiveness reviews.

Review of economic evaluations

'Cut down to quit with nicotine replacement therapies (NRT) in smoking cessation: systematic review of effectiveness and economic analysis'. The following databases were searched: Cochrane Library (Wiley) 2006 Issue 2, MEDLINE (Ovid) 1992–July 2006, MEDLINE In-Process (Ovid) 12 July 2006, EMBASE (Ovid) 1992–week 27 2006, CINAHL (Ovid) 1992–July 2006, PsycINFO (Ovid) 1992–July 2006, Science Citation Index (Web of Science) 1992–July 2006.

In addition, other searches included the research registries of ongoing trials: National Research Register 2006 Issue 2, Current Controlled Trials metaRegister and ClinicalTrials.gov, and citations of relevant studies and reviews. Further information was also sought from experts and from licensing authority and industry documents.

Relevant systematic reviews, randomised controlled trials and existing economic analyses of CDTQ were identified.

RCTs were included if:

- the populationconsisted of people who were unable or unwilling to attempt to quit smoking in the short term
- the interventions encompassed a cut-down smoking programme supported by NRT
- the comparator was a cut-down programme with placebo or other support.

Systematic reviews were included if:

- at least one electronic database had been searched and RCTs documenting quit rates in NRT smoking reduction programmes were reviewed.

Economic studies were included if they encompassed cost effectiveness or cost-utility analysis of CDTQ programme(s).

'Clinical and cost-effectiveness of nicotine replacement therapy for new licensed indications and combination therapy: a summary of best evidence'.

The following databases were searched: MEDLINE, EMBASE, the Cochrane library and OHE HEED. Studies were included if they covered:

- NRT
- the relevant population/combination as a systematic review
- the relevant population/combination as an RCT (if a systematic review was identified only more recent RCTs were sought).

Cost effectiveness analysis

'Cut down to quit with nicotine replacement therapies (NRT) in smoking

cessation: systematic review of effectiveness and economic analysis'.

No existing economic analyses of CDTQ were identified. A 'de novo' decision analytic model was constructed to estimate the cost-effectiveness of making CDTQ with NRT available for people who were unwilling or unable to attempt an abrupt quit. The outcome measure was expected quality-adjusted life years (QALYS). The model also took account of the possibility that some people willing to attempt abrupt quitting might instead switch to CDTQ. People moving from an abrupt quit attempt to CDTQ were assumed to either experience a 'CDTQ success rate' or to retain the abstinence success rate of abrupt quitters.

'Clinical and cost-effectiveness of nicotine replacement therapy for new licensed indications and combination therapy: a summary of best evidence'.

There were no economic analyses specifically addressing the cost effectiveness of NRT for adolescents, pregnant women, breastfeeding women, combination therapy NRT + NRT, combination therapy NRT + bupropion or cardiovascular patients.

It was not possible to undertake any modelling with the resources available. Searches for existing models did not identify any models for adolescents, pregnancy, breastfeeding, cardiovascular disease or combination treatment.

Fieldwork

Fieldwork was carried out to evaluate the relevance and usefulness of NICE guidance for practitioners and the feasibility of implementation. It was conducted with practitioners and commissioners who are involved in smoking cessation services. They included those working in general practice, maternity services, secondary care, community pharmacies, dentistry, strategic health authorities and primary care teams, NHS Stop Smoking Services and regional networks in the NHS and appropriate charities.

The fieldwork comprised:

- Group discussions carried out in Greater Manchester, Kirklees, Merseyside, Leicester, London and the South East, Birmingham and West Midlands with:
  - smoking cessation teams
  - GPs
  - practice nurses
  - community pharmacists
  - dentists
  - midwives
  - hospital staff
  - SHA directors of public health.
- In-depth interviews were conducted individually, in pairs and in trios in Greater Manchester, Kirklees, Merseyside, Leicester, London and the South East, Birmingham and the West Midlands and by telephone.
- The studies were commissioned to ensure there was ample geographical coverage. The main issues arising from the five group discussions and 23 in-depth interviews with individual professionals either singly, in pairs or in trios, are set out in appendix C under 'Fieldwork findings'. The full fieldwork report is available on the NICE website.

How the PDG formulated the recommendations

At its meetings held between May 2006 and September 2007, the PDG considered the evidence of effectiveness, expert reports and cost effectiveness to determine:

- whether there was sufficient evidence (in terms of quantity, quality and applicability) to form a judgement
- whether, on balance, the evidence demonstrates that the intervention is effective or ineffective, or whether it is equivocal
- where there is an effect, the typical size of effect.

The PDG developed draft recommendations through informal consensus, based on the following criteria:

- strength (quality and quantity) of evidence of effectiveness and its applicability to the populations/settings referred to in the scope
- effect size and potential impact on population health and/or reducing inequalities in health
- cost effectiveness (for the NHS and other public sector organisations)
- balance of risks and benefits
- ease of implementation and the anticipated extent of change in practice that would be required.

The PDG also considered whether a recommendation should only be implemented as part of a research programme, where evidence was lacking.

Where possible, recommendations were linked to an evidence statement(s) (see appendix C for details). Where a recommendation was inferred from the evidence, this was indicated by the reference 'IDE' (inference derived from the evidence).

The draft guidance, including the recommendations, was released for consultation in May 2007. At its meetings in June and September 2007, the PDG considered comments from stakeholders and the results from fieldwork The guidance was signed off by the NICE Guidance Executive in December 2007.

Appendix C: the evidence

This appendix sets out the evidence statements taken from five reviews, and the expert report and links them to the relevant recommendations (see appendix B for the key to study types and quality assessments). The evidence statements are presented here without references – these can be found in the full review (see appendix E for details). It also sets out a brief summary of findings from the economic appraisal and the fieldwork.

The five reviews of effectiveness are:

Review 1: 'Rapid review of non-NHS treatments of smoking cessation'

Review 2: 'The effectiveness of National Health Service intensive treatments for smoking cessation in England'

Review 3: 'Workplace policies for smoking cessation'

Review 4: 'A review of the effectiveness of mass media interventions which both encourage quit attempts and reinforce current and recent attempts to quit smoking'

Review 5: 'The impact of quitlines on smoking cessation'.

Evidence statement 1.2 indicates that the linked statement is numbered 2 in the review 'Rapid review of non NHS treatments of smoking cessation'. **Evidence statement 5.3** indicates that the linked statement is numbered 3 in the review 'The impact of quitlines on smoking cessation'.

The reviews, expert report, economic appraisal and fieldwork report are available on the NICE website. Where a recommendation is not directly taken from the evidence statements, but is inferred from the evidence, this is indicated by IDE (inference derived from the evidence).

Where the PDG has considered other evidence, it is linked to the appropriate recommendation below. It is also listed in the additional evidence section of this appendix.

Recommendation 1: evidence statements 2.1, 2.2, 2.3, 2.5, 2.17, 2.22, 2.25, 2.26, 2.27; IDE

Recommendation 2: evidence statements 2.1, 2.2, 2.3, 2.20, 2.25, 2.26, 2.27, 2.28, 2.29, 2.30; IDE

Recommendation 3: evidence statements 5.1, 5.3, 5.17; IDE

Recommendation 4: University of Birmingham 2006; NICE 2002; NICE 2007; IDE

Recommendation 5: Wang et al. 2006; IDE

Recommendation 6: evidence statements 2.1, 2.2, 2.3, 2.5, 2.9; IDE

Recommendation 7: evidence statements 2.1, 2.2, 2.3, 2.4; University of Birmingham 2006; NICE 2002; NICE 2007; IDE

Recommendation 8: evidence statements, 2.1, 2.2, 2.3, 2.4, 2.22, 2.23; University of Birmingham 2006; IDE

Recommendation 9: evidence statements 2.1, 2.2, 2.3, 2.4; University of Birmingham 2006; IDE

Recommendation 10: evidence statements 2.1, 2.2, 2.3, 2.4; University of Birmingham 2006; NICE 2002; NICE 2007; IDE

Recommendation 11: IDE

Recommendation 12: IDE

Recommendation 13: IDE

Recommendation 14: evidence statements 2.4, 4.8, 4.24, 4.26, 4.27; Gutierrez 2007; IDE

Recommendation 15: evidence statements 2.31, 2.32, 2.34; IDE

Recommendation 16: evidence statements 3.1, 3.2, 3.3, 3.10, 3.20

Research recommendation 1: IDE

Research recommendation 2: evidence statements 2.2, 2.8, 2.17, 2.18, 2.19, 2.20, 2.21, 2.25, 2.33; IDE

Research recommendation 3: Wang et al. (2006)

Research recommendation 4: evidence statements 4.3, 4.10, 4.11, 4.21, 4.28; Gutierrez (2007)

Research recommendation 5: evidence statements 5.4, 5.13

Research recommendation 6: evidence statement 1.7

Research recommendation 7: evidence statements 1.2, 3.1

Evidence statements

Evidence statement 1.2

There are no controlled data available on the efficacy of Allen Carr's Easyway Programme. Two of four cohort follow-up studies report high smoking cessation rates but this evidence is weak and further research is needed to determine their effectiveness.

Evidence statement 1.7

Level 1 (+) evidence from one randomised controlled trial shows that cytisine improves 6-month abstinence rates.

Evidence statement 2.1

Six 3 (-) reports and one 2 (++) study provide evidence that intensive interventions for smoking cessation through the NHS Stop Smoking Services appear to be effective in the short term; on average, over half of the clients setting quit dates through the services self-report as quit at 4 weeks. However, these statistics should be treated with some caution as it appears that PCTs are using different baselines to measure success. As all seven studies took place within the English smoking cessation services, they are directly applicable to the target population.

Evidence statement 2.2

One 3 (-) report, one 2 (-) study, two 2 (+) studies and one 2 (++) study provide evidence that intensive interventions for smoking cessation through the NHS Stop Smoking Services appear to be reasonably effective in the long term. On average, between 13% and 23% of the clients who self-report as successful quitters at 4 weeks through the services self-report as abstinent at 52 weeks – a long-term success rate that is broadly consistent with international findings. As all studies took place within the English smoking cessation services, they are directly applicable to the target population.

Evidence statement 2.3

Evidence from two 3 (-) bulletins indicates that intermediate interventions delivered by community advisers achieve self-reported cessation rates of between 34% and 45% at 4 weeks. These results do not necessarily reflect the outcomes currently being achieved by these interventions, given the substantial development of the services since 2001. As these studies took place within English smoking cessation services, they are directly relevant to the target population.

Evidence statement 2.4

Evidence from a 1 (++) systematic review indicates that pharmacy-delivered interventions may have a positive effect on smoking cessation rates. This finding is confirmed in a recent 2 (++) study which reports that pharmacy delivered interventions in Glasgow produce 4-week CO-validated quit rates of approximately 20%. The study also indicates that pharmacy-delivered interventions have the potential to reach and treat large numbers of smokers – especially those from disadvantaged areas. As these studies took place within UK smoking cessation services, they are directly relevant to the target population.

Evidence statement 2.5

Two studies provide a body of 2 (++) evidence that group interventions may produce higher CO-validated quit rates at 4 weeks than one-to-one interventions. However, one-to-one interventions are also effective and many clients express a clear preference for one-to-one treatment. Moreover, in some contexts (particularly rural areas), group treatment is simply unfeasible. Therefore, one-to-one interventions are a crucial component of the NHS Stop Smoking Services as smokers need to be given a choice of treatment options. As both studies took place within the English smoking cessation services, they are directly applicable to the target population.

Evidence statement 2.8

Information on how the site/setting impacts on the effectiveness of smoking cessation interventions is limited. Evidence from a 2 (++) study indicates that the location of treatment may indirectly influence the effectiveness of smoking cessation interventions.

As this study took place within the UK smoking cessation services, it is directly applicable to the target population.

Evidence statement 2.9

Two 1 (++) systematic reviews provide strong evidence that smoking cessation interventions among inpatients can be effective in creating modest to substantial increases in CO-validated smoking cessation rates up to 12 months in this population. Findings from four more recent 1 (++) studies and one 1 (+) study are mixed; however, on the whole they indicate that interventions with at least 2 months post-discharge telephone follow-up are more likely to be successful than programmes of short duration. The majority of the studies took place outside of the UK in a wide range of countries including Australia, Canada, the USA and Norway. However, it is likely that their findings are applicable to the UK, given the broad similarities in these populations.

Evidence statement 2.17

The evidence on how readily black and minority ethnic groups are accessing the stop smoking services is inconclusive. Five 3 (-) studies appear to demonstrate that black and minority groups on the whole are accessing stop smoking services in proportion with their representation within the total population; however, a high level of missing data undermines the conclusiveness of the available statistics. Moreover, indicative evidence raises some doubts about how readily black and minority ethnic groups are accessing NHS Stop Smoking Services. As these studies were conducted on the smoking cessation services in the UK, their results are directly applicable to the population under study.

Evidence statement 2.18

There is no direct evidence on how minority ethnic status intersects with gender in relation to smoking and quit status in the context of interventions delivered through the stop smoking services. Background evidence indicates that females from black and minority ethnic groups appear to be less likely (significantly less likely in South Asian communities) to smoke than males. However, given the stigma that attaches to female smoking in many minority ethnic groups (especially South Asians), it is probable that smoking rates among minority ethnic females are underreported. Among Bangladeshi women in particular, although self-reported smoking prevalence is low, use of tobacco itself is very high (over 25%).

Evidence statement 2.19

There is no direct evidence on how minority ethnic status intersects with social class in relation to smoking and quit status in the context of interventions delivered through the stop smoking services. Overall, background evidence indicates that for the most part, smoking in black and minority ethnic groups does not appear to be connected with social class, except in relation to

Bangladeshi males – whose high smoking rates may be partly accounted for by the relative levels of social disadvantage in this ethnic group.

Evidence statement 2.20

The evidence on how successful black and minority ethnic groups are in quitting smoking through the stop smoking services is inconclusive. One 2 (+) study found that CO-validated quitting success at 4 weeks did not vary by ethnicity. However, because of the small numbers of people from black and minority ethnic groups in the study, interpretation of their results is difficult. As this study was conducted on the smoking cessation services in the UK, its results are directly applicable to the population under study.

Evidence statement 2.21

There is no direct evidence on how culturally appropriate the NHS Stop Smoking Services are, although it seems to be the case that there are relatively few programmes overall that cater to ethnic minorities – in most cases people from these groups are incorporated into the broader NHS. However, it appears that smoking cessation interventions tailored for minority ethnic groups can achieve high levels of success.

Evidence statement 2.22

Five 3 (-) bulletins, one 2 (+) and one 2 (++) study provide a body of evidence that between 23% and 51% of pregnant women self-report as successful quitters at 4 weeks through the NHS Stop Smoking Services. However, given the unique challenges that pregnant smokers face, the utility of 4-week quit rates as a measure of service effectiveness is questionable. As all seven studies took place within smoking cessation services in the UK, they are directly applicable to the target population.

Evidence statement 2.23

Background evidence indicates that there are numerous barriers to recruiting pregnant women into smoking cessation programmes. One of the most fundamental barriers to recruitment is the problem of misreport among pregnant smokers – which indicates the importance of biochemically validating smoking status. Healthcare professionals are also often unwilling to address smoking with their pregnant clients in the fear that it will jeopardise their relationship with the clients.

Evidence statement 2.25

Three 2 (++) studies and one 2 (+) study provide a body of evidence that the NHS Stop Smoking Services have been effective overall in reaching routine and manual groups. However, one of these studies reports that there is variation within regional services, and some strategic health authorities have been less successful in reaching deprived smokers than others. As all four studies took place within the English smoking cessation services, they are directly applicable to the target population.

Evidence statement 2.26

Six 3 (-) bulletins, one 2 (-) study, two 2 (+) studies and three 2 (++) studies provide a consistent body of evidence that people from routine and manual groups are less successful in quitting successfully (based on both self-report and CO validation) at 4 weeks than other smokers. As all twelve studies took place within the English smoking cessation services, they are directly applicable to the target population.

Evidence statement 2.27

One 2 (+) study found that NHS stop smoking services are making a modest contribution to reducing smoking-related inequalities in health in England. As the study took place within the English smoking cessation services, it is directly applicable to the target population.

Evidence statement 2.28

Background evidence shows that smokers from routine and manual groups face numerous social and economic barriers that may inhibit their ability to quit. In many areas of deprivation, smoking is perceived as the norm and there is no culture of quitting. Moreover, those deprived smokers who are willing to quit may have little knowledge about the effectiveness of smoking cessation interventions and may also find it difficult to attend sessions.

Evidence statement 2.29

Background evidence shows that smokers from routine and manual groups are often more highly addicted, have been smoking since a young age, and smoke more cigarettes per week compared to professional workers, which is a key factor in explaining the lower cessation rates achieved by the NHS Stop Smoking Services in deprived areas.

Evidence statement 2.30

According to a 2 (-) study, more flexible modes of delivery help to make smoking cessation interventions more accessible for people from deprived groups and produce 12 month self-reported quit rates of 16% – which is comparable with the long-term effectiveness of the NHS Stop Smoking Services more broadly.

Evidence statement 2.31

Although up to 80% of prisoners in UK correctional facilities smoke, according to a recent 2 (++) report, overall a relatively small proportion of smokers (less than 10%) access smoking cessation support while in prison. However, prisoners can achieve CO-validated 4-week quit rates of over 40%, although there appear to be substantial differences in the success rates of different prisons. As this study looks at the effectiveness of the smoking cessation services in UK prisons, it is directly applicable to the target population.

Evidence statement 2.32

Smoking is a central feature of prison life and provides relief from boredom, the stressful environment as well as facilitating group membership. Therefore, prisoners face unique problems when making a quit attempt because of the endemic levels of smoking, the lack of opportunities for distraction from cravings and negative attitudes to cessation among staff and fellow prisoners. Despite these barriers, a number of prisoners recognise the negative aspects of smoking, including its health and financial costs and evidence indicates that up to 50% of smokers in prison want help in quitting smoking.

Evidence statement 2.33

Although it appears that rates of smoking are particularly high among people in mental health institutions in the UK, there is no available information on how effective smoking cessation support is in this setting.

Evidence statement 2.34

People with mental illnesses in institutional settings face a variety of barriers in accessing services and quitting smoking. Smoking cessation in this setting can be complicated by factors such as physiological vulnerability to nicotine addiction, the fact that nicotine may reduce the side effects of some medications, the positive effects of nicotine on the brain, and the use of cigarettes as a behavioural reward and lack of access to cessation support.

Evidence statement 3.1

Overall, it appears that workplace interventions in the context of 'environmental support' (workplace smoking restrictions and educational campaigns) are effective in facilitating smoking cessation. One 2 (+) American study found that a smoking cessation programme delivered in the context of a workplace smoking ban and educational campaign produced long-term success rates similar to smoking cessation programmes more broadly. Another 1 (-) American study found that environmental support may increase the success of workplace interventions, at least in the short term. Two 2 (-) studies have identified Allen Carr workplace seminars to be an effective means of facilitating smoking cessation in the workplace. Online smoking cessation programmes have also been highlighted in a 4 (+) report as a potentially effective way of facilitating smoking cessation in the workplace. However, evidence on the effectiveness of these interventions types is presently weak and further research is needed to determine their effectiveness.

Evidence statement 3.2

A 1 (++) systematic review and a 1 (+) meta-analysis of the available international literature indicates that the most effective smoking cessation interventions in workplace settings are those interventions that have proven effectiveness more broadly. There is strong evidence that group therapy, individual counselling and pharmacological treatments all have an effect in facilitating smoking cessation. However, both reviews failed to identify effects due to particular intervention type. There is also evidence that minimal interventions including brief advice from a health professional are effective. Self-help manuals appear to be less effective, although there is limited evidence that interventions tailored to the individual have some effect.

Evidence statement 3.3

Two 1 (++) systematic reviews of international studies indicate that financial incentives are most commonly used by employers to encourage employee compliance with smokefree workplace policies and the uptake of smoking cessation support. While the addition of incentives does not appear to increase the quit rates of smoking cessation interventions in the workplace, there is some evidence that such incentives do improve recruitment rates into worksite cessation programmes, which may lead to higher absolute numbers of successful quitters in the long term. There is also some evidence that incentives may delay relapse to smoking, even if they don't prevent it altogether.

Evidence statement 3.10

A 1 (++) systematic review indicates that workplace interventions may have the potential for

higher participation rates than other contexts, and also provide the opportunity to access smokers who would otherwise not be accessible. These represent significant potential outcomes of workplace interventions.

Evidence statement 3.20

Workplace smoking bans and smokefree legislation should be carefully planned, include the input of smokers, and be accompanied by provision of help and support for smokers. Public support for bans and legislation can be strengthened by using media campaigns to inform the public about the adverse health effects of passive smoking and by treating the issue as a worker protection law rather than a consumer protection law. An effort should be made to understand diversity, and materials and messages should be culturally appropriate. An adequate revenue base is crucial to support the implementation of legislation.

Evidence statement 4.3

There is level 2 (+) evidence, probably relevant to the UK population, indicating that the addition (to a web-based self-help style smoking cessation intervention) of an automated email educational messaging system was associated with an increase in the 30-day intent to treat quit rates (7.5% vs. 13.6%, p = 0.035).

Evidence statement 4.8

There is evidence from a level 1&2 (+) review, probably relevant to the UK population, that multi-channel mass media campaigns (combined with other interventions) are effective in increasing tobacco use cessation. Cessation rates in the intervention groups ranged from 3.9% (confirmed) to 50% (self-reported), with a median of 7% in follow-up periods of 6 months to 5 years. There is evidence from another review (level 2 [-]), possibly relevant to the UK population, that shows that media campaigns and concurrently implemented tobacco control programmes (or policies) are associated with a reduction in the net smoking prevalence of between 6–12%. Other level 2 (-) and 3 evidence reported either inconclusive results, or in the case of a Dutch campaign (3), estimated the follow-up point prevalence abstinence rate attributable to the campaign as 4.5% after control for test effects and secular trends. There is level 1 (+) evidence, probably relevant to UK workplaces, which found that adding peer group support and lottery incentives to mass media-based self-help interventions led to abstinence levels of 19.5% in the control group compared with 30% in the intervention group at 2 years.

Evidence statement 4.10

There is level 1 (++) evidence, probably relevant to the UK population, which found that a web-based smoking cessation programme using more extensive information on coping strategies and health risks is more effective at the contemplation stage than shorter programmes with less health-related information at 3 months. There were statistically significant differences in quit rates in smokers using the more extensive programme (OR=1.54, 95% CI: 1.18-2.02, p=.002). There is level 1 (+) evidence, probably relevant to the UK population, that a behavioural intervention for smoking cessation delivered via an Internet website can achieve a quit rate of 12.3% at 3 months (compared with 5% of controls). There is level 2 (-) and 3 evidence, probably relevant to the UK population, which reported that other web-based smoking cessation sites can achieve quit rates of up to 18%.

Evidence statement 4.11

There is level 1 (++) evidence, probably relevant to the UK population, that a text message-based intervention can increase smoking cessation rates (28% vs 13%, RR 2.20, 95% CI: 1.79 to 2.70, p < 0.0001) at 6 weeks.

Evidence statement 4.21

There is level 2 (-) evidence, probably relevant to UK college and university students, which shows a positive effect of an Internet-based smoking cessation intervention on smoking cessation. There is level 3 evidence, possibly relevant to young people in the UK, that reports reductions in smoking and quit attempts in rural teens after using an Internet-based virtual reality 'world' for smoking cessation. There is level 3 evidence, probably relevant to young people in the UK that an integrated web and text-messaging programme may result in quit rates of 17%.

Evidence statement 4.24

There is level 2 (-) and 3 evidence, probably relevant to the UK population, that posters or printed media can be an effective way of increasing awareness of campaigns. No studies were identified which evaluated the effectiveness of interventions of different duration.

Evidence statement 4.26

There is level 1 (+) evidence, probably relevant to UK workplaces, that television message recall is associated with increased smoking cessation rates. There is level 3 evidence, probably relevant to the UK, which indicates that the more TV episodes watched or recalled, the higher the incidence of self-reported quitting or abstinence from smoking. There is level 3 evidence, probably relevant to

the UK, which indicates that the effectiveness of a web-based cessation programme is increased according to the amount of exposure to educational materials. There is level 3 evidence, probably relevant to the UK adult population, that the relative risk for quitting was estimated to be 10% higher for every 5000 units of exposure to state anti-tobacco television advertising over a 2 year period. However, these results did not achieve statistical significance. There is level 2 (+) evidence, directly relevant to the UK population, that varying the intensity of TV adverts does not have an effect on smoking cessation.

Evidence statement 4.27

There is level 2 (-) evidence, which is probably relevant to the UK population, which suggests that advertisements depicting suffering as a result of tobacco use may be instrumental in promoting cessation or reinforcing the decision to quit. There is level 3 evidence, probably relevant to UK teens, that indicates that dissonance-arousing messages specifically targeting girls can have positive short-term effects on quit rates. There is also level 3 evidence that shows that graphic mass media messages about the negative consequences of smoking among adults has a positive effect on quit attempts among young people (18% of smokers in the sample attempted to quit [95% CI: 14% to 22%]). Finally, there is level 2 (-) evidence providing insufficient evidence that longer positive messages are less effective than short, negative messages.

Evidence statement 4.28

Four studies (both qualitative and quantitative) evaluated outcomes such as the acceptability and usage of web-based interventions. One qualitative study reported that participants sought online smoking cessation resources for reasons of convenience, timeliness, anonymity and because their current information needs were unmet. Another level 1 (+) study, probably relevant to the UK population, found that the optional sections of an intervention most used/viewed were setting a quit date, and the descriptions of pharmacological aids. A level 2 (-) study reported that the 'Ask an expert' section was rated most highly. The fourth study (level 2 [-]) reported that the intervention helped to raise consciousness about quitting, encouraged behavioural goals, provided stages of change feedback, and offered interactivity in presenting information and strategies about quitting. No studies were identified which evaluated the views of those delivering the intervention. No studies were identified which assessed inequalities of access.

Evidence statement 5.1

Two 1 (+) studies found that reactive quitlines improved abstinence rates over the distribution of self-help materials alone. Three 2 (+) studies provide further support for the effectiveness of quitlines, and found self-report 12-month abstinence rates of between 8.2% and 15.6%. As two of

these studies took place in the UK, and results are broadly consistent across studies, these findings are likely to be directly applicable to a UK setting.

Evidence statement 5.3

There is strong evidence from a 1 (++) Cochrane Review and one 1 (+) meta-analysis that proactive telephone counselling has a modest effect on smoking cessation. As these reviews are international in scope their findings are likely to be applicable to a UK setting.

Evidence statement 5.4

Although there is limited available evidence regarding the comparative effectiveness of proactive and reactive quitlines, one 2 (+) study found that self-reported 12-month abstinence rates were somewhat higher for proactive compared with reactive support – although the difference was not statistically significant. Although the study was conducted in Northern Europe, its results are likely to be broadly applicable to a UK setting.

Evidence statement 5.13

Further research needs to be conducted into the effectiveness of telephone counselling for minority ethnic groups as the existing limited evidence is inconclusive. A 1 (-) study found that the addition of telephone counselling did not improve the effectiveness of a smoking cessation intervention aimed at African American smokers above and beyond a provider-prompted intervention and self-help materials. A second 1 (+) study found that enhanced telephone counselling for Hispanic smokers did significantly increase abstinence rates, when demographic and smoking-related variables were controlled. As these studies were conducted in the USA, which has a different ethnic composition to the UK, their results are not directly applicable to a UK setting.

Evidence statement 5.17

Although further research is needed regarding the cost-effectiveness of quitlines, a cost-effectiveness analysis of the Swedish national quitline (+ rating) found it to be particularly cost effective: the researchers calculate the cost per year of life saved as equivalent to USD 311–401. A 2 (+) study of the cost of quitlines also deems them to represent a very modest expense for governments that provide these services, although a 3 (+) case report warns that services need to be marketed to large populations to be effective.

Although these studies were conducted outside of the UK, the costs of running a national quitline

are likely to be similar from one country to the next. Therefore, their findings are likely to be broadly applicable to a UK setting.

Additional evidence

Gutierrez (2007) Mass media interventions to stimulate and promote smoking cessation. (Expert paper)

NICE (2002) Guidance on the use of nicotine replacement therapy (NRT) and bupropion for smoking cessation. NICE technology appraisal 39. [Replaced by NICE public health intervention guidance 10]

NICE (2007) Varenicline for smoking cessation. NICE technology appraisal 123.

University of Birmingham (2006) Clinical and cost-effectiveness of nicotine replacement therapy for new licensed indications and combination therapy: a summary of best evidence.

Wang et al. (2006) Cut down to quit with nicotine replacement therapies (NRT) in smoking cessation: systematic review of effectiveness and economic analysis.

Cost-effectiveness evidence

Overall, brief advice, individual behavioural counselling, group behaviour therapy, pharmacotherapies, self-help materials, telephone counselling and quitlines were cost effective compared with no intervention.

Group counselling was more cost effective than individual counselling. Brief advice and more intensive counselling, when combined with either NRT or bupropion, was more cost effective than either advice or counselling provided on its own. NRT and bupropion, combined with advice or counselling, was more cost effective than either NRT or bupropion provided on its own. Varenicline was cost effective compared with either bupropion, NRT or placebo.

The nicotine-assisted reduction to stop (NARS) approach, supported by intensive counselling, was cost effective for people who were initially unwilling to quit smoking (or unwilling to quit without cutting down first) compared with counselling on its own. This estimate assumes that those undertaking CDTQ would not have made an abrupt quit attempt: it is generally more cost effective for people to attempt quitting abruptly rather than make an initial attempt by first cutting down using CDTQ.

No-one can ever be sure in advance whether a mass media campaign will work, but if such a campaign succeeds by encouraging even a comparatively small number of people to stop smoking, it will be cost effective. The more successful campaigns will be extremely cost effective.

Methods of assisting pregnant women to quit smoking are cost effective if the women do not return to smoking after the birth of the baby. Insufficient evidence was available to determine whether home visits by specialist stop smoking professionals were cost effective compared with attending stop smoking clinics, using NRT or attempting to quit without assistance.

Fieldwork findings

Fieldwork aimed to test the relevance, usefulness and the feasibility of implementing the recommendations and the findings were considered by the PDG in developing the final recommendations. For details, go to the fieldwork section in appendix B and online.

Fieldwork participants who work with people who smoke and other tobacco users were generally very positive about the recommendations and their potential to improve the provision of smoking cessation services and help people to stop smoking. Many stated that the recommendations were easy to read and understand. They also said they gave them a clear understanding about who to target and the types of smoking cessation products and services that are effective. They welcomed the fact that the recommendations were evidence-based.

PCT staff hoped the recommendations would encourage decision-makers to provide them with the resources they need to deliver an effective, responsive, smoking cessation service.

Although participants agreed that all healthcare professionals should be able to offer people brief advice on smoking and, where necessary, refer them to smoking cessation services, some felt this would not be feasible within the available resources. In addition, some healthcare professionals, particularly hospital staff and dentists, questioned the value of involving them in brief interventions and referrals. However, smoking cessation practitioners thought it was helpful that the guidance encouraged hospital staff to provide smoking cessation advice and make referrals.

PCT staff and practitioners who are involved in workplace stop-smoking schemes hope that this guidance will help expand this work.

Most participants agreed that smoking cessation advisers should be trained and should receive further training on a continuing basis, but relatively few knew whether the training they had received complied with national standards.

Appendix D: gaps in the evidence

The PDG identified a number of gaps in the evidence related to the programmes under examination, based on an assessment of the evidence. These gaps are set out below.

1. Data routinely collected by the NHS Stop Smoking Services are not particularly helpful as an aid to improving the service. For example, although reducing prevalence among people in routine and manual groups is a priority, information on occupation is not part of the minimum data set required by the DH.

2. Certain groups, such as pregnant women, routine and manual workers and people living in institutions, face substantial barriers to quitting smoking. Research is needed to provide a fuller picture of the effectiveness and cost effectiveness of smoking cessation services for these groups. In particular, the cost effectiveness of home visits by specialist stop smoking professionals for pregnant women who smoke should be compared with the women attending stop smoking clinics, using NRT or attempting to quit without assistance.

3. Although some commercial smoking cessation treatments may be effective, there is little or no evidence of effectiveness from high quality, comparative trials.

4. New media such as text messaging and podcasts are potentially effective in delivering personalised advice to people who smoke. However, more published evidence of their longer-term impact is needed.

5. More information is needed on the impact of mass media smoking cessation messages on people who smoke who are pregnant, socio-economically disadvantaged or from a minority ethnic group.

6. More information is needed about both the cost-effectiveness of workplace interventions and their long-term effectiveness, particularly in the context of widespread smoking restrictions.

7. More information is needed about the long-term benefits to employers of providing workplace smoking cessation support.

8. More information is needed on the cost effectiveness of using specially trained midwives to deliver smoking cessation advice to pregnant women who smoke compared with:

- home visits by specialist stop smoking professionals

- attending stop smoking clinics
- attempting to quit without assistance.

The Group made six recommendations for research. These are listed in section 6.

Appendix E: supporting documents

Supporting documents are available from the NICE website. These include the following.

- Reviews of effectiveness
  - Review 1: 'Rapid review of non NHS treatments of smoking cessation'
  - Review 2: 'The effectiveness of National Health Service intensive treatments for smoking cessation in England'
  - Review 3: 'Workplace policies for smoking cessation'
  - Review 4: 'A review of the effectiveness of mass media interventions which both encourage quit attempts and reinforce current and recent attempts to quit smoking'
  - Review 5: 'The impact of quitlines on smoking cessation'
  - Expert paper: 'Mass media interventions to stimulate and promote smoking cessation'.
- Economic evaluations
  - 'A rapid review of the cost effectiveness of non-National Health Service treatments for smoking cessation in England'
  - 'A rapid review of the cost effectiveness of National Health Service treatments for smoking cessation in England'
  - 'A rapid review of the cost effectiveness of workplace policies for smoking cessation in England'
  - 'A rapid review of: the cost effectiveness of mass media interventions for smoking cessation in England'.
- Economic analyses
  - 'Cost-effectiveness of interventions for smoking cessation'
  - 'Cost-effectiveness of interventions for smoking cessation: mass media'
  - 'Cost-impact analysis of interventions of interventions for smoking cessation aimed at pregnant women'.

- Reviews for the update of technology appraisal guidance 39
  - 'Cut down to quit with nicotine replacement therapies (NRT) in smoking cessation: systematic review of effectiveness and economic analysis'
  - 'Clinical and cost-effectiveness of nicotine replacement therapy for new licensed indications and combination therapy: a summary of best evidence'.

For information on how NICE public health guidance is developed, see:

- 'Methods for development of NICE public health guidance (second edition, 2009)'
- 'The NICE public health guidance development process: An overview for stakeholders including public health practitioners, policy makers and the public (second edition, 2009)'.

Changes after publication

February 2012: minor maintenance.

February 2013: minor maintenance.

November 2013: Update to reflect recommendations from more recent public health guidance.

About this guidance

NICE public health guidance makes recommendations on the promotion of good health and the prevention of ill health.

This guidance was developed using the NICE public health programme guidance process.

This guidance supersedes 'Guidance on the use of nicotine replacement therapy (NRT) and bupropion for smoking cessation' (NICE technology appraisal guidance 39). It cross-references and is consistent with 'Brief interventions and referral for smoking cessation in primary care and other settings' (NICE public health guidance 1), 'Workplace health promotion: how to help employees to stop smoking' (NICE public health guidance 5) and 'Varenicline for smoking cessation' (NICE technology appraisal guidance 123).

The recommendations from this guidance have been incorporated into a NICE Pathway. Tools to help you put the guidance into practice and information about the evidence it is based on are also available.

Your responsibility

This guidance represents the views of the Institute and was arrived at after careful consideration of the evidence available. Those working in the NHS, local authorities, the wider public, voluntary and community sectors and the private sector should take it into account when carrying out their professional, managerial or voluntary duties.

Implementation of this guidance is the responsibility of local commissioners and/or providers. Commissioners and providers are reminded that it is their responsibility to implement the guidance, in their local context, in light of their duties to avoid unlawful discrimination and to have regard to promoting equality of opportunity. Nothing in this guidance should be interpreted in a way which would be inconsistent with compliance with those duties.

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