NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

PUBLIC HEALTH DRAFT GUIDANCE

Smoking cessation in secondary care: acute, maternity and mental health services

Introduction: scope and purpose of this draft guidance

What is this guidance about?

This guidance aims to support smoking cessation, **temporary abstinence** from smoking and **smokefree** policies in all secondary healthcare settings. The recommendations cover:

- providing information before a hospital stay
- identifying people who smoke and referring them on for support
- providing intensive stop smoking support for people using acute and mental health services
- providing intensive stop smoking support for people using maternity services
- helping people admitted to secondary care to abstain temporarily if they do not want to stop smoking completely
- providing information and advice for carers, family other household members and hospital visitors
- providing and advising on stop smoking pharmacotherapies
- adjusting drug treatments for people who have stopped smoking
- hospital pharmacies
- providing leadership on stop smoking support
- local tobacco control strategy
- referral systems for people who smoke
- smokefree policies
- communicating the smokefree strategy

- identifying staff who smoke and providing stop smoking interventions
- stop smoking training for healthcare staff
- commissioning.

In this guidance, ‘secondary care’ refers to all NHS-funded facilities – including buildings, grounds and vehicles. This includes emergency care, planned specialist medical care or surgery and maternity care provided in hospitals, maternity units, outpatient clinics and in the community. It also includes inpatient, residential and long-term care for severe mental illness in hospitals, psychiatric and specialist units and secure hospitals.

The term ‘smokefree’ is used to mean air that is free of tobacco smoke.

See About this guidance for details of how the guidance was developed and its current status.

Who is this guidance for?

The guidance is for: leaders of the local health and care system, trust boards, commissioners, clinical leads in secondary care services, managers of clinical services, estate managers and other managers, healthcare professionals and others with any aspect of secondary care or public health as part of their remit. The guidance may also be of interest to people using secondary care services, their families and carers and other members of the public.

Contents

1 Draft recommendations

The Programme Development Group (PDG) considers that the recommended approaches are cost effective.

The evidence underpinning the recommendations is listed in The evidence.

See also the NICE website for the evidence reviews, the expert papers and the economic modelling report.

For the research recommendations and gaps in research, see Recommendations for research and Gaps in the evidence respectively.

Introduction

Secondary care providers have a duty of care to protect the health of (and promote healthy behaviour among) people who use or work in their services. The benefits of stopping smoking are well known. In addition, there is extensive evidence on effective and cost-effective stop smoking interventions. This guidance recommends that this duty of care should extend to providing advice on how to improve health, including stop smoking interventions, as a matter of routine.

People are required by law to abstain from smoking inside enclosed or substantially enclosed buildings. Most NHS secondary care settings also apply smokefree policies to their grounds. Although primarily intended to protect the health of patients, visitors and staff from exposure to smoke, smokefree policies help to promote **not** smoking as the norm for people using secondary care services.

Guiding principles

The recommendations are based on the following principles:

- Strong leadership and management ensures secondary care premises (including grounds) remain consistently smokefree.

- Delivery of behavioural interventions and pharmacotherapy to support abstinence from smoking, at least while using secondary care services is an integral component of secondary care provision.

- Secondary care smoking interventions are integrated with those provided in the community, to ensure continuity of care when patients move between primary and secondary care.

- Stop smoking and temporary abstinence behavioural support and pharmacotherapy is available for all staff who smoke.

- No concessions are made to smoking in secondary care, that is, there are no designated smoking areas, no exceptions for particular groups, and no staff-supervised and facilitated smoking breaks for people in their care.

Maternity care

Commissioners, managers and professionals in secondary care services responsible for women in pregnancy and after childbirth should read this guidance alongside NICE guidance on quitting smoking in pregnancy and following childbirth (public health guidance 26).

Whose health will benefit?

All the recommendations, except recommendations 6 and 15, aim to benefit people of all ages who smoke and who use acute, maternity and mental health services.

Recommendation 1 Providing information before a hospital stay

Who should take action?

- GPs, practice nurses and managers in primary care.

- Healthcare professionals in acute, maternity and mental health services.

- Managers of secondary care admissions and pre-admission assessment services.

What action should they take?

Provide everyone with verbal and written information about the hospital's smokefree policy before their stay. This should include:

- advice that all buildings and grounds are smokefree (see recommendation 13)
- advice that stopping, or temporarily abstaining, from smoking before a hospital stay is the best option[1]
- details of the support available to help them stop smoking before, during and after a hospital stay (see recommendations 3, 4 and 5)
- details of **pharmacotherapies** that can help with stopping smoking and temporary abstinence, and how to use them
- information about the benefits of stopping smoking for them and the risks of secondhand smoke to others
- information for relatives, carers, friends and other visitors explaining why the hospital is smokefree and providing information about local **stop smoking services**.

Recommendation 2 Identifying people who smoke and offering and arranging support

Who should take action?

- Healthcare professionals in all acute, maternity and mental health services, including community services, outpatient and pre-admission clinics.

- Healthcare professionals responsible for the care of people after compulsory admission to hospital under the Mental Health Act.

[1] There is no detrimental effect from stopping smoking within 8 weeks of surgery and a significant positive effect of short-term abstinence for surgery patients.

What action should they take?

- During the first face-to-face contact ask everyone if they smoke or have recently stopped smoking. Record smoking status and the date they stopped, if applicable, in the person's records (preferably computer-based) and any handheld notes. If a person is too ill to talk about smoking, note this in their records and ask about their smoking status at the first available opportunity.

- Provide verbal and written information about:
  - the benefits of stopping smoking for them (and the unborn child, if appropriate)
  - the risks of secondhand smoke
  - hospital smokefree policies and restrictions on smoking
  - the importance of observing smoke-free policies to help others to abstain from smoking.

- Advise everyone who smokes that they must abstain from smoking while admitted to or using secondary care services. Encourage all who smoke (and those who have stopped recently, for example during an acute illness which has led to the hospital admission) to stop smoking completely.

- For people admitted to a secondary care setting, provide immediate access to pharmacotherapies to help them to stop or temporarily abstain from smoking (see recommendation 7). Offer and, if they agree, arrange a referral to a stop smoking adviser who will deliver inpatient support (see recommendations 3, 4 and 5).

- For people attending an outpatient or pre-admission clinic, offer, and if they agree, provide immediate access to pharmacotherapy and **behavioural support** from a stop smoking adviser during their current visit (see recommendations 3 and 4). The adviser should also deliver follow-up support, or arrange for local stop smoking services to do so, if it is more convenient for the person.

- For people using secondary care services in a community setting, staff who are trained to provide intensive stop smoking interventions should offer and provide support (in line with recommendations 3 and 4). Other staff should offer, and if accepted, arrange a referral to a local stop smoking service.

- Advise people with anxiety or depression that abstaining from tobacco can have a positive long-term effect on their symptoms, as well as a positive impact on their physical health. Explain that:

    - the symptoms may be worse in the first few days after quitting but will then improve
    - if symptoms do not improve they should take further advice from their doctor.

- Midwives should follow recommendation 1 in NICE guidance on quitting and smoking in pregnancy and following childbirth (public health guidance 26). This recommends that, in addition to the actions covered here, midwives should[2]:
    - assess the woman's exposure to tobacco smoke through discussion and use of a **carbon monoxide (CO) test**
    - refer all women who smoke, or have stopped in the last 2 weeks – or with a CO reading of 7 ppm or above – to stop smoking services.

- If a person declines help to stop smoking, leave the offer open. At all subsequent contacts, offer the support again.

- Ensure all actions, discussions and decisions related to stop smoking advice, referrals or interventions are recorded in the person's records.

[2] This is an edited extract – please see the full recommendation for details.

Recommendation 3 Providing intensive stop smoking support for people using acute and mental health services

Who should take action?

Stop smoking advisers and other healthcare professionals receiving referrals from acute and mental health services for intensive stop smoking support.

What action should they take?

- Deliver support to the person who has been referred at the earliest possible opportunity. For outpatients (including pre-operative assessments) this should be immediate, and for inpatients usually within 1 working day.

- At the first meeting, discuss current and past smoking behaviour and develop a personal stop smoking plan as part of a review of health and wellbeing.

- For people admitted to a secondary care setting, offer **intensive behavioural support** (delivered in the setting) as often as needed during admission. If it is not possible to provide this support after discharge, arrange a referral for it to continue in the community. The support should comprise at least weekly sessions, preferably face-to-face, for a minimum of 4 weeks after discharge.

- For people receiving secondary care services in the community or at outpatient clinics, provide weekly sessions, preferably face-to-face, for a minimum of 4 weeks after the date they stopped smoking. Arrange a transfer to a local stop smoking service, if it is more convenient for the person.

- Include measurements of exhaled carbon monoxide during each contact, to provide feedback on progress and increase their motivation to stop completely.

- Arrange, supply or offer prescriptions of stop smoking pharmacotherapies (see recommendation 7).

Recommendation 4 Providing intensive stop smoking support for people using maternity services

Who should take action?

Stop smoking advisers and other healthcare professionals receiving referrals of people for intensive stop smoking support.

What action should they take?

- Follow recommendation 3 on contacting referrals in NICE guidance on quitting and smoking in pregnancy and following childbirth (public health guidance 26).

- Follow recommendation 4 on initial and ongoing support in NICE guidance on quitting and smoking in pregnancy and following childbirth (public health guidance 26).

Recommendation 5 Helping people admitted to secondary care to abstain temporarily if they do not want to stop smoking completely

Who should take action?

Hospital-based stop smoking advisers and other healthcare professionals receiving referrals of people for temporary abstinence support.

What action should they take?

Take the following actions, in line with draft NICE guidance on 'Tobacco: harm reduction'[3]: to help people who do not wish to stop smoking to temporararily

[3] This is an edited extract from a draft recommendation that appears in the consultation version of 'Tobacco: harm reduction'. A final version of the recommendation will be available from May 2013.

abstain during a hospital stay. (This includes those who have been compulsorily admitted.)

- Provide information about the different types of **nicotine replacement therapy (NRT)** and how to use them. Where possible, supply or prescribe NRT immediately (see recommendation 7).

- Provide behavioural support to help people abstain from smoking while in secondary care.

Recommendation 6 Providing information and advice for carers, family other household members and hospital visitors

Whose health will benefit?

- People who smoke and live in the same household as someone who is using acute, maternity or mental health services. This includes partners, parents, other family members and carers.

- People who visit acute, maternity and mental health settings.

Who should take action?

- Healthcare professionals in acute, maternity and mental health services.

- Stop smoking advisers.

What action should they take?

- During contact with partners, parents, other household members and carers of people using acute, maternity and mental health services:
    - provide clear information and advice about the risks of smoking and secondhand smoke
    - advise them not to smoke near the patient, pregnant woman, mother or baby; this includes not smoking in the house or car
    - offer people who want to stop smoking a referral to a hospital or community stop smoking service, as appropriate.

- During contact with partners of pregnant and breastfeeding women, follow recommendation 7 on in NICE guidance on quitting and smoking in pregnancy and following childbirth (public health guidance 26).

- Explain to all visitors that smoking is not allowed on the premises. Direct those who wish to use NRT for temporary abstinence to a point of sale in the hospital (see recommendation 9).

- Provide information and take the opportunity to provide advice to visitors about the benefits of stopping smoking and how to contact local stop smoking services (for people who are working in the setting, see recommendation 15).

Recommendation 7 Providing and advising on stop smoking pharmacotherapies

Who should take action?

- Healthcare professionals who advise on, supply, or prescribe, pharmacotherapies.

- Managers and providers of stop smoking services.

- GPs and practice managers in primary care.

What action should they take?

- Reassure people who smoke that NRT and other stop smoking pharmacotherapies are safe and effective, and help people to stop smoking and reduce cravings to smoke during periods of abstinence.

- Emphasise that nicotine is not the major cause of damage to people's health from smoking tobacco, and that any risks from using NRT or other stop smoking pharmacotherapies are much lower than those of smoking.

- Recommend and offer:

  - NRT products (usually a combination of transdermal patches with a short-acting product such as an inhalator, gum, lozenges or spray) to all people who smoke **or**
  - varenicline or bupropion as sole therapy as appropriate. Do not offer varenicline or bupropion to pregnant or breastfeeding women or people under the age of 18[4].

- In pregnant or breastfeeding women, particularly those who do not wish to accept other help from stop smoking services[5], recommend NRT to those who have previously tried and failed to stop smoking without NRT, or if they or the healthcare professional thinks they need NRT to succeed.

- For people admitted to secondary care services who are only prepared to abstain temporarily, encourage use of combination NRT to help reduce cravings to smoke during their stay.

- If stop smoking pharmacotherapy is accepted, ensure that it is provided as soon as possible

- Discontinue NRT patches 24 hours before microvascular reconstructive surgery and surgery using vasopressin injections.

- When people are discharged from hospital ensure they have sufficient stop smoking pharmacotherapy to last until their next contact with a stop smoking service.

See also NICE guidance on varenicline (technology appraisal guidance 123) and smoking cessation services (public health guidance 10).

[4] At the time of consultation (April 2013), these restrictions were published by the British national formulary.
[5] This is an edited extract from a recommendation that appears in Smoking cessation services (NICE public health guidance 10). It does not constitute a change to the original recommendation.

Recommendation 8 Adjusting drug treatments for people who have stopped smoking

Who should take action?

- Healthcare professionals who advise on, or prescribe, pharmacotherapies.
- Pharmacists.
- Managers and providers of stop smoking services.
- Healthcare professionals in acute, maternity and mental health services.
- GPs and practice managers in primary care.

What action should they take?

- Ensure drugs with a metabolism that is affected by smoking (or stopping smoking) are monitored, and the dosage adjusted if appropriate. Drugs that are affected include theophylline, clozapine, olanzapine and warfarin. See relevant guidelines for further details, for example, UK Medicines Information.
- Advise people with diabetes that blood glucose levels may fall slightly after stopping smoking. Adjust doses of diabetes drugs if necessary.

Recommendation 9 Hospital pharmacies

Who should take action?

Hospital pharmacists.

What action should they take?

- Ensure hospital pharmacies stock varenicline, bupropion and a range of NRT products (including transdermal patches and a range of short-acting products) for patients and staff (see recommendations 7 and 15).

- Arrange for NRT products to be available for sale in hospital to visitors and staff.

Recommendation 10 Providing leadership on stop smoking support

Who should take action?

Directors and senior managers in NHS-funded secondary care services.

What action should they take?

Assign a clinical or medical director to lead on stop smoking interventions for people who use or work for secondary care services. The designated lead should ensure:

- the organisation has an annual improvement programme for stop smoking support given to people who use, or work in, secondary care services
- the need for stop smoking support (for patients and staff) is promoted and communicated effectively (see recommendation 14) to initiate a cultural change within and across the organisation
- the development of quality improvement objectives is supported
- the quality of stop smoking services continues to improve, for example, through commissioning for quality and innovation (CQUIN) targets, payment by results systems, national ambitions to deliver ‘Make every contact count’, or other smoking-related indicators
- referral pathways for the prescription and immediate provision of stop smoking pharmacotherapies are part of the organisation’s service plan
- an organisation-wide smokefree policy is in place (see recommendation 13)
- staff in secondary care services deliver stop smoking interventions to help people stop, or temporarily abstain, from smoking, in line with the recommendations in this guidance
- progress and outcomes in each clinical area are monitored, with feedback provided to all staff.

Recommendation 11 Local tobacco control strategy

Who should take action?

- Directors and senior managers in NHS-funded secondary care services.
- Directors of public health.
- Public health commissioners, clinical commissioning groups.
- Health and wellbeing boards.

What action should they take?

- Make it explicit in the tobacco control strategy and action plan that people working in secondary care should:
  - communicate key messages about tobacco-related harm to everyone who uses services
  - develop policies and interventions to help people stop smoking
  - identify people who wish to stop smoking and, if appropriate, refer them on to a stop smoking adviser
  - implement a comprehensive smokefree policy that includes the grounds.
- Develop a local stop smoking care pathway and referral procedure. Ensure there is continuity of care and a supply of pharmacotherapies. Also ensure that drug serum levels are monitored as people move between primary and secondary healthcare providers and stop smoking advisers.

Recommendation 12 Referral systems for people who smoke

Who should take action?

- Managers in NHS-funded trusts, hospitals and clinics providing acute, maternity and mental health services.
- Managers and providers of stop smoking services.

- GPs and practice managers in primary care.

What action should they take?

- Ensure there are structured, systematic methods for recording and maintaining accurate, up-to-date records on the smoking status of people who use secondary care services. The records should:
    - provide a prompt for action (including the referral of people to stop smoking support)
    - ensure smoking status is consistent in all patient records
    - be stored for easy access and audit.

- Make sure there is a robust system in place (preferably electronic) to ensure continuity of care between secondary care and local community stop smoking services for people moving in and out of secondary care

Recommendation 13 Smokefree policies

Who should take action?

Directors and senior managers of NHS-funded secondary care services or their representatives (including occupational health services and estates management).

What action should they take?

- Develop a policy for smokefree grounds in collaboration with staff and people who use secondary care services, or their representatives. The policy should:
    - set out a clear timeframe to establish or reinstate smokefree grounds
    - identify the roles and responsibilities of staff
    - prohibit staff-supervised and facilitated smoking breaks in secondary care
    - identify adequate resources to support the policy.

- Ensure smokefree plans and strategies include the following:

  - stop smoking and temporary abstinence interventions for staff and people who use secondary care services (in line with the recommendations in this guidance)
  - training for staff (see recommendation 16)
  - removal of smoking shelters from outdoor areas
  - staff contracts that do not allow smoking during work time, on the secondary care estate or in uniform
  - measures to protect staff from tobacco smoke when they are visiting the homes of people using secondary care services[6].

- Ensure policies and procedures are in place to:
  - enforce and resolve any breaches of smokefree policies, including a process for staff to report incidents and the availability of security staff to help staff ensure compliance with the smokefree policy
  - manage any disruptive or aggressive behaviour that may result from smoking restrictions (such as are currently applied to prevent alcohol and other drug use).

- Ensure all staff are aware of the smokefree policy and comply with it.

Recommendation 14 Communicating the smokefree strategy

Who should take action?

Directors and senior managers of NHS-funded secondary care services or their representatives (including the communications team, occupational health services and estates management).

What action should they take?

Develop and deliver a communications strategy[7] about local smokefree policy requirements. This should include information for people who use secondary

[6] In accordance with smokefree legislation, employers should take action to reduce the risk to the health and safety of their employees from secondhand smoke to as low a level as is reasonably practicable.

care services and their parents or carers, staff and visitors. The strategy should include:

- clear, consistent messages about the need to keep buildings and grounds smokefree
- positive messages about the health benefits of a smokefree environment
- acknowledgement of the duty of the healthcare profession to provide a safe and healthy environment for people who use or visit secondary care services and staff
- information about stop smoking interventions and how to access services, including support for temporary abstinence, for staff and people who use secondary care services
- emphasise that staff should not smoke at any time during working hours or when recognisable as an employee, contractor or volunteer (for example, when in uniform or handling hospital business).

Recommendation 15 Identifying staff who smoke and providing stop smoking interventions

Whose health will benefit?

People who work in secondary care settings, in particular, those who have direct contact with people using the services. (This includes support staff, volunteers, those working for agencies or as locums and people employed by contractors.)

Who should take action?

- Directors, managers and staff in secondary care services.
- Providers of occupational health and hospital stop smoking services.

[7] Communications could include newsletters, pamphlets, posters and signage. Smokefree signs must comply with regulations under the Health and Safety at Work etc Act 1974.

What action should they take?

- Take action in line with NICE guidance on workplace interventions to promote smoking cessation (public health guidance 5):
  - check and record smoking status of all staff
  - advise all staff who smoke to stop smoking completely
  - offer staff in-house stop smoking interventions
  - provide contact details for community support if preferred.

- Advise staff who are unwilling, or unable, to stop smoking completely to use NRT products to help them abstain while at work or in uniform.

- Enforce staff contracts relating to smoking on the secondary care estate and during work time, including breaks and in uniform (see recommendation 13).

Recommendation 16 Stop smoking training for healthcare staff

Who should take action?

- Organisations providing training in smoking cessation and temporary abstinence such as the National Centre for Smoking Cessation and Training (NCSCT).

- Royal colleges, medical, psychiatric and nursing schools, undergraduate and postgraduate training providers.

- Healthcare professional training schools.

- Local education and training boards.

- Public health commissioners, health and wellbeing boards, clinical commissioning groups.

- Directors, managers and healthcare professionals in medical, surgical and maternity hospitals and clinics.

- Directors and managers in mental health services, including drug and alcohol treatment services.

- Managers of stop smoking services.

What action should they take?

- Ensure all frontline healthcare staff are trained to deliver stop smoking interventions, in line with recommendation 2. They should know what local and hospital-based stop smoking services offer and how to refer people to them.

- Ensure all frontline healthcare staff are trained to talk to people in a sensitive, client-centred manner about smoking. This should reduce the likelihood that some people will miss out on the opportunity to get help because they find it difficult to say that they smoke.

- Ensure all healthcare staff who deliver intensive stop smoking interventions are trained to the minimum standard set by the NCSCT. Include smoking cessation training that is relevant to their specialism.

- Ensure all staff are provided with information about smokefree policies and instructions about their roles and responsibilities in maintaining a smokefree work environment.

- Ensure all training helps to overcome the barriers to delivery of stop smoking support, and that support is provided in a sensitive manner and aims to avoid stigmatising people who smoke.

- Ensure relevant curricula include the range of interventions and practice to help people stop smoking, as outlined in this guidance.

- Ensure online training can be completed and updated annually as part of NHS mandatory training (for example, training provided by the NCSCT).

Recommendation 17 Commissioning

Who should take action?

Commissioners of health services, including public health and secondary care services.

What action should they take?

- Ensure all NHS-funded secondary care buildings and grounds are smokefree.
- Ensure the NHS standard contract includes smokefree strategies.
- Ensure services are commissioned to provide a range of pharmacotherapies for stop smoking interventions.
- Ensure healthcare professionals in secondary care identify people who smoke and offer them advice, support and treatment, or offer them a referral to a stop smoking service.
- Ensure all hospitals have an on-site, stop smoking service.
- Ensure there is a requirement within service specifications and service level agreements that staff are trained to the level needed to deliver stop smoking advice and support. It should also require that staff undertake regular continuing professional development (CPD) in how to provide stop smoking support.
- Ensure the **joint strategic needs assessment (JSNA)** considers the impact of smoking on local communities. Ensure it also identifies particular groups of people who are at very high risk.
- Monitor and audit the level of patient referrals and uptake of stop smoking interventions. Measures should include number of referrals and number of referrals that result in people stopping smoking.

- Base indicators and systems for monitoring, audit and performance management of stop smoking services on: smoking status at discharge from care, smoking status of mothers at time of delivery, and on long-term stop smoking rates.

- Ensure care pathways include: identification of people who smoke, provision of advice on likely smoking-related complications, advice to stop smoking and pro-active referral to stop smoking services.

- Ensure stop smoking pharmacotherapies are included in the **formulary**.

- Include sale of NRT products in secondary care settings (for example, in hospital shops) within formulary and guidelines policy.

2 Public health need and practice

Introduction

Tobacco smoking remains the single greatest cause of preventable illness and premature death in England. It causes a range of diseases including cancer, cardiovascular disease and respiratory diseases. It also causes many other debilitating conditions such as age-related macular degeneration, gastric ulcers, impotence and osteoporosis.

Smoking can cause complications in pregnancy, including increased risk of miscarriage, premature birth and low birthweight. It is also associated with lower survival rates, delayed wound healing, increased infections, prolonged hospital stays and repeated admissions after surgery (Delgado-Rodriguez et al. 2003; Theadom et al. 2006).

In England in 2010, an estimated 79,100 adults aged 35 and over died as a result of smoking. An estimated 459,900 hospital admissions of people from the same age group were attributable to smoking, accounting for 5% of all admissions (NHS Information Centre 2012).

There is no risk-free level of exposure to secondhand smoke (US Surgeon General 2006) and breathing it in can have both immediate and long-term health consequences. In the short term, it can exacerbate respiratory symptoms and trigger asthma attacks. In the longer term, it can increase the risk of smoking-related diseases (Royal College of Physicians 2005; Scientific Committee on Tobacco and Health 2004).

People with medical conditions (such as respiratory illnesses), pregnant women and children are particularly vulnerable to secondhand smoke. A UK report on children estimated that passive smoking caused 22,600 new cases of wheeze and asthma, 121,400 new cases of middle ear infection and 40 cases of sudden infant death. These consequences were strongly associated with maternal smoking (Royal College of Physicians 2010).

Treating smoking-related illnesses cost the NHS an estimated £2.7 billion in 2006 (Callum et al. 2010). The overall financial burden to society has been estimated at £13.74 billion a year. This includes both NHS costs, loss of productivity because of illness and early death, as well as other factors (Nash and Featherstone 2010).

The strong association between smoking and both physical and mental ill-health means that many people who use secondary care services are smokers. When smokers use these services, it presents a valuable opportunity to use interventions of proven effectiveness and cost effectiveness to initiate and support stop smoking attempts or other strategies to reduce harm.

Smoking behaviour

Although the prevalence of cigarette smoking has fallen markedly in the last 30 years, 1 in 5 adults aged 16 or over in England (20%) still smoked in 2010. On average, they smoked just under 13 cigarettes a day. Smoking prevalence remains higher in certain groups as follows.

People in routine and manual occupations

People in routine and manual occupations are about twice as likely to smoke as those in managerial or professional occupations (27% compared with 13%) (NHS Information Centre 2012).

Women who are or who have been pregnant

Many teenage women smoke during pregnancy. According to the Infant Feeding Survey 2010, women aged 20 and younger were 6 times more likely than those aged 35 and over to have smoked throughout pregnancy (35% compared with 6%). Pregnant women from routine and manual occupations are much more likely to smoke and to have done so through pregnancy than those from professional and managerial occupations (20% compared with 4%) (McAndrew et al. 2012).

Overall, more than a quarter (26%) of mothers in England smoked before pregnancy. More than half (55%) gave up at some stage before the birth. Although most women who had stopped before or during pregnancy were still not smoking shortly after the birth, nearly a third (31%) were smoking again less than a year later (McAndrew et al. 2012). Due to the stigma attached to smoking in pregnancy, there is likely to be a significant under-reporting by pregnant women who smoke.

People with mental health problems

A third (33%) of people with mental health problems (McManus et al. 2010; Royal College of Physicians 2013) and more than two-thirds (70%) of patients in psychiatric units smoke tobacco (Jochelson and Majrowski 2006). Smoking is also common among young people with mental health problems. According to the child and adolescent mental health survey of Great Britain (2004), young people aged 11–16 years with an emotional, hyperkinetic or conduct disorder were much more likely to be smokers (19%, 15% and 30% respectively) than other young people (6%) (Green et al. 2005).

Recent studies show that people with mental health problems are just as likely to want to stop as the general population – and are able to stop when offered evidence-based support (Jochelson and Majrowski 2006; Siru et al. 2009; Royal College of Physicians 2013). However, research also shows that effective stop smoking treatment is often not offered to them.

In addition, there is a lack of support for smokefree policies among healthcare staff working in mental health. Staff are reported to lack specific knowledge about the influence of smoking – and cessation activities – on a person's mental health (McNeill 2004; McNally et al. 2006; Ratschen et al. 2009a).

A survey also showed that more than a third of doctors in an NHS mental health trust were unaware that the dosage of some antipsychotic medications may need to be reduced when a person quits smoking (Ratschen et al. 2009a).

Tobacco control

The 2011 white paper Healthy lives, healthy people sets out a comprehensive list of tobacco control objectives for England. This includes:

- reducing smoking during pregnancy
- reducing smoking among people with mental health problems
- reducing the health effects of secondhand smoke
- promoting quitting smoking through providers of secondary care.

The Health Act introduced in England in July 2007 made it illegal to smoke in enclosed, or substantially enclosed, public places or workplaces, including work vehicles. Mental health units were given a temporary exemption until July 2008 (HM Government 2006).

Benefits of smokefree legislation have included a fall in hospital admissions for heart attacks (Sims et al. 2010). In addition, an estimated 6802 fewer children were admitted to hospital in England with asthma symptoms in the first 3 years following its implementation. This is a reversal of what was a steady annual increase (Millett et al. 2013).

Most NHS secondary care settings have smokefree policies that apply to their grounds (as well as to enclosed areas). However, there have been problems with compliance and enforcement (Ratschen et al. 2009b; Shipley and Allcock 2008).

3 Considerations

The Programme Development Group (PDG) took account of a number of factors and issues when developing the recommendations, as follows. Please note: this section does **not** contain recommendations. (See Recommendations.)

Stop smoking interventions

3.1 Smoking rates and related morbidity and mortality are much higher in certain groups, particularly the most vulnerable in society. These differences in smoking rates are a major contributor to inequalities in health. Smoking also exacerbates poverty. Reducing smoking among people who use secondary care services can help reduce these effects.

3.2 There is relatively limited evidence on the effectiveness of stop smoking and temporary abstinence interventions for people who use mental health services. Much of what is available originated from the US. The PDG noted, however, the importance of offering the same level of support to people who use mental health services to prevent a further widening of the already substantial health gap. It also noted that there may be a need for more intensive or tailored support to meet the needs of highly addicted smokers facing challenging life circumstances (see Recommendations for research).

3.3 There is US evidence to show financial incentives are an effective way to encourage pregnant women to quit. However, there is limited evidence on the type of rewards that would be effective or acceptable in the UK.

3.4 Smokers who undergo surgery are more likely to have longer hospital stays and are more likely to need intensive care compared with people who don't smoke. Smokers also have an increased risk of emergency readmission. Stopping smoking as soon as possible before surgery can

reduce these risks. The PDG noted the results of a recent systematic review and meta-analyses of studies that validated smoking status. This showed that there is no detrimental effect from stopping smoking just before surgery – and a significant positive effect of stopping smoking in the short term.

3.5 Some people who use secondary care services find it difficult to tell healthcare professionals that they smoke, if asked, for fear of disapproval. This is particularly true of pregnant women or people who know or suspect that their illness is related to smoking.

3.6 Current NICE guidance recommends that a carbon monoxide (CO) test is used to assess the exposure of pregnant women to tobacco smoke and many midwives are routinely using this test. The PDG felt that, if managed sensitively, CO tests help monitor smoking and act as a motivational tool for stopping. This non-invasive CO test is similar to other common tests that are routinely used in healthcare settings (for example, temperature or blood pressure tests).

3.7 Stop smoking support for healthcare staff is important in its own right. Healthcare staff may find it difficult to admit they smoke or to seek support to help them quit. They may also find it difficult to act as a health champion or to advise people to stop. In addition, the PDG heard evidence that staff who do not smoke are more likely to support hospital smokefree strategies and interventions aimed to help people stop smoking.

3.8 Trials in secondary care that use intensive behavioural interventions to support attempts to stop smoking have been shown to be effective. The effect is significantly increased when NRT is also offered as part of these interventions. There is relatively little evidence from trials in secondary care that include bupropion or varenicline as a means of helping people to stop smoking. However, these pharmacotherapies are highly effective in trials with the general population, and the PDG

felt there was no reason why this would not apply to people in secondary care settings.

3.9 The PDG noted that although stopping smoking is associated with improvements in longer-term mental health, evidence identifies both potential short-term negative and positive effects (such as increased agitation or improvements in mood). Prompt provision of evidence-based treatment can help alleviate negative effects associated with nicotine withdrawal. The PDG also heard evidence that some healthcare professionals have a limited knowledge and understanding of the specific links between tobacco dependence and mental illness, including the effects of stopping smoking on psychiatric symptoms.

Delivering stop smoking support

3.10 Evidence shows that intensive interventions (providing behavioural support and stop-smoking pharmacotherapy) delivered during a stay in hospital and continued for at least 4 weeks after discharge are effective. However, routine implementation is not widespread and involves coordinating care between hospitals and community services. The PDG noted the importance of formal systems for recording smoking status and arranging referrals. In addition, rapid response to a referral request, including support provided during a hospital stay, improved service uptake and quit rates.

3.11 The PDG noted that good clinical practice requires clinicians to take a holistic view of patients' physical health, and failing to offer stop smoking treatment is poor practice. The PDG also noted the Department of Health's Make Every Contact Count initiative. This sends a strong message that, given the right support and training, frontline staff are equipped to provide important health messages and refer (or direct) people for further advice and interventions to stop smoking.

3.12 The PDG felt that other health promotion interventions (for example, on alcohol-related harm or weight management) would ideally be offered at the same time as stop smoking advice, where appropriate. Such activities were, however, beyond the scope of the guidance

3.13 The PDG considered that healthcare staff should be competent and proactive, but recognised there are barriers to offering stop smoking advice and support. For example, they may have limited time, knowledge and skills, or they may feel that addressing smoking is beyond their role or responsibility. There is also a perception among some that asking about a person's smoking behaviour could damage the staff-patient relationship. The PDG considered that training on how to raise the topic of smoking with people, and when, how and where to refer them for specialist treatment, would overcome these barriers.

3.14 Most smokers will have been encouraged to stop on various occasions. During a quit attempt, they may have found it very difficult to abstain, despite being aware of the harmful effects of continuing to smoke. They may also have stopped in the past but subsequently relapsed. The PDG noted that, in a supportive secondary care environment, where healthcare staff have a positive, non-judgemental attitude, smokers can be encouraged and helped to try again.

3.15 The PDG noted that the role of carers, partners, family and friends is important. They can help to protect people who use secondary care services from secondhand smoke in the home. They can also help with an attempt to stop, by stopping smoking themselves, changing their own behaviour (if they smoke) and providing other support and encouragement.

Smokefree strategies and interventions

3.16 The PDG considered that secondary care providers are more likely to make a strong commitment to smokefree strategies if there is national

level support from the NHS Commissioning Board and Public Health England.

3.17 The PDG considered evidence from the UK and elsewhere on outcomes after the implementation of smokefree policies. The Group felt that smokefree policies are self-perpetuating if properly supported and maintained (including through communication, staff training and enforcement). The PDG noted that problems arise where smokefree policies are not maintained.

3.18 A total ban on smoking in the buildings and grounds of secondary care services complements the duty of care on healthcare staff and the organisation to protect the health of people in their care and promote healthy behaviour. Furthermore, the PDG felt that the resources needed to support smoking in the grounds would be more suitably directed towards stop smoking interventions and maintaining a smokefree policy. (Examples of the expense caused by smoking include: the time used for smoking breaks by staff and the erection of smoking shelters.)

3.19 The PDG was concerned that public support for hospital smokefree policies may be diminished if staff are seen smoking in hospital grounds or near entrances. This could give the impression that there is only a low commitment to the smokefree strategy, and could result in visitors dismissing or challenging smokefree policies and related restrictions.

3.20 People who are unable to leave a secondary care setting – for example, when detained under the Mental Health Act or because mobility is restricted – will have to abstain from smoking. Other people using the same service may not be subject to the same restrictions because they are able to leave the building and grounds. The PDG was aware that this situation would need careful and sympathetic management.

3.21 The episodic nature of mental health conditions can impact on a person's ability or willingness to stop smoking. However, in a smokefree secondary care environment, mental health service users will be subject to enforced abstinence – even during an acute phase of illness – and will need help to abstain.

3.22 The PDG heard evidence from UK studies of staff accepting or at times encouraging people to smoke in mental health settings. This could be for a variety of reasons including: as a reward or incentive for good behaviour; to help build relationships or avoid confrontation; as part of a shared smoking culture between staff and people in their care. The PDG noted that helping people to smoke takes up a considerable amount of staff time (when escorting smokers off a ward). It also has an implication in terms of being able to manage the movement of people who are being detained. It considered that these resources could and should be more usefully spent on therapeutic activities for smokers and non-smokers alike. The PDG discussed the need for clear leadership to change this culture. The Group also recognised that this would present many challenges and require significant changes in practice for some mental health services. It also recognised that mental health trusts would need to develop policies and enforcement procedures that work in a variety of local treatment settings (including psychiatric intensive care units and rehabilitation units), possibly akin to those in force for the use of contraband substances such as alcohol and drugs.

3.23 The PDG was aware that High Court judges had ruled, in a case involving patients at Rampton high-security hospital, that patients should not endanger their own (and anyone else's) health by smoking. The judges stated that: 'On the view we take of the evidence, substantial health benefits arise from the ban and the disbenefits are insubstantial'. The judges ruled that both health and security considerations justified the smoking ban even though smoking in the

grounds, which might be possible at other hospitals, is not feasible at secure hospitals.

3.24 There is limited evidence on the effectiveness of interventions to help people to temporarily abstain from smoking. However, the PDG agreed that smokers who use secondary care services may need help to comply with national legislation and smokefree policies for hospital buildings and grounds. The same is true of staff and volunteers who smoke.

Economic modelling

3.25 The PDG noted that both the benefits and cost effectiveness of stop smoking interventions for people with mental health problems may be underestimated. One of the most commonly reported measures of quality of life is the EQ-5D. This comprises 5 dimensions: mobility, self-care, usual activities, pain/discomfort and anxiety/depression. The PDG considered that this measure was not sensitive to some of the improvements in health arising from stopping smoking. This was of particular concern in relation to measuring the cost effectiveness of stop smoking interventions for people with mental health problems.

3.26 The PDG noted that a number of the benefits of stopping smoking were not included in the economic model. Examples include: a reduction in the harms associated with exposure to secondhand smoke, a reduction in the costs of social care for people with smoking-related diseases, and the effect on the uptake of smoking among children.

3.27 The economic modelling showed that high-intensity stop smoking interventions (including the use of pharmacotherapies) are a highly cost-effective way of helping people to stop smoking. Indeed, many of the interventions assessed were estimated to be cost saving (cheaper and more effective than the comparator).

3.28 The modelling found that interventions are cost-effective for different groups with different conditions. This includes: pregnant women, people in secondary care with chronic obstructive pulmonary disease (COPD) and cardiac conditions, pre-operative patients, general patients and hospital employees. The same applies to interventions for people with common mental health problems, such as post-traumatic stress disorder (PTSD). In the case of those with schizophrenia, the interventions showed an effect in the short-term. No impact was observed on smoking rates at 12 months. However, based on estimated cost savings made on antipsychotic drugs, if 1 in 10 of these patients quit smoking for a year, the interventions would be cost-effective.

3.29 The PDG noted that, as with any modelling exercise, the results are subject to uncertainty and numerous assumptions. However, the sensitivity analysis showed that most interventions remain cost-effective, even when the costs and effects of the interventions are randomly varied.

4 Recommendations for research

The Programme Development Group (PDG) recommends that the following research questions should be addressed. It notes that 'effectiveness' in this context relates not only to the size of the effect, but also to cost effectiveness and duration of effect. It also takes into account any harmful or negative side effects.

4.1 How effective and cost effective are interventions that aim to increase the uptake and effectiveness of stop smoking interventions in acute, maternity and mental health settings? (Examples include the identification and referral of smokers and staff training). What components of an intervention help ensure someone will take up the support they are offered? How many people in these settings complete stop smoking treatment?

4.2 How effective and cost effective (in terms of 4-week, 6- and 12-month quit and relapse rates) are intensive stop smoking interventions for people using mental health services, and how can these be improved and tailored for this group?

4.2.1 Does effectiveness or cost effectiveness differ by age, diagnosis, ethnicity, gender, in- or outpatient, sexual orientation or socioeconomic status?

4.2.2 What type of training do health professionals need to deliver these interventions? Examples might include training to: build up knowledge related to tobacco dependence, its treatment and links with mental illness; develop skills in delivering support; to develop a positive attitude towards delivering interventions?

4.3 What is the effect and acceptability of approaches that aim to match NRT dose to level of smoking addiction among women who are using maternity services?

4.4 Are stop smoking interventions that include incentives to quit effective and cost effective for UK women who are pregnant or have recently given birth?

4.5 How effective and cost effective are stop smoking interventions for partners of pregnant and breastfeeding women?

4.6 How effective and cost effective are stop smoking interventions for parents and carers of children who are using secondary care services?

4.7 How effective and cost effective are interventions that use varenicline with people who are using acute, maternity and mental health services? Are there any safety issues or adverse outcomes for people who use varenicline?

4.8 How effective and cost effective are relapse prevention interventions aimed at people who use secondary care services who have quit?

4.9 How can people who use secondary care services (particularly mental health services) staff and visitors, best be helped to abstain from smoking? Studies should consider whether support provided for temporary abstinence can lead people to stop completely.

More detail identified during development of this guidance is provided in Gaps in the evidence.

5 Related NICE guidance

Published

Smokeless tobacco cessation: South Asian communities. NICE public health guidance 39 (2012)

Quitting smoking in pregnancy and following childbirth. NICE public health guidance 26 (2010)

School-based interventions to prevent smoking. NICE public health guidance 23 (2010)

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

Smoking cessation services. NICE public health guidance 10 (2008)

Smoking cessation: varenicline. NICE technology appraisal 123 (2007)

Workplace interventions to promote smoking cessation. NICE public health guidance 5 (2007)

Brief interventions and referral for smoking cessation. NICE public health guidance 1 (2006)

Under development

Tobacco: harm reduction. NICE public health guidance (publication expected June 2013)

6 Glossary

Behavioural support

Practical advice and discussion about goal-setting, self-monitoring and dealing with the barriers to stopping smoking.

Carbon monoxide (CO) test

A carbon monoxide test is a breath test used to assess whether or not someone smokes.

Commissioning for quality and innovation (CQUIN)

The CQUIN payment framework enables commissioners to reward excellence, by linking a proportion of English healthcare providers' income to the achievement of local quality and innovation goals. The goals are agreed between the trust and its commissioners.

Formulary

A formulary is a list of healthcare treatments and drugs approved for use within a health economy, service or organisation.

Intensive behavioural support

Intensive interventions typically involve scheduled face-to-face meetings between someone who smokes, either alone or in a group, and a counsellor trained to provide stop smoking support including information, advice and encouragement and a behavioural intervention. Established and effective behaviour-change techniques should be used (see NICE public health guidance on Behaviour change). Support is typically offered weekly for at least the first 4 weeks of a quit attempt (that is, for 4 weeks after the quit date) or 4 weeks after discharge from hospital (where a quit attempt may have started before discharge), and normally given with stop smoking pharmacotherapy.

Joint strategic needs assessment (JSNA)

A joint strategic needs assessment provides a profile of the health and social care needs of a local population. JSNAs are used to develop joint health and wellbeing strategies. They are also used for commissioning to improve health outcomes and reduce health inequalities.

Nicotine replacement therapy (NRT)

Nicotine replacement therapy products are licensed for use as a stop smoking aid and for temporary abstinence, as outlined in the British national formulary. They include: transdermal patches, gum, inhalation cartridges, sublingual tablets and a mouth and nasal spray.

Pharmacotherapies

Pharmacotherapy is the treatment of addiction through the administration of drugs. Stop smoking advisers and healthcare professionals may recommend and prescribe nicotine, varenicline or bupropion as an aid to help people to stop smoking. Nicotine products may also be offered to support temporary abstinence from smoking in the secondary care setting.

Secondary care

Secondary care can be planned or emergency care. It is provided by specialist acute, maternity or mental health staff, usually in a hospital, clinic or community setting. Planned secondary care generally follows a referral from a primary care provider, such as a GP.

Smokefree

Smokefree means air that is free of smoke and applies to the whole secondary care estate (including the grounds) and vehicles.

Stop smoking services

Stop smoking services provide a combination of behavioural support and pharmacotherapy to aid smoking cessation. The behavioural support is free. The pharmacotherapy may incur a standard prescription charge. The

evidence-based treatment is based on the National Centre for Smoking Cessation and Training (NCSCT) standard programme and involves practitioners trained to their standard or equivalent.

Temporary abstinence

Not smoking for a limited period of time. This could be for a particular event or series of events, in a particular location, for specific time periods (for example, while at work or during a hospital stay), or even for the foreseeable future (such as abstinence while detained in a secure mental health unit).

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8 Summary of the methods used to develop this guidance

Introduction

The reviews, primary research, commissioned reports and economic modelling report include full details of the methods used to select the evidence (including search strategies), assess its quality and summarise it.

The minutes of the Programme Development Group (PDG) meetings provide further detail about the Group's interpretation of the evidence and development of the recommendations.

All supporting documents are listed in About this guidance.

Guidance development

The stages involved in developing public health programme guidance are outlined in the box below.

1. Two draft scopes released for consultation

2. Stakeholder meeting about the draft scopes

3. Stakeholder comments used to revise the scopes

4. Final scopes and responses to comments published on website

5. Evidence reviews and economic modelling undertaken and submitted to PDG

6. PDG produces draft recommendations

7. Draft guidance (and evidence) released for consultation and for field testing

8. PDG amends recommendations

9. Final guidance published on website

10. Responses to comments published on website

Key questions

The key questions were established as part of the 2 original scopes developed for guidance on smoking cessation for acute and maternity services and for separate guidance on mental health services. (These 2 pieces of guidance have now been amalgamated.) They formed the starting point for the reviews of evidence and were used by the PDG to help develop the recommendations. The overarching questions were:

- How effective and cost effective are smoking cessation interventions in secondary care settings in helping people to quit?
- How effective and cost effective are interventions in secondary care settings to help people temporarily abstain from smoking?
- How effective and cost effective are the current approaches used by secondary care services to identify and refer people to stop smoking services or to provide them with smoking cessation information, advice and support?
- What type of approaches are effective and cost effective at encouraging secondary care professionals to record smoking status, offer smoking cessation information, advice and support, or to refer people to stop smoking services?
- How can community, primary and secondary care providers collaborate more effectively to provide seamless smoking cessation services?
- What barriers and facilitators affect the delivery of effective interventions in secondary care?
- What are the effects of nicotine intake, or changes in levels of nicotine intake, on the mental and physical health of people using secondary care services who are on medication? What are the effects of tobacco consumption, or changes in tobacco consumption on this group?

- What are the effects of nicotine intake, or changes in levels of nicotine intake, on the mental and physical health of people using secondary care services?
- How effective and cost effective are strategies and interventions for ensuring compliance with smokefree legislation and local smokefree policies in secondary care settings?
- Are there any unintended consequences from adopting a smokefree approach in secondary care settings?
- What factors encourage or discourage compliance with smokefree policies in secondary care settings? What are the views, perceptions and beliefs of secondary care staff and people who use or visit these services?

These questions were made more specific for each review (see reviews for further details).

Reviewing the evidence

Below is a summary of the review methods. For full details see the reviews and economic analysis: available online.

Effectiveness reviews

Three reviews of effectiveness were conducted. These covered:

- Smoking cessation interventions in acute and maternity services (review 2)
- Smoking cessation interventions in mental health services (review 4)
- Smokefree strategies and interventions in secondary care settings (review 6).

Identifying the evidence

A number of databases and national and international websites were searched as follows:

- **Review 2** A search was conducted in December 2011 for systematic reviews and randomised controlled trials (RCTs) from January 1990 onwards.

- **Review 4** A search was conducted in February 2012 for evidence from January 1985 onwards. This included: reviews of reviews, systematic reviews, RCTs, non-randomised controlled trials, controlled before-and-after studies, interrupted time series and uncontrolled before-and-after studies.

- **Review 6** A search was conducted in February 2012 for evidence from January 1990 onwards. This included: reviews of reviews, systematic reviews, RCTs, non-randomised controlled trials, controlled before-and-after studies, interrupted time series, uncontrolled before-and-after studies and retrospective comparison studies.

See each review for details of the databases and websites searched.

A call for evidence from registered stakeholders was made in June 2012.

Selection criteria

Studies were included in the effectiveness reviews if they covered the following:

- people who use secondary care services or people who live in the same household as someone who is using these services
- people who visit secondary healthcare settings
- people who work in secondary healthcare settings
- interventions to identify and refer people to stop smoking services or to increase general uptake of stop smoking services
- interventions to help people stop smoking
- interventions to help people temporarily abstain from smoking
- smokefree strategies and interventions in hospitals and other secondary healthcare settings.

Studies were excluded if they:

- were aimed at people who use primary care services
- covered interventions aimed at preventing people from taking up smoking.

See each review for details of the inclusion and exclusion criteria.

Other reviews

Three reviews of the barriers to and facilitators for quitting smoking were conducted. These covered:

- acute and maternity services (review 3)
- mental health services (review 5)
- smokefree strategies and interventions in secondary care settings (review 7).

Identifying the evidence

A number of databases and national and international websites were searched:

- **Review 3** A search was conducted in December 2011 for evidence from January 1990 onwards. This included: systematic reviews, trials (controlled and non-controlled), descriptive studies (including questionnaire surveys and views or process evaluations), qualitative studies and discussion papers or reports.
- **Review 5** A search was conducted in February 2012 for evidence from January 1985 onwards. This included: systematic reviews, trials (controlled and non-controlled), descriptive studies (including questionnaire surveys and views or process evaluations), qualitative studies and reports.
- **Review 7** A search was conducted in February 2012 for evidence from January 1990 onwards. This included: systematic reviews, trials (controlled and non-controlled), descriptive studies (including questionnaire surveys and views or process evaluations), qualitative studies and reports.

Selection criteria

The selection criteria for the barriers and facilitators reviews were the same as for the effectiveness reviews (see above).

See each review for details of the inclusion and exclusion criteria.

Review 1: Review of effects of nicotine in secondary care

Identifying the evidence

A number of databases and national and international websites were searched in December 2011 for studies published from January 1990 onwards.

This included quantitative (both experimental and observational) studies, qualitative studies, systematic reviews, reviews of reviews and reports (see review for details).

See review 1 for details of the databases and websites searched.

A call for evidence from registered stakeholders was made in June 2012.

Selection criteria

Studies were included in review 1 if they covered people who use secondary care (acute, maternity or mental health) services and:

- reported on the effects of nicotine use, or withdrawal
- reported on safety issues related to acute abstinence and use of nicotine replacement therapy (NRT).

Studies were excluded if they reported on the long-term health effects of tobacco use or of stopping smoking.

Quality appraisal

Included papers were assessed for methodological rigour and quality using the NICE methodology checklist, as set out in Methods for the development of NICE public health guidance. Each study was graded (++, +, –) to reflect the risk of potential bias arising from its design and execution.

Study quality

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

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

– Few or no checklist criteria have been fulfilled. The conclusions of the study are likely or very likely to alter.

Summarising the evidence and making evidence statements

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

The findings from the review were synthesised and used as the basis for a number of evidence statements relating to each key question. The evidence statements were prepared by the external contractors (see About this guidance). The statements reflect their judgement of the strength (quality, quantity and consistency) of evidence and its applicability to the populations and settings in the scope.

Cost effectiveness

There was a review of economic evaluations and an economic modelling exercise.

Review of economic evaluations

Three economic evaluation databases were searched in February 2012 for studies from January 1990 onwards.

To supplement database and website searches, potentially relevant economic studies were identified using the screening results from the searches carried out for the effectiveness reviews.

Studies were included if they reported on a full economic evaluation with the same populations and interventions as in the effectiveness reviews (see above). Included studies were then quality-assessed.

Economic modelling

A number of assumptions were made that could under- or overestimate the cost effectiveness of the interventions (see economic modelling report for further details).

Economic models were constructed to incorporate data from the reviews of effectiveness and cost effectiveness as follows:

- A general model that considered the long-term impacts of smoking (which are similar for all population groups including patients, staff and visitors).
- Six models based on case studies which focus on the specific impact of smoking in a secondary care context (recovery times and the likelihood of complications associated with secondary care, generally within 12 months).

The results are reported in 'Smoking cessation in secondary care: cost-effectiveness review' and 'Economic analysis of smoking cessation in secondary care'.

How the PDG formulated the recommendations

At its meetings between March 2012 and January 2013 the Programme Development Group (PDG) considered the evidence, expert papers and cost effectiveness to determine:

- whether there was sufficient evidence (in terms of strength and applicability) to form a judgement
- where relevant, whether (on balance) the evidence demonstrates that the intervention or programme/activity can be effective or is inconclusive
- where relevant, the typical size of effect (where there is one)
- whether the evidence is applicable to the target groups and context covered by the guidance.

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

- Strength (type, quality, quantity and consistency) of the evidence.
- The applicability of the evidence to the populations/settings referred to in the scope.
- Effect size and potential impact on the target population's health.
- Impact on inequalities in health between different groups of the population.
- Equality and diversity legislation.
- Ethical issues and social value judgements.
- Cost effectiveness (for the NHS and other public sector organisations).
- Balance of harms and benefits.
- Ease of implementation and any anticipated changes in practice.

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

9 The evidence

The evidence statements from the reviews provided by external contractors (see What evidence is the guidance based on?) are available in a separate document (see The evidence statements).

This section lists the evidence statements and expert papers links to the recommendations and sets out a brief summary of findings from the economic analysis.

The evidence statements are short summaries of evidence in a review. Each statement has a short code indicating which document the evidence has come from (see The evidence statements). The letter(s) in the code refer to the type of document the statement is from, and the numbers refer to the document number, and the number of the evidence statement in the document.

For example, **evidence statement 1.2.10** indicates that the linked statement is numbered 2.10 in review 1. **Evidence statement 2.2.3** indicates that the linked statement is numbered 2.3 in review 2 and **evidence statement 3.2.6** indicates that the linked statement is numbered 2.6 in review 3. **Evidence statement CE.2.3** indicates that the linked statement is numbered 2.3 in the cost effectiveness review.

The reviews, expert papers and economic analysis are available online. 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).

Recommendation 1: evidence statements 1.1.2.2, 3.1.7, 5.2.7; expert paper 1

Recommendation 2: evidence statements 1.2.9, 3.1.3, 3.1.7, 3.2.4, 5.2.3, 5.2.7, 5.3.2, 5.3.5, 5.12.1, 5.14.2, 6.1.2, 7.2.28, CE1.7.0; expert papers 1, 2, 3, 4, 5, 6, 7

Recommendation 3: evidence statements 1.2.9, 2.1.3, 2.1.5, 2.1.8, 2.1.10, 4.1.1, 4.1.2, 4.4.3, 4.4.4, 4.9.1, 4.9.4, 4.10.1, 4.12.1, 4.13.2, 4.13.2, 5.2.3, 5.3.6, CE1.1.0, CE1.2.0, CE1.2.1, CE1.2.2, CE1.2.3, CE1.3.0, CE1.6.0, CE1.7.0; expert papers 4, 5, 6, 7

Recommendation 4: evidence statements 1.2.9, 2.2.3, 2.2.9, 3.2.6, CE1.4.0, CE1.4.1; expert papers 3, 4

Recommendation 5: evidence statements 1.3.5, 6.1.5

Recommendation 6: evidence statements 5.2.4, 5.2.8

Recommendation 7: evidence statements 1.1.2.2, 1.1.2.3, 1.3.5, 5.2.1, 5.9.1, 5.9.2, 7.2.28

Recommendation 8: evidence statements 1.1.1.7, 1.1.1.8, 1.1.3.7, 1.2.10, 1.2.31, 1.2.33, 6.3.5, 6.3.6, 7.3.9, 7.3.10

Recommendation 9: evidence statements 3.1.2, 5.3.1, 6.2.2, 7.2.30; expert papers 1, 2; IDE

Recommendation 10: evidence statements 3.1.5, 3.2.3, 3.2.6, 5.1.1, 5.8.1, 5.8.1, 5.8.3, 5.15.1, 5.15.4, 7.2.9, 7.2.13, 7.2.30; expert papers 1, 2; IDE

Recommendation 11: evidence statement 7.2.8; IDE

Recommendation 12: evidence statements 3.1.2, 3.1.3, 3.1.6, 3.2.4, 5.12.1, 5.13.2, 5.14.2, 7.2.28; expert papers 1, 2; IDE

Recommendation 13: evidence statements 3.1.0, 3.1.1, 3.1.5, 3.2.3, 5.1.6, 5.4.2, 5.4.3, 5.5.4, 6.1.2, 6.1.3, 6.1.4, 6.1.5, 6.1.6, 6.1.10, 6.2.1, 6.2.2, 6.2.3, 6.2.5, 6.3.1, 6.3.2, 6.3.3, 6.3.5, 6.3.6, 6.3.8, 7.1.1, 7.2.7, 7.2.10, 7.2.11, 7.2.13, 7.2.15, 7.2.16, 7.2.17, 7.2.18, 7.3.3, 7.3.4, 7.3.8, 7.3.12, 7.3.14; expert paper 6

Recommendation 14: evidence statements 3.1.5, 3.2.3, 5.2.5, 5.2.6, 5.5.2, 6.1.5, 7.2.4, 7.2.18, 7.3.3; expert paper 6; IDE

Recommendation 15: evidence statements 2.1.13, 3.1.0, 5.5.3, 6.2.3, 7.1.2, 7.2.2, 7.2.29

Recommendation 16: evidence statements 3.1.1, 3.1.2, 3.1.3, 3.1.4, 3.2.1, 3.2.2, 3.2.6, 5.1.4, 5.2.5, 5.3.7, 5.4.3, 5.5.1, 5.5.2, 5.5.5, 5.7.1, 5.7.2, 5.7.3, 5.7.4, 5.9.2, 7.2.16, 7.2.17, 7.2.26, 7.3.1, 7.3.3, 7.3.9, 7.3.10; expert paper 2; IDE

Recommendation 17: IDE

Economic modelling

The economic model estimates that stop smoking interventions are cost-effective for groups of secondary care service users. This includes: pregnant women, patients presenting at secondary care with chronic obstructive pulmonary disease (COPD) and cardiac conditions, pre-operative and general patients, and hospital employees.

The same applies to interventions for people with common mental health problems, such as post-traumatic stress disorder (PTSD). In the case of people with schizophrenia, the interventions showed an effect in the short-term. No impact was observed on 12-month smoking rates. However, the model estimated that there would be potential cost savings in the use of antipsychotics. It demonstrated that if 1 in 10 patients with schizophrenia successfully quit smoking for a year, the interventions would be cost-effective.

For the majority of interventions and population groups, the interventions were cost-effective and thus, value for money. This holds true not only when the lifetime benefits of smoking cessation are considered, but also when a more short-term perspective is adopted. This means that, for many interventions, the costs required to deliver them are smaller than the benefits they would generate within the first 3 years of implementation.

As with any modelling exercise, the results are subject to uncertainty and numerous assumptions. However, the sensitivity analysis showed that most interventions remain cost-effective even when the costs and effects are randomly varied.

10 Gaps in the evidence

The Programme Development Group (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. There is a lack of evidence on the effectiveness and cost effectiveness of interventions that aim to increase the uptake of stop smoking interventions in secondary care settings. (An example includes interventions that identify and refer people to stop smoking services.)

2. There is a lack of evidence about the effectiveness of interventions to support temporary abstinence for people who use, work in or visit secondary care services.

3. There is a lack of high quality research to establish the long-term effectiveness and cost effectiveness of stop smoking interventions for people using mental health services (including Child and Adolescent Mental Health Services [CAMHS]).

4. There is a lack of evidence on the effectiveness and cost effectiveness of stop smoking interventions:

    a. aimed at secondary care staff
    b. aimed at partners, parents, other family and household members and friends or carers of someone using acute, maternity and mental health services
    c. aimed at secondary care patients and involving the use of varenicline or bupropion

5. There is a lack of UK evidence on the effectiveness and cost-effectiveness of incentives to encourage women who are pregnant or postpartum to quit

6. There is a lack of data on the use of stop smoking services by people with a history of mental illness, because mental health history is rarely recorded by stop smoking service providers.

7. There is a lack of evidence on quality of life measures (such as EQ-5D) by smoking status for people using mental health services.

8. There is a lack of data to support economic evaluations of the cost effectiveness of stop smoking interventions for people who are using secondary care services.

9. There is a lack of evidence about the safety and efficacy of varenicline treatment for pregnant women.

10. There is a lack of evidence to determine the effect and acceptability of approaches that aim to match NRT dose to level of smoking addiction among people who use acute, maternity and mental health services.

11. There was very limited evidence, particularly from the UK, on strategies for ensuring compliance with smokefree legislation and local smokefree policies. There was no evidence from well-conducted trials. There was little evidence about the effect of policies on smoking cessation or staff absenteeism.

11 Membership of the Programme Development Group (PDG) and the NICE project team

Programme Development Group

PDG membership is multidisciplinary. The Group comprises public health practitioners, clinicians, representatives of the public, academics and technical experts as follows.

Matthew Alford Community Member

Gary Bickerstaffe Health Improvement Specialist, Bolton Council

John Britton (Chair) Director, UK Centre for Tobacco Control Studies, University of Nottingham

Jonathan Campion Director, Public Mental Health; Consultant Psychiatrist, South London and Maudsley NHS Foundation Trust

Amanda Farley Lecturer in Epidemiology, Primary Care Clinical Sciences, University of Birmingham

Elizabeth Fisher Health Improvement Manager; Head, NHS Stop Smoking Services, NHS Hertfordshire

Liz Gilbert Delivery Manager, National Centre for Smoking Cessation and Training

Gill Grimshaw Community Member

Yvonne Hermon Smoking Cessation and Pregnancy Coordinator, NHS Dudley

Jo McCullagh Tobacco Control Programme Lead, Heart of Mersey/ChaMPs

Lisa McNally Consultant in Public Health, Bracknell Forest Council

John Moxham Professor of Respiratory Medicine, King's College London School of Medicine; Consultant Physician, King's College Hospital NHS Foundation Trust

Rachael Murray Lecturer, Health Policy and Promotion, UK Centre for Tobacco Control Studies, University of Nottingham

Carmel O'Gorman Specialist Midwife, Smoking Cessation in Pregnancy, Heart of England Foundation NHS Trust

Shalini Patni Consultant, Obstetrics and Feto-maternal Medicine, Heart of England Foundation NHS Trust

Giri Rajaratnam Deputy Regional Director, Public Health, NHS East Midlands

Elena Ratschen Lecturer, Tobacco Control, University of Nottingham

Fraser Serle Community Member

Matthew Taylor Deputy Director, York Health Economics Consortium

Hilary Wareing Director, Public Management Associates; Director, Tobacco Control Collaborating Centre

NICE project team

Mike Kelly CPHE Director

Tricia Younger Associate Director (until December 2012)

Simon Ellis Associate Director (from December 2012)

Pete Shearn Lead Analyst

Amanda Killoran Analyst

Linda Shepherd Analyst

Patti White Analyst

Lesley Owen Technical Adviser Health Economics

Patricia Mountain Project Manager

Denise Jarrett Coordinator

Sue Jelley Senior Editor (until February 2012)

Jaimella Espley Senior Editor (from February 2012)

Alison Lake Editor

12 About this guidance

Why is this guidance being produced?

The Department of Health (DH) asked the National Institute for Health and Care Excellence (NICE) to produce this guidance.

The guidance should be implemented alongside other guidance and regulations (for more details see Implementation (below) and Related NICE guidance respectively).

How was this guidance developed?

The recommendations are based on the best available evidence. They were developed by Programme Development Group (PDG).

Members of the PDG are listed in Membership of the Programme Development Group/Public Health Interventions Committee and the NICE project team.

For information on how NICE public health guidance is developed, see the NICE public health guidance process and methods guides.

What evidence is the guidance based on?

The evidence that the PDG considered included:

- Evidence reviews:
  - Review 1: 'Review of effects of nicotine in secondary care' was carried out by Tobacco Dependence Research Unit, Queen Mary University of London. The principal authors were: Hayden McRobbie, Peter Hajek and Katie Myers.
  - Review 2: 'Smoking cessation interventions in acute and maternity services: review of effectiveness' was carried out by Tobacco Dependence Research Unit, Queen Mary University

of London. The principal authors were: Katie Myers, Hayden McRobbie and Peter Hajek.

- Review 3: 'Smoking cessation interventions in acute and maternity services: review of barriers and facilitators' was carried out by Tobacco Dependence Research Unit, Queen Mary University of London. The principal authors were: Katie Myers, Hayden McRobbie, Oliver West and Peter Hajek.
- Review 4: 'Effectiveness of smoking cessation interventions in mental health services' was carried out by UK Centre for Tobacco Control Studies, University of Nottingham. The principal authors were: Jo Leonardi-Bee, Leah Jayes, Alison O'Mara-Eves, Clare Stansfield, Kate Gibson, Elena Ratschen and Ann McNeil.
- Review 5: 'Barriers to and facilitators for smoking cessation interventions in mental health services' was carried out by UK Centre for Tobacco Control Studies, University of Nottingham. The principal authors were: Jo Leonardi-Bee, Leah Jayes, Alison O'Mara-Eves, Clare Stansfield, Kate Gibson, Elena Ratschen and Ann McNeil.
- Review 6: 'A review of the effectiveness of smokefree strategies and interventions in secondary care settings' was carried out by University of Stirling and University of Nottingham. The principal authors were: Kathryn Angus, Rachael Murray, Laura MacDonald, Douglas Eadie, Alison O'Mara-Eves, Clare Stansfield and Jo Leonardi-Bee.
- Review 7: 'A review of the barriers to and facilitators for implementing smokefree strategies and interventions in secondary care settings' was carried out by University of Stirling and University of Nottingham. The principal authors were: Douglas Eadie, Laura MacDonald, Kathryn Angus, Rachael Murray, Alison O'Mara-Eves, Clare Stansfield and Jo Leonardi-Bee.

- Review of economic evaluations: 'Smoking cessation in secondary care: cost-effectiveness review ' was carried out by Matrix Evidence. The principal authors were: Maria Rizzo, Alison Martin, Victoria Clift-Matthews, Louise Lombard, Oluwaseye Abogunrin, Obinna Onwude, Jacque Mallender and Rupert Lee.

- Economic modelling: ‘Economic analysis of smoking cessation in secondary care’ was carried out by Matrix Evidence. The principal authors were: Jacque Mallender, Evelina Bertranou, Mariana Bacelar and Sarah Roberts.

- Expert papers:

    - Expert paper 1: ‘Stop smoking interventions in secondary care’ by Liz Gilbert, National Centre for Smoking Cessation and Training.

    - Expert paper 2: ‘Streamlined secondary care system: project report’ by Liz Gilbert, National Centre for Smoking Cessation and Training.

    - Expert paper 3: ‘Bedside interventions for smoking cessation: A randomised controlled trial of systematic identification and treatment of smokers’ by Rachael Murray, UK Centre for Tobacco Control Studies, University of Nottingham.

    - Expert paper 4: ‘Association between smoking and mental disorders’ by Jo Leonardi-Bee, UK Centre for Tobacco Control Studies, University of Nottingham.

    - Expert paper 5: ‘The prevalence of smoking in people with mental health problems’ by Lisa Szatkowski, UK Centre for Tobacco Control Studies, University of Nottingham.

- Expert paper 6: ‘Ethical issues for smoking cessation and smokefree policies’ by Richard Ashcroft, School of Law, Queen Mary University of London.
- Expert paper 7: ‘Smoking and mental disorder’ by Jonathan Campion, South London and Maudsley NHS Foundation Trust.

The reviews, expert papers and economic analysis are available online.

In some cases the evidence was insufficient and the PDG has made recommendations for future research.

Status of this guidance

This is draft guidance. The recommendations made in section 1 are provisional and may change after consultation with stakeholders (listed on our website).

This document does not include all sections that will appear in the final guidance. The stages NICE will follow after consultation are summarised below.

- The Group will meet again to consider the comments, reports and any additional evidence that has been submitted.
- After that meeting, the Group will produce a second draft of the guidance.
- The draft guidance will be signed off by the NICE Guidance Executive.

The key dates are:

Closing date for comments: 5 June 2013.

Next PDG meeting: 17–18 July 2013.

Implementation

NICE guidance can help:

- Commissioners and providers of NHS services to meet the requirements of the NHS Outcomes Framework 2013–14. This includes helping them to deliver against domain one: preventing people from dying prematurely.
- Local health and wellbeing boards to meet the requirements of the Health and Social Care Act (2012) and the Public Health Outcomes Framework for England 2013–16.
- Local authorities, NHS services and local organisations determine how to improve health outcomes and reduce health inequalities during the joint strategic needs assessment process.

NICE will develop tools to help organisations put this guidance into practice. Details will be available on our website after the guidance has been issued.

Updating the recommendations

This section will be completed in the final document.