NHS

✓ **SMOKEFREE**

LOCAL STOP SMOKING SERVICES

Service delivery and monitoring guidance 2011/12

(DH) Department of Health

LOCAL STOP SMOKING SERVICES

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ACKNOWLEDGEMENTS

CONTENTS

ABBREVIATIONS

AMD	Age-related macular degeneraton
BME	Black and minority ethnic
CO	Carbon monoxide
CQUIN	Commissioning for Quality and Innovation
DH	Department of Health
FTND	Fagerström test for nicotine dependence
IC	NHS Information Centre
LTFU	Lost to follow-up
MHRA	Medicines and Healthcare products Regulatory Agency
NCSCT	NHS Centre for Smoking Cessation and Training
NCSCT CIC	NCSCT Community Interest Company
NICE	National Institute for Health and Clinical Excellence
NRT	Nicotine Replacement Therapy
ONS	Office for National Statistics
PbR	Payment by Results
PCT	Primary care trust
ppm	parts per million
QIPP	Quality, Innovation, Productivity and Prevention
QOF	Quality and Outcomes Framework
RCM	Regional communications manager
RCT	Randomised controlled trial
RDM	Regional development manager
R/M	Routine and manual
RTPM	Regional tobacco policy manager
RTQ	Routes to Quit
SHA	Strategic health authority
SIGN	Scottish Intercollegiate Guidelines Network
SPC	Summary of product characteristics
UKCTCS	UK Centre for Tobacco Control Studies

Key terms can be found in the Definitions section in Annex C (see page 107). The research on which this guidance is based is fully referenced throughout.

EXECUTIVE SUMMARY

☐ The provision of high-quality stop smoking services is a top priority in reducing health inequalities and improving health among local populations. Since stop smoking services began they have supported over 2.5 million people to stop in the short term and 625,000 people to stop in the long term, saving over 70,000 lives.

☐ Stop smoking services are a key part of tobacco control and health inequalities policies both at local and national levels.[1]

☐ Evidence-based stop smoking support is highly effective both in cost and clinical terms. It should therefore be seen in the same way as any other clinical service and offered to all smokers.

☐ The changes to public health and NHS commissioning and providing, which were announced in the White Paper *Equity and Excellence: Liberating the NHS*,[2] will mean that during the financial year 2011/12 commissioners and providers will want to work together with GP consortia and local authorities (particularly in 'pathfinder' areas) to clarify the future local arrangements for stop smoking services and tobacco control.

Targeting groups

☐ Most smokers need to make multiple attempts to quit before achieving long-term success. It is important to maintain contact with smokers and offer re-treatment following relapse.

☐ In line with National Institute for Health and Clinical Excellence (NICE) best practice recommendations, service providers should aim to treat a minimum of 5% of their local population of smokers in the course of a year,[3] but should take local needs into account. This is a minimum recommendation and the current national average is just under 10%.

☐ To work most effectively services should focus on specific segments of the population who are most at risk from tobacco use, or who are the major consumers of tobacco – in particular increasing access to services for smokers from routine and manual (R/M) groups, pregnant smokers and smokers with mental disorders (including alcohol and substance misuse).

☐ All health and social care services play a key role in identifying smokers and referring people to stop smoking services, and referral opportunities need to be maximised.

1   Department of Health (2008) *Excellence in Tobacco Control: 10 high impact changes to achieve tobacco control.* DH.
    www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_084847
2   Department of Health (2010) *Equity and Excellence: Liberating the NHS.* TSO
    www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_117353
3   NICE (2008) *Smoking Cessation Services in Primary Care, Pharmacies, Local Authorities and Workplaces, Particularly for Manual Working Groups, Pregnant Women and Hard to Reach Communities.* NICE.
    www.nice.org.uk/PH010

Delivering services

☐ Four-week quit smoking rates are the local measure to reflect smoking prevalence as set out in the NHS Operating Framework. They provide a vital performance measure for stop smoking service providers and a means of tracking service performance against local operating plans.

☐ However, services should be provided for a minimum of 12 weeks to achieve enough intervention to assure long-term success. Commissioners will therefore wish to consider ways to incentivise continued treatment over this period.

☐ Smokers attempting to stop with medicine alone can expect to have a success rate of 25% at four weeks (for carbon monoxide (CO) validated quits) and a success rate of about 35% at four weeks (for self-reported quits). Therefore, to show an impact, services must achieve success rates in excess of these.

☐ Evidence-based guidelines[4] and NICE guidance should inform how services are delivered and the availability of smoking cessation aids (see Pharmacotherapy, page 52).

☐ To optimise success, all NICE-recommended pharmacotherapies (Nicotine Replacement Therapy (NRT), bupropion and varenicline) need to be offered as a first-line option.

Maintaining standards

☐ Commissioners and providers will want to work together to achieve optimum outcomes using evidence-based interventions, focusing equally on increasing reach and access for smokers from high-risk or high-usage groups, improving data quality and ensuring that resources are allocated appropriately.

☐ All stop smoking advisers need to receive specific training to carry out their role, which should conform to the training standards and competences set by the NHS Centre for Smoking Cessation and Training (NCSCT) (www.ncsct.co.uk). Advisers are able to demonstrate a minimum level of competence by achieving stage one certification from the NCSCT.

☐ To achieve best practice, all service delivery models should conform to established quality principles (see page 28).

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4   West R, McNeill A and Raw M (2000) 'Smoking cessation guidelines for health professionals: an update.' *Thorax* 55(2):987–99

INTRODUCTION

Smoking remains the leading cause of preventable death and disease in England and is one of the most significant factors that impacts on health inequalities and ill health, particularly cancer, coronary heart disease and respiratory disease. Reducing smoking prevalence therefore remains a key public health priority and a national focus.

In November 2010, the Government published its public health strategy for England, *Healthy Lives, Healthy People*.[5] This set out a number of changes to the public health system, including moving Directors of Public Health and public health funding from primary care trusts (PCTs) in the NHS to local authorities by April 2013, and the setting up of a national body, Public Health England (PHE), within the Department of Health (DH) from April 2012. PHE will be a dedicated, professional public health service that strengthens national response on emergency preparedness and health protection. It will also offer strengthened public health surveillance, information and intelligence to support local areas in commissioning effective, cost-efficient services that meet the needs of their local population.

Following publication of *Healthy Lives, Healthy People*, DH has published a further two consultation documents, one focusing on outcomes[6] and the other on funding and commissioning.[7] Together, the proposals in these documents would have implications for the future of stop smoking support services. It is proposed that local tobacco control services, including stop smoking support, prevention and communications, would be funded from the new ring-fenced public health budgets that will be used by local authorities, which would be responsible for commissioning these services. The NHS would retain a role in providing brief interventions across primary, secondary, dental and maternity care to support smokers to quit. It is also proposed in the consultation that the Public Health Outcomes Framework, which will be used to monitor and drive further improvements across the country, could include indicators on smoking prevalence among adults over 18, pregnant women and people with serious mental disorder.

5   HM Government (2010) *Healthy Lives, Healthy People: Our Strategy for public health in England*. TSO. www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_121941

6   Department of Health (2010) *Healthy Lives, Healthy People: Transparency in Outcomes – Proposals for a Public Health Outcomes Framework*. DH. www.dh.gov.uk

7   Department of Health (2010) *Healthy Lives, Healthy People: Consultation on the funding and commissioning routes for public health*. DH. www.dh.gov.uk

Tobacco control

NATIONAL AND INTERNATIONAL MEASURES

In March 2011 DH published a new Tobacco Control Plan, which outlined the Government's key priorities, actions and ambitions for tobacco control in England over the forthcoming five years. Based on the World Bank's six strands for comprehensive tobacco control, the plan provides an overview of what the Government will do to support continued reductions in tobacco use, nationally and internationally.

LOCAL MEASURES

This guidance shows how to use an evidence-based approach to delivering support to help smokers to quit locally.

This document continues the annual update and publication of the mandatory and extra suggested monitoring requirements for local service commissioners and providers. It also includes the most recent best evidence about how to achieve improved outcomes through the delivery of this clinical service. In short, this document aims to support local areas to achieve an increased number of four-week quitters in 2011/12, as per the published NHS Operating Framework.

It is well documented that a comprehensive approach to tobacco control is required to reduce smoking prevalence effectively. Stop smoking interventions and stop smoking services in isolation should therefore not be regarded as the main drivers for reducing smoking prevalence but recognised as important elements of tobacco control and included within any strategy to reduce smoking prevalence. Since their inception in 1999 for example, stop smoking services have become well established, delivering substantial numbers of four-week quitters each year and around a quarter of all successful quits per year. Therefore the aim to increase the number of four-week quitters remains a key outcome in the NHS Operating Framework for 2011/12 on the measure for local smoking prevalence. While the transition to Public Health England is made throughout 2011/12, accountability for delivery remains with strategic health authorities (SHAs) and PCTs.

The roles of service providers and commissioners

Service providers are responsible for delivering treatment services as stipulated by the contract. They will need to ensure that all necessary data is collected and that data verification procedures are followed for each client. They are responsible for maintaining the quality of treatment delivered (in line with the quality principles set out in this guidance) and for ensuring that client data confidentiality is protected in line with agreed protocols. Service providers need to ensure that staff receive support to carry out their roles and remain up to date with national guidance and research developments. Service

providers should be prepared for possible audits of their operations at any time and should maintain detailed records of their activities for inspection.

Commissioners will want to ensure that the services commissioned are adequately resourced, evidence based, effective, accessible and appropriate to the needs of the local population. Given the highly dynamic nature of this subject area and the continued drive to develop new pharmacotherapies and treatment approaches, commissioners will need to ensure that they are up to date with national guidance and are enabling services to be developed according to contractual arrangements. Commissioners are responsible for ensuring that effective clinical governance systems are in place, safeguarding the quality of treatment and data collection processes. They are also responsible for ultimately signing off quarterly data submissions and ensuring that robust procedures for checking exceptional data are adhered to.

PART 1:
COMMISSIONING SERVICES

CONTENTS

Identification and referral of smokers

Around two-thirds of smokers want to stop smoking and three-quarters report having attempted to quit at some point in the past.[8] Latest data from the Smoking Toolkit Study,[9] however, shows that the vast majority of smokers attempting to stop are continuing to choose the least effective methods of doing so, 18.6% opting to stop unaided (the least effective method) in comparison to just under 9%[10] using a stop smoking service (the most effective method). Systematic identification of smokers at every opportunity and very brief advice delivered by a healthcare professional is required to assist smokers to access the more effective stop smoking support options available.

KEY POINTS

☐ All smokers should be advised to stop smoking and offered evidence-based support, regardless of whether or not they express a desire to stop.

☐ Smoking cessation has been linked to the potential for teachable moments,[11] meaning that all healthcare professionals can have a positive impact on a smoker's decision to stop.

☐ The systematic provision of very brief advice and routine referral of smokers to stop smoking service providers would be best written into all provider contracts, supported by appropriate training and established formal referral systems.

☐ All local healthcare professionals (e.g. practice nurses, community pharmacies, district nurses, midwives and health visitors) and social care professionals should be aware of the AAA model for the provision of very brief advice and routinely refer smokers to the local stop smoking service provider(s). A simple guide to aid the delivery of very brief advice using AAA is available from the Smokefree Resource Centre (http://smokefree.nhs.uk/resources/resources/product-list/detail.php?code=1353118458).

☐ Formalised systems such as electronic referrals or paper-based referrals enable the identification of referral sources and areas where referral rates could be improved.

☐ It is not recommended that service providers are remunerated for referrals as this activity is often remunerated through Commissioning for Quality and Innovation (CQUIN) and Quality and Outcomes Framework (QOF) payment schemes (see pages 17–18).

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8   Office for National Statistics (2010) *Smoking and drinking among adults, 2008*. ONS
9   Smoking Toolkit Study, www.smokinginengland.info
10   NHS IC (2010) *Statistics on NHS Stop Smoking Services: England, April 2009 to March 2010*. NHS IC
     www.ic.nhs.uk/statistics-and-data-collections/health-and-lifestyles/nhs-stop-smoking-services/statistics-on-nhs-stop-smoking-services-england-april-2009--march-2010
11   McBride CM, Emmons, KM and Lipkus IM (2003) 'Understanding the potential of teachable moments: the case of smoking cessation.' *Health Education Research* 18(2):156–70

Forthcoming supportive resources

During 2011 the NCSCT Community Interest Company (NCSCT CIC) will be developing very brief advice training. The CIC will also be devising resources to support referral activity in key settings including primary care, secondary care and maternity settings. To keep up to date with the progress of these projects or to find out more information, visit: www.ncsct.co.uk.

Referral sources

PRIMARY CARE

General practice

GP practice teams have daily contact with a significant number of smokers and should play a key role in any local referral network. Over 60% of smokers see their GP at least once in any year. While some practices are very proactive in this area, Figure 1 below shows that the delivery of very brief advice is not currently systematic or standardised.[12]

Figure 1: Smokers' reports of GP contact and outcomes

- Did not see GP
- Saw GP but no mention of smoking
- Smoking mentioned but not advised to stop
- Advised to stop but not offered help
- Offered medication
- Advised to see practice nurse
- Referred to stop smoking service

The study also shows that those smokers who were offered support by their GP were:

1. more likely to attempt to stop
2. more likely to use stop smoking medication (on prescription and over the counter)
3. more likely to use a stop smoking service.

Note: While the questions asked in the study all relate specifically to GP activity, very brief advice should form part of routine care delivered practice-wide.

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12   West R and Fidler J (2011) 'Key findings from the Smoking Toolkit Study', STS014 www.smokinginengland.info

Pharmacy

Community pharmacies are easily accessible: 99% of the population, even those living in the most deprived areas, can get to a pharmacy within 20 minutes by walking or using public transport. Some 84% of adults visit a pharmacy at least once a year. An estimated 1.6 million visits take place daily, of which 1.2 million are for health-related reasons. This ready access makes community pharmacies an ideal location to provide opportunistic and brief advice.

As part of the community pharmacy contractual framework, all pharmacies in England are required to provide opportunistic and prescription-linked healthy lifestyle advice to patients presenting prescriptions for diabetes, those who may be at risk of heart disease, those who smoke and those who are overweight. In addition, pharmacies are required to participate in six public health campaigns each year, organised by primary care trusts (PCTs). Some PCTs are choosing stop smoking as one of their six campaigns. Smokefree materials suitable for these campaigns can be downloaded or ordered at: http://smokefree.nhs.uk/resources/. Guidance exists for pharmacists on assisting cessation in those with mental illness.[13]

Dentistry

As almost 60% of the adult UK population visits a dentist for regular check-ups, including a high proportion of young people aged 25–35, and dentists also have regular contact with pregnant women and teenagers, so dental teams are well placed to offer very brief advice and refer smokers to their local stop smoking service provider. Dentists are also ideally placed to identify users of smokeless tobacco. There is evidence to demonstrate that the use of smokeless tobacco products (e.g. chewing tobacco, paan, khat) can have significant health effects, including oral cancers. There is some evidence to suggest that behavioural support can be effective; however, there is a significant lack of evidence recommend the most effective intervention.

Optometry

There is a strong association between smoking and age-related macular degeneration (AMD). Currently, there is no effective treatment for all types of AMD and therefore identifying modifiable risk factors is of great importance.[14] Optometrists therefore provide a further opportunity to deliver very brief advice to smokers, to promote and refer to stop smoking services.[15]

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13 Campion J, Hewitt J, Shiers D and Taylor D (2010) 'Pharmacy guidance on smoking and mental health.' Forum for Mental Health in Primary Care. www.rcpsych.ac.uk/pdf/Pharmacy_%20guidance%20for%20smoking%20and%20mental%20health%20Feb%20 2010.pdf

14 Thornton J, Edwards R, Mitchell P, Harrison RA, Buchan I and Kelly SP (2005) 'Smoking and age-related macular degeneration: a review of association.' *Eye* 19:935–44

15 Thompson C, Harrison RA, Wilkinson SC, Scott-Samuel A, Hemmerdinger C and Kelly SP (2007) 'Attitudes of community optometrists to smoking cessation: an untapped opportunity overlooked?' *Ophthalmic and Physiological Optics* 27(4):389–93

MATERNITY SERVICES

Maternity services play a key role in identifying and referring pregnant smokers or women who smoke and are trying to conceive. National Institute for Health and Clinical Excellence (NICE) guidance published in 2010 recommends that a wide range of healthcare professionals, particularly those within maternity services, should proactively identify pregnant smokers and facilitate referral to a stop smoking service.[16] Referrals should be made as early as possible.

Forthcoming supportive resources

In 2011/12, the NCSCT CIC will be developing and piloting a suite of resources to support the implementation of systematic service models for the identification and referral of all smokers in pregnancy and the postpartum period.

SECONDARY CARE

Smokers are more likely to experience postoperative complications and slower wound healing,[17] which could result in the need for further surgery, a longer hospital stay and increased costs to the health service. Admission to hospital has been shown to increase a patient's motivation to stop smoking. A Cochrane review found that patients offered support to stop smoking as part of their inpatient activity, including community follow-up for at least four weeks post-discharge, improved abstinence rates significantly.[18]

Both primary and secondary care staff play a pivotal role in referring smokers for stop smoking support as soon as possible prior to planned admissions. In the case of unplanned admissions, staff need to ensure that pharmacotherapy for withdrawal management is available, as well as offer a referral to a stop smoking service. It is therefore also crucial that the hospital pharmacy is engaged and included so that it is able to deliver very brief advice and act as referrers as well as facilitate access to stop smoking medicines.

Forthcoming supportive resources

In 2011/12, the NCSCT CIC will be developing and piloting a suite of resources to support the implementation of systematic service models for the identification and referral of all smokers in secondary care settings.

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16   NICE (2010) *Quitting smoking in pregnancy and following childbirth.* NICE. http://guidance.nice.org.uk/PH26/Guidance/pdf/English

17   Møller AM, Villebro N, Pedersen T and Tønnesen H (2002) 'Effect of preoperative smoking intervention on postoperative complications: a randomised control trial.' *Lancet* 359(9301):114–7

18   Rigotti NA, Munafo MR and Stead LF (2007) 'Interventions for smoking cessation in hospitalised patients.' *Cochrane Database of Systematic Reviews* 2007(3): CD001837

MENTAL HEALTH, ALCOHOL AND SUBSTANCE MISUSE SERVICES

Those with mental disorder (which includes those with mental illness, alcohol problems and substance misuse) have significantly higher smoking rates than the general population and are responsible for 42% of tobacco consumption in the UK.[19]

Table 1: Proportion of population in England with different mental disorder and rates of smoking

	Prevalence of disorder in population	Proportion who are regular smokers
Any mental disorder	23%	33%
Common mental disorder	16%	32%
Depressive episode	3%	37%
Phobias	2%	37%
Generalised anxiety disorder	4%	36%
Post-traumatic stress disorder screen	3%	37%
Attention deficit hyperactivity disorder screen	1%	31%
Psychosis	1%	40%
Suicide attempt in past year	1%	57%
Drug dependence	3%	69%
Alcohol dependence	6%	46%
Alcohol problems	24%	30%

Mental health problems are the most significant risk factor in the uptake of smoking in children and adolescents and are six times more common in those with conduct disorder and four times more common in those with emotional disorder.[20] This means that 43% of smokers aged 5–16 years are from the 10% of children and adolescents with conduct disorder and emotional disorder.

Since the majority of those with mental disorder are managed in primary care, it is therefore important that care pathways are developed with primary care and implemented to facilitate improved access to stop smoking support for both adolescents and adults with mental disorder (see pages 75–82). Since 70% of adults in mental health units smoke,[21] inpatient and community mental health services, including substance and alcohol services, are also important sources of referrals to stop smoking services.

19 McManus S, Meltzer H and Campion J (2010) *Cigarette Smoking and Mental Health in England: Data from the Adult Psychiatric Morbidity Survey 2007*. National Centre for Social Research. www.natcen.ac.uk/study/cigarette-smoking--mental-health
20 Green H, McGinnity A, Meltzer H et al. (2005) *Mental Health of Children and Young People in Great Britain, 2004*. ONS
21 Jochelson J and Majrowski B (2006) *Clearing the Air: Debating smoke-free policies in psychiatric units*. King's Fund

OTHER SETTINGS

Prison settings

Prisons are also an important source of referrals, as 80% of the population smoke.[22] Smoking status should be routinely checked as part of the admission process as well as at routine health checks during each prisoner's stay, further supported by very brief advice and referral to a stop smoking service as appropriate (see pages 85–87).

Health trainers or similar local services

Health trainers are ideally placed to refer clients who smoke and who identify stopping as a key priority. All health trainers should therefore be trained to deliver the AAA approach and be aware of local stop smoking service provider(s) and the locally agreed referral protocol.

Partnerships

Commissioners are encouraged to develop and maintain partnerships with a range of organisations to aid service promotion and increase referral pathways (e.g. workplaces, children's centres and the fire service). The Tobacco Control Toolkit, developed by the London region in 2010 (www.cieh.org/publication/tobacco_control_alliances.html), provides a comprehensive overview of suggested partners.

Health inequality pilot

In 2010, the UK Centre for Tobacco Control Studies (UKCTCS) was awarded funding to carry out six health inequality pilot projects, one of which relates to children's centres. The aim of the project is to pilot an integrated referral system to stop smoking services and to 'smokefree homes schemes' targeted at parents and carers registered with children's centres. Outcomes from the project are expected in autumn 2011.

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22   Singleton N, Farrell M and Meltzer H (1999) *Substance Misuse among Prisoners in England and Wales.* ONS

Referral systems

The following systems can all be used to drive referrals of smokers into evidence-based stop smoking services.

QUALITY AND OUTCOMES FRAMEWORK

The QOF is an annual reward and incentive programme for all GP practices in England, and is part of GP contracts. Although participation in the QOF is voluntary, participation rates remain very high. The objective of the QOF is to improve the quality of care patients receive by rewarding practices for the quality of care they provide. It is not, however, a performance management tool. One of the key principles of the QOF is that indicators should, where possible, be based on the best available research evidence.

The following indicators are currently part of the QOF and relate to smoking:

☐ **Asthma 3** – the percentage of patients with asthma between the ages of 14 and 19 in whom there is a record of smoking status in the previous 15 months.

☐ **Smoking 3** – the percentage of patients with any or any combination of the following conditions: coronary heart disease, stroke or transient ischemic attack, hypertension, diabetes, chronic obstructive pulmonary disease, chronic kidney disease, asthma, schizophrenia, bipolar affective disorder or other psychoses whose notes record smoking status in the previous 15 months.

☐ **Smoking 4** – the percentage of patients with any or any combination of the following conditions: coronary heart disease, stroke or transient ischemic attack, hypertension, diabetes, chronic obstructive pulmonary disease, chronic kidney disease, asthma, schizophrenia, bipolar affective disorder or other psychoses whose notes contain a record that smoking cessation advice or referral to a specialist service, where available, has been offered within the previous 15 months.

☐ **Records 23** – the percentage of patients aged over 15 whose notes record smoking status in the past 27 months.

☐ **Information 5** – the practice supports smokers in stopping smoking by a strategy which includes providing literature and offering appropriate therapy.

There is a proposed new smoking indicator, which was cleared by the NICE Advisory Committee for piloting in 2010 but no further update as been provided as yet (http://nice.org.uk/aboutnice/qof/qof.jsp):

☐ the percentage of current smokers whose notes record that referral to NHS Stop Smoking Service or pharmacotherapy with brief support has been offered in the previous 15 months.

The NHS Information Centre provides information about the QOF as well as QOF results (www.ic.nhs.uk/statistics-and-data-collections/audits-and-performance/the-quality-and-outcomes-framework).

QUALITY, INNOVATION, PRODUCTIVITY AND PREVENTION (QIPP)

The QIPP agenda, included in the NHS White Paper published in 2010,[23] aims to generate efficiency savings within the NHS of up to £20 billion by 2014/15 which will be reinvested into the health system to support the delivery of continued quality improvements. To support clinical teams and NHS organisations with QIPP, a programme identifying a number of national workstreams with the potential for large-scale savings has been established. Further information can be found at: www.dh.gov.uk/en/Healthcare/Qualityandproductivity/index.htm. The NHS Information Centre also provides a number of resources to support local implementation of QIPP (www.ic.nhs.uk/about-us/more-about-us/supporting-qipp).

The proposals for a national QIPP prevention workstream, initially focused on alcohol and tobacco, aim to ensure delivery of high impact interventions which will contribute to savings of up to £20 billion through the QIPP programme. We will focus on those high impact actions concerned with tobacco and alcohol for which strong evidence exists for the realisation of savings and efficiency gains within the current spending review. Despite evidence for the short-term return on investment for these, their provision throughout the NHS is currently inconsistent.

The detail of the workstream is being scoped but may include:

- the further development and handing over of evidence to strategic health authorities (SHAs), PCTs and local authorities
- the provision of 'best practice' briefings for commissioners for the established high impact interventions
- benchmarking of data on implementation within SHAs and PCTs to support further delivery of high impact interventions.

COMMISSIONING FOR QUALITY AND INNOVATION

High Quality Care for All published in 2008[24] included a commitment to make a proportion of providers' income conditional on quality and innovation through the CQUIN payment framework. This framework is intended to ensure that contracts with providers include clear and agreed plans for achieving higher levels of quality by allowing PCTs to link a specific modest proportion of providers' contract income to the achievement of ambitious locally agreed goals. Many areas have identified CQUIN schemes as an opportunity to include increased referral rates into local stop smoking services within acute contracts. Examples of CQUIN schemes for acute and mental health services which include smoking-related CQUIN goals, as well as locally agreed CQUIN schemes, can be accessed at: www.institute.nhs.uk/world_class_commissioning/pct_portal/cquin.html.

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23   Department of Health (2010) *Equity and Excellence: Liberating the NHS.* TSO
www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_117353
24   Department of Health (2008) *High Quality Care for All: NHS Next Stage Review final report.* DH

NHS HEALTH CHECK

The NHS Health Check is a programme for everyone between the ages of 40 and 74 which assesses their risk of heart disease, stroke, kidney disease and diabetes. Everyone receives a personal assessment, setting out their level of risk and what they can do to reduce it, including a referral to an appropriate service, e.g. stop smoking, a weight management service or preventive medication. For a simple toolkit which enables PCTs to estimate the number of interventions that will be generated by the checks, visit: http://system.improvement.nhs.uk/ImprovementSystem/ViewDocument.aspx?path= Cardiac%2fNational%2fWebsite%2fVascular+Checks%2f3rd+Learning+workshop +presentations+22.01.09%2fPCT+Vascular+Toolkit.xls.

NHS SMOKING HELPLINE

The national NHS Smoking Helpline and the Smokefree website (www.nhs.uk/smokefree) currently provide referrals to stop smoking services, mostly for smokers responding to national campaign activity.

The national NHS Smoking Helpline has also established a customer relationship management programme which can track communication with respondents who want to maintain contact with the helpline (e.g. via telephone or mail). Quitters can thereby be supported beyond their initial enquiry. Some stop smoking services may already have similar programmes in place, but others should think about how they maintain contact with users who are not referred from the national helpline. For example, a system could be set up to re-engage with unsuccessful quitters, attracting them back to the service at a later date or offering an alternative treatment.

> ### Forthcoming supportive resources
> The Department of Health (DH) communications team has been developing and is currently piloting a range of resources to support customer engagement; these will be available in 2011. More information can be found at: www.smokefree.nhs.uk/resources.

Getting the message across

There is worldwide evidence to show that effective mass media campaigns prompt quit attempts and reduce smoking prevalence. In 2010, national mass media activity was dramatically reduced because of the challenging economic situation. A new public health marketing strategy will be published in spring 2011, followed by a new tobacco control marketing strategy, which will set the direction for marketing activity over the next

three years. The public health White Paper *Healthy Lives, Healthy People*,[25] published in November 2010, emphasises that localism will be at the heart of the public health system; therefore, local activity in promoting stop smoking services is likely to become increasingly important.

Strategies for promoting local services should be supported by detailed research and based on local intelligence wherever possible. Extensive research exists at a national level (e.g. on routine and manual (R/M) groups and other audiences) which can be shared upon request with local services to avoid duplication of resources. Information can also be provided about media and channel choices, evaluation benchmarks and creative materials that can be used by local areas.

Integration with any regional and national campaigns should enhance their effectiveness, so they should also be planned in co-operation with tobacco control and communications colleagues from PCTs and local authorities, as well as with regional teams where still in place. For example, local media channels often cover large geographical areas so planning with neighbouring PCTs could also help to create cost savings.

Local marketing initiatives can add most value by:

☐ increasing the percentage of quit prospects using their local stop smoking service provider

☐ improving consumer understanding of what their local service can offer and where help is available locally

☐ generating local quit prospects for local services to help deliver against performance outcomes.

Smokefree literature, brand materials (including font, photographs and logo) and other resources, including templates for local use, can be ordered or downloaded from the Smokefree Resource Centre (www.smokefree.nhs.uk/resources).

Methods of stopping smoking

When attempting to stop smoking there are a number of methods that smokers commonly use, including:

☐ unassisted ('cold turkey')

☐ Nicotine Replacement Therapy (NRT) bought over the counter

☐ a stop smoking medicine provided on prescription

☐ a stop smoking service.

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25   DH (2010) *Healthy Lives, Healthy People: Our strategy for public health in England.* TSO.
      www.dh.gov.uk/en/Publicationsandstatisticis/Publications/PublicationsPolicyAndGuidance/DH_121941

Other methods such as hypnotherapy, Allen Carr, acupuncture and e-cigarettes are also cited by smokers but as there is not a sufficient evidence base to support their use with regards to smoking cessation they are not included in this guidance (see page 65).

Figure 2, taken from the latest Smoking Toolkit Study data,[26] shows the success rates associated with each of the most commonly used methods, including the recent discovery that over-the-counter medication has no greater effect than a smoker going unassisted. The most effective method remains a combination of stop smoking medicine and NHS support.

Figure 2: Relative success rates by route to quit

Odds ratio (relative to no aid)

Stop smoking services

Stop smoking services are now well established and deliver substantial numbers of successful four-week quitters. Services providers support around a quarter of all successful quits per annum and are a key element of the Government's overall tobacco control plan.

The primary role of stop smoking service providers is to provide a high-quality clinical smoking cessation service to their local population. Services are currently following the abrupt model, supporting a smoker who is motivated to stop to set a quit date immediately or in the near future, after which they smoke 'not a puff' (for the definition of a treated smoker, see page 111). The support programme offered by services also incorporates a combination of approved pharmacological and behavioural support.

Services should not be regarded as the main driver for reducing smoking prevalence, which is affected to a much greater degree by national policy and local tobacco control

26   www.smokinginengland.info

strategies. Stop smoking service providers should sit within an overall tobacco control programme and should form a part of wider action to reduce local smoking prevalence.[27] In the course of a year, services should aim to treat at least 5% of the local population of smokers, in line with best practice recommendations contained within NICE programme guidance for smoking cessation,[28] although many areas achieve in excess of 10%. By supporting local smokers who want to stop, they can help reduce health inequalities and have a significant long-term impact on local and national smoking prevalence.

Smokers attempting to stop without additional support have a success rate of 25% at four weeks (for carbon monoxide (CO) validated quits) and a success rate of about 35% at four weeks (for self-reported quits). Therefore, to show an effect, services must achieve success rates in excess of these.[29]

Targeting priority groups

Reducing prevalence in the general smoking population as well as among higher risk groups, such as smokers with a mental disorder (mental illness, alcohol problems and substance misuse) and pregnant smokers, is emphasised in the English national Tobacco Control Plan and the Public Health Outcomes Framework. These are therefore key priority groups. In particular, 42% of all tobacco consumption in England is by those with mental disorder,[30] while 43% of smokers under the age of 17 have emotional or conduct disorder,[31] and so addressing cessation in these two groups is crucial. Since R/M smokers are a large group within the overall smoking population, they also require targeting if reductions in general smoking prevalence are to be achieved.

Commissioners need to ensure that throughput and success rates for priority groups are monitored, aiming for a minimum throughput of smokers setting a quit date from these groups that is at least proportionate to the local smoking population and maximising and sustaining potential quits by ensuring that the most effective and well-evidenced approaches are used.

Due to their high rates of smoking, prisoners and certain black and minority ethnic (BME) communities also require proportionate targeting.

27 Department of Health (2008) *Excellence in Tobacco Control: 10 high impact changes to achieve tobacco control.* DH. www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_084847

28 NICE (2008) *Smoking cessation services in primary care, pharmacies, local authorities and workplaces, particularly for manual working groups, pregnant women and hard to reach communities.* NICE. www.nice.org.uk/PH010

29 The best estimate of the 30-day abstinence figure in untreated smokers is 18–28%. NRT with minimal behavioural support has been found to increase success rates by about 50%, giving a range of 27%–42%. Taking the lower estimate of 27% and rounding down to 25% gives an approximate minimal level of success that would be expected for smokers receiving medication and minimal behavioural support. Given the evidence that self-reported success overestimates true success by about 10%, the self-report baseline figure needs to be some 10% higher. These figures do not take account of the fact that the four-week success rates of the services allow for smoking during the first two weeks. It is not known what effect this might have; however, if anything, it would raise the baseline figure even further. Further specific research is required to inform baselines for specific smoking population groups.

30 McManus S, Meltzer H and Campion J (2010) *Cigarette Smoking and Mental Health in England: Data from the Adult Psychiatric Morbidity Survey 2007.* National Centre for Social Research. www.natcen.ac.uk/study/cigarette-smoking--mental-health

31 Green H, McGinnity A, Meltzer H et al. (2005) *Mental Health of Children and Young People in Great Britain, 2004.* ONS

Commissioners who identify communities within their localities with high rates of smokeless tobacco use may also consider these to be priority groups and look to commission services to help them to stop. There is currently a limited evidence base to suggest the most effective type of service for smokeless tobacco users and consideration also needs to be given about how clients who self-report cessation will be clinically validated. It is also important to note that clients who attend such services should not be included in data monitoring returns as the outcomes relate specifically to smoking.

Health inequality pilot

In 2010, the UKCTCS was awarded funding to carry out six health inequality pilot projects, one of which relates to smokeless tobacco users. The aim of the project is to identify the most acceptable, accessible and effective services to support smokeless tobacco users to stop. Outcomes from the project are expected in autumn 2011.

Information and intelligence

To achieve their aims, services and types of intervention need to be configured according to local needs. Understanding those needs is therefore vital, as is gauging the impact each type of service provision can have on reductions in smoking prevalence.

The key to ensuring that services are aligned with the needs of the local population is developing a local health needs assessment. The NHS Centre for Smoking Cessation and Training (NCSCT) has published a toolkit for commissioners to assist with the needs analysis process (available at: www.ncsct.co.uk/resources/downloads/NCSCT_needs_analysis_final.pdf).

Tobacco profiles, available on the London Health Observatory website, include data that can be used to illustrate the impact of services by either PCT or local authority area. As part of the English national Tobacco Control Plan, the profiles will continue to be made available and can currently be accessed at: www.lho.org.uk/LHO_Topics/Analytic_Tools/TobaccoControlProfiles/.

The profiles also include data from the Integrated Household Survey which is used to track national smoking prevalence.

Effective and efficient local data systems will support accurate recording of stop smoking service provider data which can be used to inform and improve both the local commissioning and the provision of services. This data includes information about numbers from high-risk service user groups and their cessation rates. Increasingly, areas are implementing sophisticated web-based databases which can be locally tweaked to record a range of information in addition to the mandatory data fields.

Forthcoming supportive resources

As part of its programme of work, the NCSCT CIC will be developing a stop smoking service database specification and supporting commissioners to upgrade their provider databases to this voluntary specification. Keep up to date with this project and its implementation at: www.ncsct.co.uk.

Stop smoking interventions

NICE programme guidance on smoking cessation recommends the following stop smoking interventions as being cost effective:

☐ brief interventions (see page 39)

☐ individual behavioural counselling (see page 41)

☐ group behaviour therapy (see page 42)

☐ pharmacotherapy – NRT, Zyban (bupropion) and Champix (varenicline) (see pages 52–62)

☐ self-help materials

☐ telephone counselling and helplines (see pages 43–44).

The delivery section of this guidance (Part 2) gives more detail about stop smoking interventions and specific smoking population groups (see pages 67–93). Evidence ratings are also included in the delivery section and summarised here in Tables 2 and 3 for ease of reference.

EVIDENCE RATINGS OF RECOMMENDATIONS

Every recommendation in the delivery section (Part 2) of this guidance has a rating to show the extent to which it is evidence based. This is based on the Scottish Intercollegiate Guidelines Network (SIGN) rating system,[32] an internationally recognised scale to rate research evidence. The SIGN rating system was recently adapted for smoking cessation guidance by the New Zealand Guidelines Group,[33] and the same evidence ratings are used here. These are as follows.

A	The recommendation is supported by good (strong) evidence
B	The recommendation is supported by fair (reasonable) evidence, but there may be minimal inconsistency or uncertainty
C	The recommendation is supported by expert (published) opinion only
I	There is insufficient evidence to make a recommendation
✓	Good practice point

In order to grade the evidence in this guidance, reviews of published research were conducted by members of the guidance development group. The process included identifying relevant systematic reviews and primary studies of smoking cessation interventions. Particular attention was paid to reviews conducted to inform NICE guidance and primary studies conducted in the UK, due to their relevance for English stop smoking services. Evidence gradings are updated annually in line with the guidance to take into account the findings of any new studies.

32   Scottish Intercollegiate Guidelines Network (2010) *SIGN 50: A guideline developer's handbook*.
     www.sign.ac.uk/guidelines/fulltext/50/annexb.html
33   New Zealand Ministry of Health (2007) *New Zealand Smoking Cessation Guidelines*. Ministry of Health

Table 2: Summary of evidence ratings

Section	Evidence rating
Very brief advice	A
Behavioural support	A
Intervention types	
One-to-one support	A
Couple/family support	I
Closed group support	A
Open (rolling) group support	B
Drop-in support	I

Telephone support
    Proactive
    Reactive
    Text-based
	
	A
	B
	B

Online support	B
Assessing nicotine dependence	
Quantitative approach	A
Biochemical markers	
Carbon monoxide	A
Cotinine	A
Increasing quit rates through lung function/spirometry	I
Pharmacotherapy	
Nicotine Replacement Therapy	A
Combination therapy	A
Preloading/cutting down	B
Bupropion (Zyban)	A
Varenicline (Champix)	A
Smoking populations	
Routine and manual smokers	B
Pregnancy Nicotine Replacement Therapy in pregnancy Teenage pregnancy	B C √
Smoking and mental disorder	B
Secondary care	A
Prisoners	C
Substance misuser	C
Black and minority ethnic groups	B
Children and young people Prevention and tobacco control	I B
Relapse prevention	I
Repeat service users	√

Other interventions and products that are either not recommended or are currently not evidence based are also included in the delivery section and are again summarised below.

Table 3: Effectiveness of other interventions

Some evidence of effectiveness but not recommended
Rapid smoking
Cytisine
Insufficient evidence – currently not recommended
Allen Carr
Nicobrevin
NicoBloc
St John's wort
Glucose
Lobeline
Exercise
Evidence of no effectiveness – not recommended
Hypnosis
Acupuncture
Acupressure
Laser therapy
Electrostimulation
Anxiolytics
Incentives/competitions

Delivering interventions

All interventions should adhere to the intervention quality principles which are based on previous guidance, changes in the evidence base and the latest understanding of 'best practice'. A complete list of competences has been developed by the NCSCT and is available as learning outcomes listed in the NCSCT training standard: www.ncsct.co.uk/resources/downloads/NCSCT_Training_Standard.pdf.

INTERVENTION QUALITY PRINCIPLES

☐ Interventions should be based on the current evidence base and, where applicable, follow NICE guidance, e.g. for workplace interventions.[34]

☐ Prior to treatment, clients should be informed of all available (evidence-based) treatment options both locally and nationally.

☐ Stop smoking service provision should be guided by a treatment manual clearly indicating the elements of behavioural support programmes and when and how they should be applied. This manual should follow recommended practice from evidence-based national guidelines. (An example standard treatment programme is available at: www.ncsct.co.uk/resources/downloads/NCSCT_STP_ed2.pdf.)

☐ All staff involved in delivery should have been trained to the NCSCT training standard and should obtain full NCSCT certification.

☐ All interventions should be multi-sessional, offering weekly support for at least the first four weeks following the quit date, with a total potential client contact time of at least 1.5 hours (from pre-quit preparation to four weeks after quitting). This will ensure effective monitoring, client compliance and ongoing access to medication.

☐ Smoking status at four weeks from the quit date should be biochemically verified (in a minimum of 85% of cases).

☐ Interventions should be efficiently managed with sufficient administrative support for general organisation, client contact processes and data handling. There should be sufficient administrative support to ensure that clients are contacted within a week of being made known to the stop smoking service provider and seen within two weeks.

☐ New, non-evidence-based delivery models should initially be piloted only on a small scale and should be carefully evaluated before being adopted as a significant part of local delivery (see Annex H, page 119, for an evaluation proforma).

☐ Service delivery in all settings should be objectively audited at regular intervals to ensure that the intervention being provided is of acceptable quality and duration.

Forthcoming supportive resources
In 2011, the NCSCT CIC will be developing and piloting an auditing service which, once refined, will be available as a resource that can be locally commissioned.

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34   NICE (2007) *Workplace interventions to promote smoking cessation.* NICE. www.nice.org.uk/PHI005

INTERVENTION CONTENT

Interventions should:

- ☐ provide information on the consequences of smoking and smoking cessation
- ☐ provide information on withdrawal symptoms
- ☐ facilitate barrier identification and problem solving
- ☐ facilitate relapse prevention and ways of coping with urges to smoke
- ☐ facilitate action planning and help the client to identify their relapse triggers
- ☐ facilitate goal setting, specifically the 'not a puff' rule
- ☐ measure CO or cotinine levels
- ☐ provide advice and information about medication
- ☐ assess smoking behaviour and apply diagnostic criteria such as the Heaviness of Smoking Index or the Fagerström test for nicotine dependence (FTND)
- ☐ assess current readiness and ability to quit
- ☐ assess past history of quit attempts
- ☐ offer appropriate written materials
- ☐ prompt commitment from the client, specifically the 'not a puff' rule
- ☐ assess client satisfaction with the intervention provided.

Measuring client satisfaction

In 2008, a pilot project was conducted to evaluate a tool for measuring levels of client satisfaction with stop smoking service providers. The full report of this project and the validated tool can be found at: www.scsrn.org/department_of_health_projects.html.

Training for stop smoking advisers

As stated in the quality principles, interventions should only be delivered by advisers who have been trained to NCSCT training standards and achieved NCSCT certification.

NHS Centre for Smoking Cessation and Training

The NCSCT was set up in April 2009 and is being funded by DH until 2012. The NCSCT is tasked to develop evidence-based national training standards for smoking cessation, competence-based training programmes and professional development systems for the stop smoking workforce. The intention behind this development is that anyone working for an NHS-commissioned stop smoking service provider will be able to prove to themselves, their employer and the public that they have the necessary knowledge and skills to deliver effective smoking cessation interventions. For commissioners of stop

smoking services, ensuring that practitioners are fully NCSCT certified offers a measure of quality assurance previously unavailable to them.

The NCSCT's comprehensive online training and assessment programme focuses on knowledge and practice (Stage 1) and has been accessed by over 2,000 practitioners since its release in September 2010. On passing the assessment linked to this training programme, individuals will be eligible for NCSCT Stage 1 certification. Full NCSCT certification follows on passing the NCSCT Stage 2 (skills) assessment which will be available online in 2011.

The NCSCT also offers two-day training courses on behavioural support for smoking cessation to those service providers who face the greatest challenges in terms of high levels of deprivation, service performance and high smoking prevalence. These courses have been developed and piloted throughout 2010 and will be rolled out over the next couple of years. A train-the-trainers course is also being developed so that the content of the NCSCT training courses can be cascaded to a local level.

Two speciality training modules focusing on smoking cessation in pregnancy and on smokers with mental health problems will also be available in 2011. The NCSCT is evaluating the impact of its training programmes and is engaged in a series of research projects investigating behavioural support for smoking cessation. More information on the NCSCT and various resources for practitioners, managers and commissioners is available on the website (www.ncsct.co.uk).

NCSCT Community Interest Company

The NCSCT CIC has been commissioned to continue the development and implementation of important specific, scoped national projects during the transitional year. These are referred to throughout this document.

Efficacy and intervention mix

Meeting the needs of an individual requires an understanding of their lifestyle and personal preferences. It is therefore important to provide a choice of interventions. All options, however, need to be offered to smokers accompanied by supporting information regarding the relative chances of success of each intervention type (e.g. group, one-to-one or telephone support) at local and national levels. In addition, as all smokers should be given the optimum chance of success in any given quit attempt, NRT, Champix (varenicline) and Zyban (bupropion) should all be made widely available in combination with intensive behavioural support as a first-line treatment (where clinically appropriate).

Figure 3: Effectiveness of pharmacotherapy and support options

The relative impact of a variety of evidence-based stop smoking interventions and pharmacotherapies upon four-week quit rates.

Four-week quit rates	No medication	Mono NRT	Combination NRT	Bupropion	Varenicline
No support	16%	25%	36%	28%	37%
Individual behavioural support	22%	37%	50%	39%	52%
Closed group behavioural support	32%	50%	71%	55%	74%

Source: *Cochrane Database of Systematic Reviews*[35]

35   West R and Aveyard P, internal correspondence for DH.

BALANCING REACH AND EFFICACY OF INTERVENTIONS

Ideally, stop smoking service providers should combine interventions that are appropriate to the needs, preferences and diversity of their local smoking population, while being particularly mindful of reaching those with health and social inequalities. There is evidence to show an inverse relationship between numbers treated and success rates with a drive for high numbers resulting in lower success rates. Therefore, commissioners will need to balance the need for widely accessible services against the need for high efficacy rates. Some interventions, such as online or telephone support, reach high volumes of smokers but may be less intensive and therefore less effective. Interventions such as closed groups (see page 42) are highly effective and should form part of the overall service delivery but will need sustained, effective local promotion to ensure throughput. Supporting other settings which provide smoking cessation such as primary care, pharmacies and dental settings can expand overall capacity and increase the number of those quitting.

OFFERING MORE FLEXIBLE SUPPORT TO REACH MORE SMOKERS

As identified in the English national Tobacco Control Plan, while the abrupt model currently provided by stop smoking services is recognised as the most effective method of stopping it is also evident from the numbers accessing these services that not all smokers feel they can, or want to, stop in this way. However, it is possible to offer alternative, more flexible support methods. In response, the NCSCT CIC has been commissioned by DH to pilot and evaluate a new Routes to Quit (RTQ) programme. An overview of this model is provided in Annex D, pages 113–114.

> ### Forthcoming supportive resources
>
> As the RTQ programme is still in the piloting phase, it is not yet possible to provide any recommendations for its adoption locally on a wider scale. All of the pilots are being fully evaluated and the pilot outcomes will be used to develop commissioner/ provider guidance and resources as appropriate.

Service models

Traditionally each area has funded a core stop smoking service that provides a wide range of functions in addition to the delivery of support to smokers. Recent changes, including the commissioner and provider split and the emergence of Payments by Results (PbR), have in some areas resulted in adaptations of this model.

It is important to note that smoking cessation interventions delivered by advisers for whom this is not their main job – e.g. in GP practices, pharmacies and dental practices – are in general less effective than interventions delivered by staff specifically employed

to work in smoking cessation who frequently deliver stop smoking support. However, settings such as GP practices, pharmacies and dental surgeries remain a valuable resource, often providing clients with greater choice and flexibility, since they are often available in places and open at times where and when specialist provision may be unavailable. Accordingly, there may be a local circumstance where an NHS Stop Smoking Service might wish to provide a service in one of these settings, either by placing a member of staff in the setting, or through training a member of the setting's staff.

It is also important to consider the wider functions that are required to ensure a locally co-ordinated and cohesive approach to the delivery of high-quality, evidence-based stop smoking interventions. These include:

- [ ] development and maintenance of local referral networks
- [ ] training of providers, including regular update training and continuing professional development opportunities
- [ ] co-ordination and management of local marketing campaigns and communications as well as national events such as No Smoking Day
- [ ] co-ordination and management of quarterly data collections, including for higher-risk groups' access, exception reporting and auditing
- [ ] management of local referrals and allocation to providers
- [ ] membership and representation within local tobacco control alliances.

PAYMENT BY RESULTS

PbR was first introduced in 2003 and is a payment per patient outcomes method that replaces other funding methods such as block contracts. PbR gives greater transparency in NHS funding, as organisations are reimbursed based upon the care people receive (measured as the outcome achieved, known as the currency) and aims to improve the quality of services provided and broaden client choice. Since April 2010, a tariff for the provision of stop smoking interventions has been piloted in the West Midlands to test the feasibility of this approach. As the pilot has shown this is viable, a national tariff for stop smoking services is being piloted from April 2011, to which local areas have been invited to take part. There are variable tariffs available to ensure no increase in health inequalities, by incentivising more highly the groups whom it is most important to reach and treat. Following refinement of the tariff over 2011/12, the aim is to then offer implementation nationally from April 2012 onwards. Interested commissioners should contact emma.croghan@dh.gsi.gov.uk in the first instance for more information.

Establishing smoking status

There are a number of well-established biochemical methods for establishing smoking status in individuals attempting to quit (see pages 47–51). The most cost-effective and least invasive of these is the measurement of expired air CO. Since self-reported smoking status can be unreliable, CO validation rates are important markers of data quality.

The 2010/11 guidance update recommended that services should aim for a minimum biochemical validation rate of 85% (of all reported four-week quits). Although biochemical validation rates have increased since 2007/08, April 2009 to March 2010 data indicates that, on average, services are achieving biochemical validation rates of around 69% with a wide variation in rates at PCT level.[36] There is therefore some way to go before reaching the recommended level.

Commissioners play a key role in ensuring that providers have the capacity and capability to comply with CO monitoring requirements (under contracts and Service Level Agreements).

In turn, providers have responsibility for implementing and providing evidence of effective quality systems for CO or cotinine level monitoring.

Measuring success

Four-week quit smoking rates are the local measure to reflect smoking prevalence as set out in the *Operating Framework for the NHS in England 2011/12*.[37] They provide a useful performance measure for stop smoking service providers and a means of tracking service performance against local operating plans.

The use of the four-week point as a measure of clinical outcome (stop smoking success) has been questioned, but if the quality of smoking status data at four weeks is good (and is supported by high rates of CO validation) then longer-term success rates can be calculated with a high degree of accuracy. This is because relapse rates for smoking are predictable and well documented in the research literature.

Where resources allow, longer-term follow-up data, e.g. at 12 weeks and 52 weeks, can provide a further check of efficacy, especially for sub-populations or specific pilot projects. In general, however, following up service users over longer periods of time (such as 52 weeks) can become very resource-intensive, as many of them will have changed their address or contact details. Stop smoking service providers are therefore not required to supply this level of data – but they need to ensure that sufficient resources

36   NHS Information Centre (2010) *Statistics on NHS Stop Smoking Services: England, April 2009 to March 2010*. NHS IC. www.ic.nhs.uk/statistics-and-data-collections/health-and-lifestyles/nhs-stop-smoking-services/statistics-on-nhs-stop-smoking-services-england-april-2009--march-2010

37   Department of Health (2010) *The Operating Framework for the NHS in England 2011/12*. DH. www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_122738

are in place to complete four-week follow-ups (validated wherever possible) as these provide essential monitoring data.

Commissioners need to ensure that contracts with service providers include clear criteria for delivery and reporting requirements (with deadlines for data return). Providers that fail to return data within the prearranged deadlines should be made aware that payments will not be made for late data. Commissioners should determine the level of payment for in-house support according to the time and duration of interventions given, as well as team inputs for data handling. The same principles should also be included in any contracts with third party or subcontracted providers.

PUBLIC HEALTH OUTCOMES FRAMEWORK

Proposals for a Public Health Outcomes Framework are currently subject to consultation (www.dh.gov.uk/en/Consultations/Liveconsultations/DH_122962). Proposed public health indicators include three relating to smoking;

☐ smoking prevalence in adults (over 18)

☐ maternal smoking prevalence

☐ smoking rate of people with serious mental disorder.

The consultation closes on 31 March 2011.

Quality principles for financial practice

Commissioners entering into contracts with service providers need to guard against the possibility of fraudulent claims for reimbursement. They should therefore be aware of the following quality principles.

☐ When setting up provider contracts, procedures and data processing instructions (including deadlines for data submission) should be verified with providers both verbally and in writing. It should also be made clear that deviation from specifications laid out in the contract is not permitted.

☐ Commissioners should refer to local NHS standing financial instructions for guidance on procurement and contracting of services. In addition, commissioners should seek guidance from their local procurement team/expert to ensure that they adopt a consistent approach to contracting arrangements.

☐ Providers should be required to keep all relevant records for a minimum of two years to allow for auditing (www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4131747).

☐ Service Level Agreements and local enhanced service contracts should stipulate that providers may not subcontract service provision to other parties, unless agreed with the commissioner.

☐ To safeguard commissioners against the possibility of fraudulent payment claims, all claim forms submitted by providers should include the following declaration, which should be signed and dated by the claimant:

'I claim payment for the stop smoking services that I have provided which are shown above. I confirm that the information given on this form is true and complete. I understand that if I provide false or misleading information I may be liable to prosecution or civil proceedings. I understand that the information on this form may be provided to the Counter Fraud and Security Management Service, a division of the NHS Business Services Authority for the purpose of verification of this claim and the preventing, detecting and investigation of fraud.'

☐ If the commissioner has reasonable grounds to suspect that fraud has been committed, then they should immediately refer details to their local counter-fraud specialist, based at their local health body. Alternatively, they can report the matter in confidence to the NHS Fraud and Corruption Reporting Line on 0800 028 4060.

A checklist for commissioners can be found at Annex A (pages 100–103) and a checklist for providers is at Annex B (pages 104–106).

PART 2: DELIVERING SERVICES

This section aims to provide an overview of the latest evidence base that supports and informs the delivery of stop smoking interventions. It also offers practical recommendations for stop smoking service providers. A checklist for providers can be found in Annex B, page 104.

Every recommendation in this section of the guidance has a rating to show the extent to which it is evidence based. This is based on the Scottish Intercollegiate Guidelines Network (SIGN)[38] rating system, an internationally recognised scale to rate research evidence. The SIGN rating system was recently adapted for smoking cessation guidance by the New Zealand Guidelines Group,[39] and the same evidence ratings are used here. These are as follows.

A	The recommendation is supported by good (strong) evidence
B	The recommendation is supported by fair (reasonable) evidence, but there may be minimal inconsistency or uncertainty
C	The recommendation is supported by expert (published) opinion only
I	There is insufficient evidence to make a recommendation
✓	Good practice point

In order to grade the evidence in this guidance, reviews of published research were conducted by members of the guidance development group. The process included identifying relevant systematic reviews and primary studies of smoking cessation interventions. Particular attention was paid to reviews conducted to inform National Institute for Health and Clinical Excellence (NICE) guidance and primary studies

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38   Scottish Intercollegiate Guidelines Network (2010) *SIGN 50: A guideline developer's handbook.*
     www.sign.ac.uk/guidelines/fulltext/50/annexb.html
39   New Zealand Ministry of Health (2007) *New Zealand Smoking Cessation Guidelines.* Ministry of Health

conducted in the UK, due to their relevance for English stop smoking services. Evidence gradings are updated annually in line with the guidance to take into account the findings of any new studies.

CONTENTS

Brief interventions and very brief advice

Evidence rating: **A**

There are very few healthcare professionals who do not treat conditions caused by or exacerbated by smoking. Helping these patients to stop smoking is often the most effective and cost-effective of all the interventions they receive. Despite this, however, rates of intervention by healthcare professionals remain low.

Simple advice from a physician can have a small but significant effect on smoking cessation – more so than Nicotine Replacement Therapy (NRT) alone.[40] Advice and/or counselling given by nurses also significantly increase the likelihood of successfully quitting.[41]

Brief interventions are aimed at motivating smokers to quit and supporting them during the attempt. Current NICE guidance describes these interventions as lasting 10 minutes. However, in the UK, appointments with a hospital consultant typically last 15–20 minutes, while those with a GP last 10 minutes. In such a context, it is not possible to spend 5–10 minutes discussing smoking when this is not the primary focus of the consultation.

Since giving stop smoking advice need only take as long as 30 seconds, all health and social care workers, as well as those working for partner organisations such as children's centres, the fire service and workplaces, should be encouraged to systematically deliver very brief advice to all smokers at every opportunity.

Example script

'In this [*insert setting – i.e. practice, pharmacy, workplace, etc.*] it is our policy to offer every smoker a referral to our local stop smoking service provider, who can offer you your best chance of stopping. Are you happy for me to do that for you now?'

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40   Stead LF, Bergson G and Lancaster T (2008) 'Physician advice for smoking cessation.' *Cochrane Database of Systematic Reviews* 2008(2):CD000165

41   Rice VH and Stead LF (2008) 'Nursing interventions for smoking cessation.' *Cochrane Database of Systematic Reviews* 2008(1):CD001188

MAXIMISING REFERRALS

☐ Formal referral systems will provide a process for referrers to follow and can support analysis of referral information.

☐ People are more likely to refer if the referral process and any associated paperwork/electronic programs are simple and easy to use.

☐ Treatment outcomes should be routinely fed back to referrers (as they would expect from any other clinical service).

> **Forthcoming supportive resources**
>
> The Department of Health (DH) Communications team is currently piloting a range of communication materials that can be used by stop smoking advisers to build relationships with GPs locally. Materials and results from these pilots will be published in 2011 on the Smokefree Resource Centre website (http://smokefree.nhs.uk/resources/).

Stop smoking interventions

Evidence has shown that a combination of behavioural support from a stop smoking adviser plus pharmacotherapy (see page 52) can increase a smoker's chances of stopping by up to four times.[42] Stop smoking support can be delivered in a number of ways and it is important that smokers are offered a range of support options so that they can choose the type of intervention that is right for them. All interventions share common properties (such as behavioural support, structure and the offer of approved pharmacotherapy) and they all involve multiple sessions. There is a clear dose–response relationship with successful outcomes – the more heavily dependent a smoker is, the greater the level of support they will require.

BEHAVIOURAL SUPPORT

Evidence rating: **A**

Behavioural support consists of advice, discussion and exercises provided face to face (individually or in groups). It can also be delivered by telephone. It aims to make a quit attempt successful by:

☐ helping clients escape from or cope with urges to smoke and withdrawal symptoms

☐ maximising the motivation to remain abstinent and achieve the goal of permanent cessation

☐ boosting self-confidence

42　Ferguson J, Bauld L, Chesterman J and Judge K (2005) 'The English smoking treatment services: one year outcomes.' *Addiction* 100(Suppl. 2):59–69

☐ maximising self-control

☐ optimising the use of pharmacotherapy.

INTERVENTION CHOICE

A client may change the type of support they use during a quit attempt or they may choose a combination of interventions.

> **For the purpose of data capturing, the intervention type is the one chosen at the point the client sets a quit date and consents to treatment.**

Intervention types

The following pages contain pragmatic definitions of the intervention types described in the quarterly dataset. They are not meant to constrain practitioners but reflect current delivery methods and the language used to describe the services being delivered at local level. All figures quoted are from the NHS Information Centre (IC) April 2009 to March 2010 experimental statistics. They can be accessed via the IC website (www.ic.nhs.uk/).[43]

ONE-TO-ONE SUPPORT

Evidence rating: **A**

This is an intervention between a single stop smoking adviser and a single smoker, at a specified time and place. It is usually delivered face to face.

The average self-reported quit rate in England for one-to-one, face-to-face support is 49% (n = 289,981), contributing 77.5% of the total number of successful self-reported four-week quitters in 2009/10.

COUPLE/FAMILY SUPPORT

Evidence rating: **I**

This is usually a face-to-face intervention between a stop smoking adviser, a smoker and up to a maximum of six family members or friends.

The average self-reported quit rate in England for couple/family support is 53% (n = 3,318), contributing 0.9% of the total number of successful self-reported four-week quitters in 2009/10.

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43   NHS IC (2010) *Statistics on NHS Stop Smoking Services: England, April 2009 to March 2010.* NHS IC. www.ic.nhs.uk/statistics-and-data-collections/health-and-lifestyles/nhs-stop-smoking-services/statistics-on-nhs-stop-smoking-services-england-april-2009--march-2010

CLOSED GROUP SUPPORT

Evidence rating: **A**

This is a face-to-face intervention facilitated by one or more stop smoking advisers, with a number of smokers, at a specified time and place. For example, a group may be held once a week, over a specific number of weeks, for example every Tuesday evening from 7.00pm to 8.00pm for six to seven weeks (see the intervention quality principles on page 28 for the minimum recommended client contact time). To account for diminishing client returns, a minimum of eight members is recommended.

The average self-reported quit rate in England for closed group support is 61% (n = 10,257), contributing 2.7% of the total number of successful self-reported four-week quitters in 2009/10.

OPEN (ROLLING) GROUP SUPPORT

Evidence rating: **B**

This is a face-to-face intervention facilitated by one or more stop smoking advisers, with a number of smokers who are at different stages of their quit attempt, at a specified time and place. A recent evaluation of open (rolling) group support (offered on a drop-in basis) was conducted in 2009/10[44] and focused on stop smoking services in Liverpool and Knowsley. The study found that at four weeks after their original quit date, 49% of clients self-reported that they had quit smoking, with 31% confirmed by carbon monoxide (CO) validation. At one year after their original quit date, 9% of clients self-reported that they had quit smoking, with 8% continuously abstinent since their quit date and 6% confirmed by CO validation.

The average self-reported quit rate in England for open (rolling) group support is 53% (n = 17,812), contributing 4.8% of the total number of successful self-reported four-week quitters in 2009/10.

DROP-IN SUPPORT

Evidence rating: **I**

This involves face-to-face intervention provided at a specified venue or selection of venues at an unallocated time (although it could be a specified time slot, e.g. between 10.00am and 12.00pm). The service is provided by an individual stop smoking adviser with an individual smoker within the wider confines of an open access service.

Once the smoker has set a quit date and consents to treatment it is important that they are offered and encouraged to receive weekly support sessions for behavioural support,

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44   Bauld L, Ferguson J, Jones C, McEwen A, Sumnall H and Woolfall K (2010) *Evaluation of a Drop-in Rolling Group Model for Smoking Cessation: Final report.* Roy Castle Lung Foundation

CO monitoring and to check compliance with medication. While venues and appointment times can be flexible, the client must be advised to attend regularly to get the maximum benefit.

The average self-reported quit rate in England for drop-in support is 48% (n = 38,293), contributing 10.2% of the total number of successful self-reported four-week quitters in 2009/10.

TELEPHONE SUPPORT

There are a number of varieties of telephone support, including support that is proactive, reactive and text based.

Proactive telephone support
Evidence rating: Ⓐ

This intervention should be delivered by stop smoking advisers and should follow the same specification as one-to-one support. It should begin and end with a face-to-face session for CO validation, and access to stop smoking pharmacotherapy on prescription should be available throughout the treatment episode.

The average self-reported quit rate in England for telephone support is 64% (n = 5,787), contributing 1.5% of the total number of successful self-reported four-week quitters in 2009/10.

All proactive telephone interventions should have a total potential contact time with the client of a **minimum** of 1.5 hours' duration (from pre-quit preparation to the four-week post-quit period). This is to ensure regular monitoring, client compliance and continual access to pharmacotherapy. A minimum of 10 interventions in a 12-week period is recommended,[45] with a minimum of 10 minutes per intervention, apart from the first session, which will need to be longer to allow for assessment and planning.

Reactive telephone support
Evidence rating: Ⓑ

Ongoing support following the four-week quit date may be provided over the telephone as part of a relapse prevention strategy. Only stop smoking advisers should deliver this intervention.

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45   Zhu SH, Anderson CM, Tedeschi GJ, Rosbrook B, Johnson CE, Byrd M et al. (2002) 'Evidence of real-world effectiveness of a telephone quitline for smokers'. *New England Journal of Medicine* 347(14):1087–93

Text-based telephone support

Evidence rating: **B**

A recent Cochrane review into mobile telephone-based interventions for smoking cessation concluded that the current evidence shows no effect of such interventions on long-term outcome. While short-term results (six weeks) were more promising, the review concluded that more rigorous studies of the long-term effects of mobile telephone-based interventions are needed.[46]

SMOKEFREE TOGETHER PLUS TRIAL

DH is funding research to find out whether more people could stop smoking if intensive support and a supply of free nicotine replacement products were offered through the NHS Smokefree Together programme.

Called the Proactive or Reactive Telephone Smoking Cessation Support (PORTSSS) trial, the 18-month study involves academics at Nottingham, Bath, Glasgow and UCL universities and began in early 2009.[47] The trial is looking at whether the telephone helpline's success rate could be improved by using scheduled calls to deliver support similar to that provided in face-to-face interventions and by mailing participants vouchers for nicotine patches. Recruitment to the trial has finished and results are expected in late 2011.

ONLINE SUPPORT

Evidence rating: **B**

A rapid review of the evidence in this area concluded that online support for smoking cessation can be acceptable to users and is of superior efficacy to other wide-reach interventions and of similar efficacy to face-to-face interventions.[48] A number of other systematic reviews on electronic aids for cessation have reached similar conclusions.

However, more research is needed to determine how effective purpose-built, interactive, web-based stop smoking programmes are compared with websites that present simple advice on quitting smoking.

Wherever possible, providers of online smoking cessation interventions need to replicate standard outcome measures. This would mean developing innovative ways of biochemically verifying self-reported abstinence at the four-week mark.

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46 Whittaker R, Borland R, Bullen C, Lin RB, McRobbie H and Rodgers A (2009) 'Mobile phone-based interventions for smoking cessation.' *Cochrane Database of Systematic Reviews* 2009(4):CD006611

47 Coleman T, McEwen A, Bauld L, Ferguson J, Lorgelly P and Lewis S (2009) 'Protocol for the Proactive or Reactive Telephone Smoking Cessation Support (PORTSSS) trial.' *Trials*, 10:26

48 Shahab L and McEwen A (2009) 'On-line support for smoking cessation: a systematic review of the literature.' *Addiction* 104(11): 1792–804

Figure 4: Intervention pathways

Is the main intervention delivered face to face?

No ← → **Yes**

Is the intervention provided by a stop smoking adviser over the telephone?

How many people are involved in the intervention (including the stop smoking adviser)?

No ← → **Yes**

More than 2 ← → **2 people**

Is the intervention web-based?

Telephone support

Yes

Online support

Are the clients related or friends?

Specific appointment time given?

No → **Yes**

No → **Yes**

Does the group meet for a specific number of weeks only?

Drop-in   *1:1*

No → **Yes**

How many people are involved in the intervention (including the stop smoking adviser)?

Rolling group   *Closed group*

8+ ← → **3–7**

Couple/family

Delivering interventions

All interventions should be delivered by advisers trained to NHS Centre for Smoking Cessation and Training (NCSCT) standards (see page 29) and follow the intervention quality principles on page 28.

Currently services follow the abrupt model within which a smoker sets a quit date with a trained adviser and smokes 'not a puff' after that date. The NCSCT has developed a Standard Treatment Programme for the delivery of the abrupt model (see www.ncsct.co.uk/resources/downloads/NCSCT_STP_v4.pdf).

The new Routes to Quit programme

A new approach to stop smoking provision called Routes to Quit (RTQ), which aims to broaden the support options available to smokers, is in the process of being piloted by the NCSCT Community Interest Company (CIC). An overview of the RTQ approach is provided in Annex D, page 113.

Assessing nicotine dependence

QUANTITATIVE APPROACH

Evidence rating: **A**

Tailoring stop smoking support for an individual starts with assessing their dependence on nicotine, as this will have a bearing on the severity of the withdrawal symptoms they may experience and therefore the intensity of support they require. This assessment may also be used to indicate the most appropriate medication. The Fagerström test for nicotine dependence (FTND)[49] provides a quantitative measure and is the most widely used. It consists of six questions. The higher a client scores, the greater their nicotine dependency.

The Fagerström test for nicotine dependence

1. How soon after you wake up do you smoke your first cigarette?

☐ After 60 minutes (0)
☐ 31–60 minutes (1)
☐ 6–30 minutes (2)
☐ Within 5 minutes (3)

2. Do you find it difficult to refrain from smoking in places where it is forbidden?

☐ No (0)
☐ Yes (1)

3. Which cigarette would you hate most to give up?

☐ The first in the morning (1)
☐ Any other (0)

4. How many cigarettes per day do you smoke?

☐ 10 or less (0)
☐ 11–20 (1)
☐ 21–30 (2)
☐ 31 or more (3)

5. Do you smoke more frequently during the first hours after awakening than during the rest of the day?

☐ No (0)
☐ Yes (1)

6. Do you smoke even if you are so ill that you are in bed most of the day?

☐ No (0)
☐ Yes (1)

Your score was:

Your level of dependence on nicotine is:

0–2 = very low dependence
3–4 = low dependence
5 = medium dependence

6–7 = high dependence
8–10 = very high dependence

49   Heatherton TF, Kozlowski LT, Frecker RC and Fagerström KO (1991) 'The Fagerström Test for Nicotine Dependence: A revision of the Fagerström Tolerance Questionnaire.' *British Journal of Addiction* 86(9):1119–27

Heaviness of smoking index

The two most important indicators of dependence, however, are considered to be: 'How soon after you wake up do you smoke your first cigarette?' and 'How many cigarettes per day do you smoke?' It is therefore deemed adequate to use just these two questions as a shortened version of the FTND.

Shortened FTND

Q1. How soon after you wake up do you smoke your first cigarette? (circle one response)		Q2. How many cigarettes per day do you usually smoke?	
Within 5 minutes	3	10 or less	0
6–30 minutes	2	11–20	1
31–60 minutes	1	21–30	2
After 60 minutes	0	31 or more	3

Cigarette consumption alone is not a good indicator of dependence, as it does not take into account the different ways people smoke their cigarettes. This may be particularly true for smokers who cut down the number they smoke but continue to get the same amount of nicotine from their reduced number of cigarettes by taking deeper and more frequent puffs, smoking more of each cigarette or blocking the vent holes.

OBJECTIVE APPROACH

Objective biochemical validation methods such as cotinine assessment can also be used to assess nicotine dependency by measuring the quantity of nicotine metabolites present. CO testing measures smoke intake and provides an immediate and cheaper alternative to cotinine testing (see page 51).

Biochemical markers

There are a number of well-established biochemical methods for establishing smoking status in individuals attempting to quit. The most cost-effective and least invasive of these is to measure of the amount of CO in expired air.

CARBON MONOXIDE

Evidence rating: **A**

As self-reported smoking status can be unreliable, CO verification rates are an important marker of data quality. CO testing should be carried out on all adult smokers, to provide as a minimum both a baseline (pre-quit) level and a four-week validation (post-quit) level. CO testing is quick to carry out, is non-invasive and provides a cost-effective means of validating the smoking status of a significant number of clients. It should be noted, however, that clients who give a reading of under 10ppm (parts per million) at the four-week follow-up point but have self-reported smoking should not be counted as quitters.

There is considerable anecdotal evidence to suggest that CO testing can be highly motivating for clients, as their readings decrease over a relatively short period if they quit successfully. When introducing the CO monitor to clients, they should be made aware of its motivational benefits and given an explanation as to what it can and cannot measure. To achieve as accurate a reading as possible, clients should be asked to hold their breath for 20 seconds (15 seconds minimum) before blowing into the CO monitor.

Some clients may not be able to physically complete CO testing due to the inability to hold their breath for 15 or more seconds. It is expected that a minimum of 85% of self-reported four-week quitters undertake expired CO validation. Stop smoking service data from 2009/10 indicates that on average services are achieving CO validation rates of around 69%, so there is some way to go towards achieving recommended levels.[50]

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50   NHS IC (2010) *Statistics on NHS Stop Smoking Services: England, April 2009 to March 2010*. NHS IC. www.ic.nhs.uk/statistics-and-data-collections/health-and-lifestyles/nhs-stop-smoking-services/statistics-on-nhs-stop-smoking-services-england-april-2009--march-2010

Calculation for the percentage of CO verified clients from all quit dates set

Number of treated smokers who self-report continuous abstinence from smoking from day 14 to the four-week follow-up point, and who have a CO reading of less than 10ppm:

Example: all treated smokers

Treated smokers	Self-reported four-week quitters	No. of self-reported four-week quitters CO verified	% of all treated smokers CO verified
100	50	35	35/100 = 35%

Calculation for the percentage of self-reported four-week quitters who have been CO verified:

Number of treated smokers who self-report continuous abstinence from smoking from day 14 to the four-week follow-up point, and who have a CO reading of less than 10ppm:

Example: all self-reported four-week quitters

Treated smokers	Self-reported four-week quitters	No. of self-reported four-week quitters CO verified	% of all four-week quitters CO verified
100	50	35	35/50 = 70%

Monitoring carbon monoxide levels effectively

A survey of CO verification within stop smoking services showed that provision varies greatly.[51] From the results of the survey the following recommendations were made:

☐ All stop smoking advisers need to have access to a CO monitor at every consultation. This should be supplied and properly maintained by the stop smoking service provider. Systems should be in place to ensure that CO monitors are calibrated according to the manufacturer's instructions and checked regularly thereafter.

☐ In line with the NCSCT training standards, all training should emphasise the importance of verifying levels at the four-week post-quit point.

☐ Stop smoking services should have a written protocol for CO monitoring. This protocol should emphasise the importance of obtaining CO verification of self-reports as a part of follow-up procedures. There will also need to be a written protocol detailing infection control and management issues. The protocol should clearly state when monitors need calibrating, who should do it, how it should be done and how regularly.

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51   May S and McEwen A (2008) *Stop Smoking Service Provider CO-verification Project.* Smoking Cessation Service Research Network

☐ Payment should only be made to providers under contractual arrangements if a full monitoring form is completed and submitted to the commissioner. The stipulation that follow-up at four weeks verified by CO monitoring is to be conducted with all self-reported quitters should be written into the contract. If clients do not attend their appointment, they should be followed up by telephone, text or email (three times at different times of day), and asked and encouraged to attend for CO verification.

Sample carbon monoxide monitor protocol (infection control)

Hand sanitiser gel

Hand sanitiser gel should be used before and after using the machine.

Cardboard tubes

Single-use only; change for every patient/client. Ask the patient to put their own tube into the machine and remove it after use.

Plastic adaptor/T-piece

The adaptor contains a one-way valve that prevents inhalation from the monitor. Changing adaptors depends on the manufacturers' guidance:

Micromedical: The adaptor should be discarded and replaced every six months.

Bedfont (Pico): The adaptor should be discarded and replaced monthly.

BMC-2000: The adaptor should be changed quarterly – unless usage is heavy, in which case it should be changed monthly.

Usage guidance

Fewer than 50 uses per month: change quarterly.
Between 51 and 200 uses per month: change bi-monthly.
More than 200 uses per month: change monthly.

Contact your nearest stop smoking service office for supplies of adaptors/T-pieces.

Cleaning

The monitors should be wiped down using non-alcohol wipes, ideally at the end of every session.

Calibrating

All monitors should be calibrated every six months. Contact your nearest stop smoking service office to arrange calibration.

Stop smoking service offices

[Insert service details]

Adapted with kind permission from guidance produced by NHS County Durham and NHS Darlington.

Carbon monoxide poisoning

A client may self-report that they are not smoking but, on testing, exhibit abnormally high expired CO levels. In such cases, they should be given advice about possible CO poisoning.

The Health Protection Agency has developed a leaflet for stop smoking advisers to support them to identify and advise clients who may be at risk of CO poisoning. Please note that the launch of this will be in late spring 2011 and communication will be sent directly to stop smoking providers.

COTININE
Evidence rating: **A**

Cotinine is a metabolite of nicotine that can be detected in the blood, urine or saliva. CO monitoring is currently the most cost-effective method of validating four-week quits, due to the relatively high cost of other biochemical monitoring methods. For specific projects or groups such as pregnant women, however, using either urinary or salivary cotinine samples may be an appropriate validation method, as the results will be more accurate and consistent over time. It is also a recommended validation route for telephone or online service provision. Cotinine testing can be done by various laboratories via a posted sample for less than £15 per sample.

INCREASING QUIT RATES THROUGH LUNG FUNCTION/SPIROMETRY
Evidence rating: **I**

Lung function and lung age measures provide biomedical feedback for smokers and are increasingly used to recruit smokers into stop smoking services and improve quit rates.

A Cochrane review concluded that there is a lack of evidence to support lung function/spirometry as methods for increasing quit rates. Despite the lack of data and the heterogeneity of the trials, the authors concluded that: 'Current evidence of lower quality does not, however, support the hypothesis that biomedical risk assessment increases smoking cessation in comparison with standard treatment.'[52]

None of these studies included identification and explanation of an individual's lung age. A recent study of lung age calculations and the provision of this information to smokers showed no statistically significant impact on recruitment to stop smoking services, but it did show an impact on individual cessation activity.[53] More research is needed in this area.

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52   Bize R, Burnand B, Mueller Y, Rège Walther M and Cornuz J (2009) 'Biomedical risk assessment as an aid for smoking cessation.' *Cochrane Database of Systematic Reviews*, 2009(2):CD004705
53   Parkes G, Greenhalgh T, Griffin M and Dent R (2008) 'Effect on smoking quit rate of telling patients their lung age: the Step2quit randomised controlled trial.' *British Medical Journal* 336:598

Pharmacotherapy

Stop smoking medicines currently approved by NICE are Nicotine Replacement Therapy (NRT), bupropion (Zyban) and varenicline (Champix).

Commissioners, service leads and local prescribing leads should note that medicines recommended by NICE are extremely cost-effective and that cost-effectiveness studies are published on the NICE website. The numbers needed to treat (NNTs) in order to achieve a long-term quitter compare very favourably with other interventions routinely delivered in primary care. Therefore, all current and any new NICE-recommended products should be made available to smokers as appropriate.

Current experimental statistics from stop smoking services indicate that varenicline was the most successful smoking cessation aid between April 2009 and March 2010. Of those who used varenicline 60% successfully quit, compared with 50% who received bupropion only and 47% who received NRT.[54]

BEST PRACTICE POINTS

☐ All stop smoking pharmacotherapies should be offered on prescription to any smoker who is motivated to quit. Many areas use patient group directions (PGDs) and/or voucher systems to make this possible.

☐ All pharmacotherapy should remain available for at least the duration recommended by the product specification (see Table 5 on pages 54–56) and patients should be able to access approved stop smoking medicines simply and easily.

☐ Pharmacotherapies should be available for more than one treatment episode. For example, if a client using varenicline relapses during a quit attempt, provided they are adequately motivated to attempt to stop again (see Time between treatment episodes, page 110) they should be able to begin a new course of varenicline if this is assessed to be the most appropriate medicine for that client.

☐ Where a client relapses during a quit attempt and does not wish to begin a new treatment episode (see Treatment episode, page 111) no further pharmacotherapy should be provided until such time that the client is motivated to make another quit attempt.

☐ In the case of NRT, local prescribing arrangements should consider the need to balance the total number and cost of prescription charges incurred by the client and the need for structured and frequent face-to-face contact.

☐ The relative impact of evidence-based stop smoking interventions and pharmacotherapies on four-week quit rates is shown on page 31 of this document.

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54 NHS IC (2010) *Statistics on NHS Stop Smoking Services: England, April 2009 to March 2010*. NHS IC. www.ic.nhs.uk/statistics-and-data-collections/health-and-lifestyles/nhs-stop-smoking-services/statistics-on-nhs-stop-smoking-services-england-april-2009--march-2010

EXPERIMENTAL STATISTICS

Table 4: Number (percentage) setting a quit date and successful quitters, by type of pharmacotherapy received, April 2009 to March 2010

	Number (%) setting a quit date	Number (%) of successful quitters	Percentage who successfully quit
England total	757,537	373,954	49%
Number who received NRT only	493,459 (65%)	229,587 (61%)	47%
Number who received bupropion (Zyban) only	9,509 (1%)	4,761 (1%)	50%
Number who received varenicline (Champix) only	175,380 (23%)	105,925 (28%)	60%
Number who received both NRT and bupropion (Zyban)	852 (0%)	387 (0%)	45%
Number who received both NRT and varenicline (Champix)	8,022 (1%)	3,119 (1%)	39%
Number who did not receive any pharmacotherapies	39,222 (5%)	19,376 (5%)	49%
Number where treatment option not known	31,093 (4%)	10,799 (3%)	35%

Source: adapted from lifestyle statistics, NHS IC, 2010

The full summary of product characteristics (SPC) for the following products can be found on the electronic medications compendium website (http://emc.medicines.org.uk).

Table 5: Product specifications

Brand	Product	Treatment duration
NiQuitin CQ	24hr patch 21mg 14mg 7mg	Adults (18+): 6 weeks 2 weeks 2 weeks **Adolescents (12–18)** As adult
	Lozenge 4mg 2mg	**Adults (18+)** 12 weeks **Adolescents (12–18)** 12 weeks maximum
	Minis Mint Lozenge 4mg 1.5mg	**Adults (18+)** Continue use for up to 6 weeks, then gradually reduce lozenge use. When daily use is 1–2 lozenges, use should be stopped **Adolescents (12 – 18)** As adult
	Gum 4mg 2mg	**Adults (18+)** Use for up to 3 months and then gradually reduce gum use. When daily use is 1–2 pieces, use should be stopped **Adolescents (12–18)** 12 weeks maximum
Nicotinell	24hr patch 21mg 14mg 7mg	**Adults (18+)** 3 months **Adolescents (12–18)** 12 weeks maximum
	Lozenge 2mg 1mg	**Adults (18+)** Withdraw treatment gradually after 3 months. Discontinue use when dose is reduced to 1–2 lozenges per day Maximum period of treatment: 6 months **Adolescents (12–18)** Not to be used in under 18s without recommendation from a physician

Table 5: Product specifications *continued*

Brand	Product	Treatment duration
Nicotinell	**Gum** 4mg 2mg	**Adults (18+)** Reduce dose gradually after 3 months. Discontinue use when dose has been reduced to 1–2 pieces per day **Adolescents (12–18)** 12 weeks maximum
Nicorette	**Invisi patch** 25mg 15mg 10mg	**Adults (18+)** 8 weeks 2 weeks 2 weeks **Adolescents (12–18)** The dose and method of use are as for adults, as data is limited in this age group. The recommended treatment duration is 12 weeks. If longer treatment is required, advice should be sought from a healthcare professional
	16hr patch 15mg 10mg 5mg	**Adults (18+)** 8 weeks 2 weeks 2 weeks **Adolescents (12–18)** The dose and method of use are as for adults, as data is limited in this age group. The recommended treatment duration is 12 weeks. If longer treatment is required, advice should be sought from a healthcare professional
	Nasal spray	**Adult (18+)** 12 weeks For 8 weeks' use as required within maximum daily use guidelines. Reduce dose to 0 over following 4 weeks **Adolescents (12–18)** 12 weeks maximum
	Inhalator	**Adults (18+)** 12 weeks **Adolescents (12–18)** 12 weeks maximum

Table 5: Product specifications *continued*

Brand	Product	Treatment duration
Nicorette	Gum 4mg 2mg	**Adults (18+)** Reduce dose gradually after 3 months. When daily use is 1–2 pieces, use should be stopped **Adolescents (12–18)** 12 weeks maximum. Use for 8 weeks and then gradually reduce the dose over a 4-week period
	Microtab	**Adults (18+)** Gradually reduce after 3 months **Adolescents (12–18)** 12 weeks maximum. Use for 8 weeks and then gradually reduce the dose over a 4-week period
	Combi patch and gum 16hr patch (15mg) + 2mg gum	**Adults (18+)** Initial treatment – 12 weeks: Use 1 patch per day for 12 weeks as well as gum ad libitum (max. 15 pieces per day). Gradually wean off gum after week 6. 9 months maximum of gum use recommended **Adolescents (12–18)** 12 weeks maximum. Weeks 1–8: 1 patch per day and gum ad libitum (max. 15 pieces per day). Weeks 9–12: gradually reduce gum until daily use is 1–2 pieces and then discontinue use
Pfizer	Champix (varenicline)	**Adults (18+)** 12 weeks + 12 weeks – refer to NICE **Adolescents (12–18)** Contraindicated for under-18s
GlaxoSmith Kline	Zyban (bupropion)	**Adults (18+)** 8–9 weeks **Adolescents (12–18)** Contraindicated for under-18s

FACTORS AFFECTING THE METABOLISM OF NICOTINE

Certain factors, including gender, pregnancy and oral contraception, can affect the rate at which a smoker metabolises nicotine. Furthermore, smoking induces certain liver enzymes which metabolise medications including some antidepressants, antipsychotics, benzodiazepines and opiates. This will have implications for the choice and strength of pharmacotherapy required as well as reduction of doses of such medications immediately following cessation.

Fast metabolism of nicotine from NRT products means that some quitters will need higher doses to control their cravings and other withdrawal symptoms. This is especially relevant to pregnant smokers, who may need higher doses of NRT but who may be concerned or cautious about using it. Where appropriate, stop smoking advisers should advise pregnant women to use NRT in line with the SPC (making sure that the maximum recommended dosage is not exceeded) but should be especially careful about this client group under-dosing or stopping the treatment early.

Table 6: Nicotine metabolism factors

Factor	Effect
Gender	Women metabolise nicotine **15%** faster than men
Pregnancy	Pregnant women metabolise nicotine up to **60%** faster[55]
Oral contraceptive	Women using an oral contraceptive metabolise nicotine **40%** faster[56]

NICOTINE REPLACEMENT THERAPY

Evidence rating: **Ⓐ**

NRT is safe and effective. When provided on prescription and used in isolation (without additional behavioural support) it approximately doubles the chances of long-term abstinence.[57,58] There are six different types of NRT: patch (24hr and 16hr), gum, lozenge, microtab, nasal spray and inhalator. There is no evidence to suggest that one type of NRT is significantly more effective in practice than another, although further academic analysis has found that abstinence was significantly higher for tablets or lozenges

55   Dempsey D, Jacob P and Benowitz NL (2002) 'Accelerated metabolism of nicotine and cotinine in pregnant smokers'. *Journal of Pharmacology and Experimental Therapeutics* 301(2):594–8
56   Benowitz NL, Lessov-Schlagger CN, Swan GE and Jacob P (2006) 'Female sex and oral contraceptive use accelerate nicotine metabolism'. *Clinical Pharmacology and Therapeutics* 79:480–8
57   Stead LF, Perera R, Bullen C, Mant D and Lancaster T (2008) 'Nicotine replacement therapy for smoking cessation'. *Cochrane Database of Systematic Reviews* 2008(1):CD000146
58   Silagy C, Lancaster T, Stead L, Mant D and Fowler G (2004) 'Nicotine replacement therapy for smoking cessation'. *Cochrane Database of Systematic Reviews* 2004(3):CD000146

compared with gum and that nasal spray was slightly more effective than gum (see Table 7), so product selection should be guided by client preference.[59]

Table 7: Effectiveness of different forms of Nicotine Replacement Therapy

Form of replacement	RR	95% CI	Trials, n
Any form	1.58	1.50–1.66	
Nasal spray	2.02	1.49–3.73	4
Tablets/lozenges	2.00	1.63–2.45	6
Inhalers	1.90	1.36–2.67	4
Patches	1.66	1.53–1.81	41
Gum	1.43	1.33–1.53	53

RR: risk ratio of abstinence relative to control

Source: Stead et al. (2008)[60]

Nicotine Replacement Therapy with special population groups

Following a review by the Medicines and Healthcare products Regulatory Agency (MHRA) in 2005, NRT can now be used by adolescents aged 12 and over, pregnant women and people with cardiovascular disease. Full details of the report can be found on the MHRA website (www.mhra.gov.uk/home/groups/pla/documents/websiteresources/con2023239.pdf).

NRT is also effective for people with mental illness.[61] NRT can double cessation rates and lower self-reported depression in depressed smokers.[62] Nicotine replacement is effective for people with schizophrenia, although not as effective as it is for the general population.[63] There is some evidence that the rapid nicotine delivery of a nasal spray is most successful[64] and cessation rates are likely to be enhanced when a fast-acting method of delivery is combined with nicotine patches.

59 Dempsey D, Jacob P and Benowitz NL (2002) 'Accelerated metabolism of nicotine and cotinine in pregnant smokers'. *Journal of Pharmacology and Experimental Therapeutics* 301(2):594–8.

60 Stead LF, Perera R, Bullen C, Mant D and Lancaster T (2008) 'Nicotine replacement therapy for smoking cessation'. *Cochrane Database of Systematic Reviews* 2008(1):CD000146

61 Campion J, Checinski K and Nurse J (2008) 'Review of smoking cessation treatments for people with mental illness'. *Advances in Psychiatric Treatment* 14:208–16

62 Kinnunen T, Doherty K Militello FS and Garvey AJ (1996) 'Depression and smoking cessation: characteristics of depressed smokers and effects of nicotine replacement'. *Journal of Consulting and Clinical Psychology* 64(4):791–8

63 Williams JM and Hughes JR (2003) 'Addressing tobacco use in mental health and addiction settings'. *Psychiatric Annals* 33:457–66

64 Williams JM, Gandhi KK, Karavidas MK, Steinberg ML, Lu SE and Foulds J (2008) 'Open-label study of craving in smokers with schizophrenia using nicotine nasal spray compared to nicotine patch'. *Journal of Dual Diagnosis* 4(4):355–76

COMBINATION THERAPY

Evidence rating: **A**

A combination of NRT products (combination therapy) has been shown to have an advantage over using just one product.[65,66] It is also considered cost-effective.[67] Stop smoking service providers should therefore routinely offer clients combination therapy whenever appropriate.[68]

PRELOADING/CUTTING DOWN

Evidence rating: **B**

There is some evidence that using NRT for a short period before a quit attempt (preloading) results in higher cessation rates.[69,70]

Using NRT while cutting down on cigarettes can be helpful for smokers who find stopping in one step too difficult. Systematic reviews found that NRT while smoking significantly increases the likelihood of long-term abstinence[71] and the odds of cessation.[72] However, there is currently insufficient evidence about the most effective medicinal reduction method before quitting, as well as the long-term benefits of interventions intended to help smokers reduce but not stop smoking.

The following products are all licensed for gradual reduction (further details can be found in the SPC available at: www.medicines.org.uk/EMC/default.aspx):

Nicorette:

2mg and 4mg gum
Inhalator
Microtabs

NiQuitin:

2mg and 4mg lozenge
2mg and 4mg gum
1.5mg and 4mg minis

65 Silagy, Lancaster T, Stead L, Mant D and Fowler G (2004) 'Nicotine replacement therapy for smoking cessation'. *Cochrane Database of Systematic Reviews* 2004(3):CD000146

66 Stead LF, Perera R, Bullen C, Mant D and Lancaster T (2008) 'Nicotine replacement therapy for smoking cessation'. *Cochrane Database of Systematic Reviews* 2008(1):CD000146

67 Stapleton J, Watson L, Spirling LI, Smith R, Milbrandt A, Ratcliffe M and Sutherland G (2007) 'Varenicline in the routine treatment of tobacco dependence: a pre-post comparison with nicotine replacement therapy and an evaluation in those with mental illness'. *Addiction* 103(1):146–54.

68 NICE (2008) *Smoking Cessation Services in Primary Care, Pharmacies, Local Authorities and Workplaces, Particularly for Manual Working Groups, Pregnant Women and Hard to Reach Communities*. NICE. www.nice.org.uk/PH010

69 Silagy C, Lancaster T, Stead L, Mant D and Fowler G (2004) 'Nicotine replacement therapy for smoking cessation'. *Cochrane Database of Systematic Reviews* 2004(3):CD000146

70 Lindson N, Aveyard P and Hughes JR (2010) 'Reduction versus abrupt cessation in smokers who want to quit'. *Cochrane Database of Systematic Reviews* 2010(3):CD008033

71 Wang D, Connock M, Barton P, Fry-Smith A, Aveyard P and Moore D (2008) '"Cut down to quit" with nicotine replacement therapies in smoking cessation: a systematic review of effectiveness and economic analysis'. *Health Technology Assessment* 12(2):iii–iv, ix–xi, 1–135

72 Stead L and Lancaster T (2007) 'Interventions to reduce harm from continued tobacco use'. *Cochrane Database of Systematic Reviews* 2007(3):CD005231

BUPROPION (ZYBAN)

Evidence rating: **A**

Bupropion is a stop smoking treatment that has antidepressant properties that can almost double the chances of long-term abstinence.[73] It is a prescription-only medicine and should not be used in combination with any other stop smoking medicines.[74] There is no evidence to show whether bupropion is less or more effective than NRT, although three randomised controlled trials (RCTs) have shown it to be less effective than varenicline on long-term abstinence.[75]

Cautions and adverse effects

Although a safe medicine, bupropion does have a number of contraindications, drug interactions, interactions with clinical conditions (e.g. reduces seizure threshold) and cautions that should be taken into account before it is recommended to a client. It has been associated with increased anxiety and depression and is contraindicated in those with depression or suicidal ideation.[76] It is also associated with seizures and is contraindicated in bipolar affective disorder and epilepsy. It should not be prescribed with drugs that increase risk of seizures, such as tricyclic antidepressants and some antipsychotics. However, bupropion almost triples cessation rates at six months in those with schizophrenia.[77]

If patients taking bupropion develop suicidal thoughts, agitation or depressed mood, or display any changes in behaviour which are of concern to the doctor, patient, family or caregiver, they should stop taking bupropian and contact their doctor immediately.

73 Hughes J, Stead L and Lancaster T (2007) 'Antidepressants for smoking cessation.' *Cochrane Database of Systematic Reviews* 2007(1):CD000031

74 NICE (2008) *Smoking Cessation Services in Primary Care, Pharmacies, Local Authorities and Workplaces, Particularly for Manual Working Groups, Pregnant Women and Hard to Reach Communities.* NICE.www.nice.org.uk/PH010

75 Cahill K, Stead L and Lancaster T (2011) 'Nicotine receptor partial agonists for smoking cessation.' *Cochrane Database of Systematic Reviews* 2011(2):CD006103

76 MHRA guidance, last updated January 2011, available at: www.mhra.gov.uk/Safetyinformation/ Generalsafetyinformationandadvice/Product-specificinformationandadvice/Product-specificinformationandadvice%E2%80%93 M%E2%80%93T/Stopsmokingtreatments/index.htm

77 Tsoi DT, Porwal M and Webster AC (2010) 'Efficacy and safety of bupropion for smoking cessation and eduction in schizophrenia: systematic review and meta-analysis.' *British Journal of Psychiatry* 196:346–3

VARENICLINE (CHAMPIX)

Evidence rating: **A**

A prescription-only medicine, varenicline has been shown to increase the chances of long-term abstinence two-to-three fold.[78] Three RCTs have shown it to be more effective than bupropion.[79]

Cautions and adverse effects

A 2007 Cochrane review reported that the most common adverse effect was mild to moderate levels of nausea, which subsided over time.[80]

The MHRA has highlighted that depression, suicidal thoughts, suicide attempts and completed suicides have been reported in people taking varenicline who have no pre-existing psychiatric conditions and advises care if prescribing to those with a history of psychiatric illness.[81]

If patients taking varenicline develop suicidal thoughts, agitation or depressed mood, or display any changes in behaviour which are of concern to the doctor, patient, family or caregiver, they should stop taking varenicline and contact their doctor immediately.

Depression, suicide ideation and suicide attempts

A recent cohort study[82] found no clear evidence to show that varenicline was associated with an increased risk of depression or suicidal thoughts.

78 Cahill K, Stead L and Lancaster T (2011) 'Nicotine receptor partial agonists for smoking cessation.' *Cochrane Database of Systematic Reviews* 2011(2):CD006103

79 Ibid.

80 Ibid.

81 MHRA guidance, last updated January 2011, available at: www.mhra.gov.uk/Safetyinformation/ Generalsafetyinformationandadvice/Product-specificinformationandadvice/Product-specificinformationandadvice%E2%80%93 M%E2%80%93T/Stopsmokingtreatments/index.htm

82 Gunnell D, Irvine D, Wise L, Davies C and Martin RM (2009) 'Varenicline and suicidal behaviour: a cohort study based on data from the General Practice Research Database.' *British Medical Journal* 339:b3805

The following appears within the SPC for varenicline (Champix):

Changes in behaviour or thinking, anxiety, psychosis, mood swings, aggressive behaviour, depression, suicidal ideation and behaviour and suicide attempts have been reported in patients attempting to quit smoking with Champix in the post-marketing experience. Not all patients had stopped smoking at the time of onset of symptoms and not all patients had known pre-existing psychiatric illness. Clinicians should be aware of the possible emergence of significant depressive symptomatology in patients undergoing a smoking cessation attempt, and should advise patients accordingly. Champix should be discontinued immediately if agitation, depressed mood or changes in behaviour or thinking that are of concern for the doctor, the patient, family or caregivers are observed, or if the patient develops suicidal ideation or suicidal behaviour. In many post-marketing cases, resolution of symptoms after discontinuation of varenicline was reported, although in some cases the symptoms persisted; therefore, ongoing follow up should be provided until symptoms resolve.

Depressed mood, rarely including suicidal ideation and suicide attempt, may be a symptom of nicotine withdrawal. In addition, smoking cessation, with or without pharmacotherapy, has been associated with exacerbation of underlying psychiatric illness (e.g. depression).

The safety and efficacy of Champix in patients with serious psychiatric illness such as schizophrenia, bipolar affective disorder and major depressive disorder has not been established. Care should be taken with patients with a history of psychiatric illness and patients should be advised accordingly.

All services should be aware of this advice and have a local care pathway in place.

WORKING WITH THE PHARMACEUTICAL INDUSTRY

In February 2008, DH published *Best Practice Guidance on Joint Working Between the NHS and the Pharmaceutical Industry and Other Relevant Commercial Organisations*. This publication shows NHS staff how to maintain the balance between partnership and ethical working. The guidance is available on the DH website at:

www.dh.gov.uk/en/Publicationsandstatistics/Publications/
PublicationsPolicyAndGuidance/DH_082370

EFFECT OF CESSATION ON MEDICINES

Cigarette smoke stimulates a liver enzyme responsible for metabolising some medicines in the body, which means that the metabolism of these medicines increases, resulting in lower blood levels of such medicines and hence a lower therapeutic effect. Some of these medications have a narrow therapeutic window, meaning too small a dose will be ineffective and too much will be toxic. If the dose of the medicine is titrated while the person is smoking, then when the person stops smoking it could result in toxicity[83,84] or a significant increase in side effects from their medicine. Medicines affected in this way include some mental health medications (see page 77–78) as well as theophylline, insulin, paracetamol, propranolol, tamoxifen, verapamil and warfarin-R.

It is therefore crucial that advisers establish at the first session which medicines (if any) clients are taking before they start taking a smoking cessation medicine, and that they liaise with prescribers as appropriate to ensure that any required alterations to the dosage are made by the prescriber and are being monitored. If the person subsequently relapses and starts smoking again, then the prescriber should again be informed, as drug metabolism will increase and the dosage will need a further review.

For more information refer to the MHRA's *Drug Safety Update*.[85]

Other products and their evidence base

There are many other products and interventions, some of which are marketed as aids to stopping smoking. These are listed in Tables 8, 9 and 10 (adapted from *New Zealand Smoking Cessation Guidelines*),[86] along with their current evidence base.

83   Campion J, Checinski K and Nurse J (2008) 'Review of smoking cessation treatments for people with mental illness.' *Advances in Psychiatric Treatment* 14:208–16.
84   Taylor D, Paton C and Kapur S (2009) *Maudsley prescribing guidelines*, 10th edition. Informa
85   MHRA (2009) 'Smoking and smoking cessation: clinically significant interactions with commonly used medicines.' *Drug Safety Update* 3:9. www.mhra.gov.uk/Safetyinformation/DrugSafetyUpdate/CON087705
86   New Zealand Ministry of Health (2007) *New Zealand Smoking Cessation Guidelines*. Ministry of Health

Table 8: Some evidence of effectiveness, but not recommended

Product	Evidence
Rapid smoking	RCT evidence suggests that this can improve six-month abstinence rates. However, due to the possible harmful effects, i.e. increased heart rate, systolic blood pressure and carboxyhaemoglobin, this intervention should not be used.[87,88]
Cytisine	There are dated and limited studies which indicate that this plant alkaloid may be a useful stop smoking aid. Further research is required, however, before it can be recommended for use.[89,90,91,92]

87 United States Department of Health and Human Services (2000) *Treating Tobacco Use and Dependence*. USDHHS, Agency for Healthcare Research and Quality

88 Hajek P and Stead LF (2004) 'Aversive smoking for smoking cessation.' *Cochrane Database of Systematic Reviews* 2004(3):CD000546

89 Paun D and Franze J (1968) 'Breaking the smoking habit using cytisin containing "Tabex" tablets.' *Deutsche Gesundheitswesen* 23(44):2088–91

90 Scharfenberg G, Benndorf S and Kempe G (1971) 'Cytisine (Tabex) as a pharmaceutical aid in stopping smoking.' *Deutsche Gesundheitswesen* 26(10):463–5

91 Schmidt F (1974) 'Medical support of nicotine withdrawal. Report on a double blind trial in over 5000 smokers' (author's transl). *Munchener Medizinische Wochwnschrift* 116(11):557–64

92 Ostrovskaya TP (1994) 'Clinical trial of antinicotine drug-containing films.' *Biomedical Engineering* 28(3):168–71

Table 9: Insufficient evidence – currently not recommended

There is insufficient evidence on the following interventions/products to draw any conclusions.

Product	Evidence
Allen Carr	RCT data required to assess true efficacy.
Nicobrevin	Two trials suggest a potential effect on short-term outcomes but as both studies had problems with their methodologies, the results should be considered with caution. No evidence to show long-term effect on abstinence.
NicoBloc	One small, well-designed, randomised, double-blind placebo-controlled trial showed no benefit over placebo.[93]
St John's wort	Due to its potential anti-depressant properties, some believed St John's wort may also prove a useful aid to stopping smoking. However, two small studies suggest that a dose of 600mg per day has no effect on smoking cessation.[94,95]
Glucose	A positive effect on abstinence rates shown when used in combination with NRT or bupropion.[96,97] Contraindicated for diabetics.
Lobeline	A plant-based partial nicotine agonist, structurally similar to nicotine. There are a number of controlled trials that report on short-term outcome but none showed the benefit of lobeline over the control.
Exercise	There is some evidence to suggest that exercise can have a positive effect on relieving tobacco withdrawal symptoms and short-term abstinence rates.[98,99,100,101] Furthermore, exercise may increase self-esteem and assist in managing post-quit weight gain.[102] A systematic review of 12 studies that compared exercise with a passive condition found positive effects on cigarette cravings, withdrawal symptoms and smoking behaviour. This suggests that exercise can be a useful aid to managing cigarette cravings and withdrawal symptoms.[103]

93   Gariti P, Alterman AI, Lynch KG, Kampman K and Whittingham T (2004) 'Adding a nicotine blocking agent to cigarette tapering.' *Journal of Substance Abuse Treatment* 27(1):17–25

94   Becker B, Bock B and Carmona-Barros R (2003) 'St John's Wort oral spray reduces withdrawal symptoms (POS4-82).' *Society for Research on Nicotine and Tobacco* (9th Annual Meeting February 2003)

95   Barnes J, Barber N, Wheatley D and Williamson EM (2006) 'A pilot, randomised, open, uncontrolled, clinical study of two dosages of St John's Wort (Hypericum perforatum) herb extract (LI-160) as an aid to motivational/behavioural support in smoking cessation.' *Planta Medica* 72(4):378–82

96   West R and Willis N (1998) 'Double-blind placebo controlled trial of dextrose tablets and nicotine patch in smoking cessation.' *Psychopharmacology* 136(2):201–4

97   West R, Courts S, Beharry S, May S and Hajek P (1999) 'Acute effects of glucose tablets on desire to smoke.' *Psychopharmacology* 147(3):319–21

98   Ussher MH, West R, Doshi R and Sampuran AK (2006) 'Acute effect of isometric exercise on desire to smoke and tobacco withdrawal symptoms.' *Human Psychopharmacology* 21(1):39–46

99   Ussher MH, West R, McEwen A, Taylor A and Steptoe A (2003) 'Efficacy of exercise counselling as an aid for smoking cessation: a randomized controlled trial.' *Addiction* 98(4):523–32

100 Bock BC, Marcus BH, King TK, Borelli B and Robert MR (1999) 'Exercise effects on withdrawal and mood among women attempting smoking cessation.' *Addictive Behaviors* 24(3):399–410

101 Daniel J, Cropley M, Ussher MH and West R (2004) 'Acute effects of a short bout of moderate versus light intensity exercise versus inactivity on tobacco withdrawal symptoms in sedentary smokers.' *Psychopharmacology* 174(3):320–6

102 Ussher MH (2005) 'Exercise interventions for smoking cessation.' *Cochrane Database of Systematic Reviews* 2005(1):CD000295

103 Taylor AH, Ussher MH and Faulkner G (2007) 'The acute effects of exercise on cigarette cravings, withdrawal symptoms, affect and smoking behaviour: a systematic review.' *Addiction* 102, 534–43

Table 10: Evidence of no effectiveness – not recommended

Product	Evidence
Hypnosis	Hypnosis does not improve long-term abstinence rates.[104]
Acupuncture, acupressure, laser therapy and electrostimulation	These do not improve long-term abstinence rates over placebo effect.[105,106]
Anxiolytics (e.g. diazepam)	There is no evidence that such drugs are effective in stopping smoking.[107]
Incentives/ competitions	Incentives have been shown to increase participation rates although this does not necessarily propel more people into successfully stop smoking. Evidence shows that incentives/competitions do not increase long-term abstinence rates.[108]

NOVEL NICOTINE DELIVERY DEVICES (INCLUDING E-CIGARETTES)

The MHRA published a consultation to seek views on the regulation of all nicotine-containing products in 2010. The outcomes of the consultation were published in March 2011 (www.dh.gov.uk/mhra). More information on the consultation can be found at: www.mhra.gov.uk/Publications/consultations/Medicinesconsultations/MLXs/CON065617.

Currently novel nicotine delivery devices such as e-cigarettes are not regulated by the MHRA.

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104 Abbot NC, Stead LF, White AR and Barnes J (2010) 'Hypnotherapy for smoking cessation.' *Cochrane Database of Systematic Reviews* 2010(10):CD001008

105 White AR, Rampes H and Campbell JL (2011) 'Acupuncture and related interventions for smoking cessation.' *Cochrane Database of Systematic Reviews* 2011(1):CD000009

106 United States Department of Health and Human Services (2000) *Treating Tobacco Use and Dependence.* USDHHS, Agency for Healthcare Research and Quality

107 Stead LF, Bergson G and Lancaster T (2008) 'Physician advice for smoking cessation.' *Cochrane Database of Systematic Reviews* 2008(2):CD000165

108 Hey K and Perera R (2008) 'Competitions and incentives for smoking cessation.' *Cochrane Database of Systematic Reviews* 2008(3):CD000437

Priority population groups

Smoking cessation interventions tailored for people from disadvantaged groups may be slightly more effective than generic interventions aimed at these groups. However, it is unlikely that tailored interventions alone have a significant impact on the social gradient in smoking prevalence. It is important to ensure that it is easy for people from these groups to access stop smoking service providers and that they are encouraged to use them.[109]

Routine and manual smokers

Evidence rating: **B**

Historically the decline in smoking rates among higher-income groups has been much greater than among lower-income groups, and smoking rates are highest in the routine and manual (R/M) group, lower socio-economic groups and certain minority and vulnerable groups.

R/M smokers form the largest group of smokers among the general population and, as stated, have higher smoking rates than other occupational groups in the general population (31% in R/M men and 27% in R/M women compared with 21% and 20% respectively in the general population).[110] R/M smokers are therefore a key target group for stop smoking services. To track the throughput and success rates of R/M quitters, services need to routinely and accurately record socio-economic status.

RESEARCH INSIGHTS INTO GROUPS OF DISADVANTAGED AND ROUTINE AND MANUAL SMOKERS

Evidence from recent research provides some insight into smoking and quitting behaviour among R/M groups.

Smoking is strongly associated with social disadvantage, and higher levels of prevalence and tobacco addiction are often found in the most disadvantaged areas.[111]

Smokers from disadvantaged communities, however, are just as likely to want to quit as affluent smokers.[112] The lack of a significant decline in prevalence in this group may be partially due to the barriers that affect service use or access but may also relate to issues associated with addiction and wider life circumstances. A number of studies have

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109 NICE (2008) *Smoking Cessation Services in Primary Care, Pharmacies, Local Authorities and Workplaces, Particularly for Manual Working Groups, Pregnant Women and Hard to Reach Communities*. NICE. www.nice.org.uk/PH010

110 Office for National Statistics (2010) *Smoking and Drinking Among Adults, 2008*. ONS.

111 Jarvis MJ and Wardle J (1999) 'Social patterning of individual behaviours: the case of cigarette smoking' in Marmot M and Wilkinson RG (eds) *Social Determinants of Health*. Oxford University Press

112 Office for National Statistics (2002) *Smoking Related Behaviour and Attitudes 2002*. ONS. www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsStatistics/DH_4050240

been undertaken with smokers to identify these types of barriers and explore how they can be overcome. These have been summarised in a recent review for NICE.[113]

The review highlights a study by Roddy and colleagues[114] who conducted focus groups with 39 socio-economically deprived smokers in Nottingham. These were used to explore how the smokers viewed stop smoking services and aimed to identify specific barriers and motivations to improve access to stop smoking services. The study concluded that these smokers displayed a fear of being judged and fear of failure, and demonstrated a lack of correct knowledge about stop smoking services and the medicines available. It was recommended that services be promoted in a personalised, non-judgemental and flexible manner.

Another study conducted by Wiltshire and colleagues[115] involved interviews with 100 smokers from disadvantaged communities in Edinburgh to investigate their perceptions of smoking and past experiences of quit attempts. The study found that smokers from such communities lack the motivation to access stop smoking services unless they feel they will get help not only with their nicotine addiction but also with the wider life circumstances, routines and stressors linked to their smoking habits.

More recent work by Kotz and West,[116] using data from the Smoking Toolkit Study, shows that smokers in more deprived groups are just as likely as those in higher groups to try to stop and use aids to stop smoking, but there is a strong gradient across socio-economic groups in success rates. Those in the lowest group are half as likely to succeed compared with those in the highest.

Higher levels of nicotine addiction may be one factor explaining this. Kotz and West's study confirms previous reports of higher nicotine dependence scores in smokers from more deprived groups, and nicotine dependence can predict failure of attempts to stop smoking. However, other factors have a role to play. Smokers in more deprived groups will have more smokers in their immediate circle of family, co-workers and friends. They may also have higher levels of stress, which can play a role in relapse.[117] Other recent research with stop smoking service clients has found that encouraging smokers to adhere to treatment (to keep attending appointments and to use pharmacotherapy correctly and for long enough) may be particularly helpful in supporting more disadvantaged smokers to quit.[118]

113 Bauld L, McNeill A, Hackshaw L and Murray R (2007) *Services in Disadvantaged Areas: Evidence summary – smoking cessation.* NICE. www.nice.org.uk/guidance/index.jsp?action=download&o=37495

114 Roddy E, Antoniak M, Britton J, Molyneux A and Lewis S (2006) 'Barriers and motivators to gaining access to smoking cessation services amongst deprived smokers – a qualitative study.' *BMC Health Services Research* 6:147

115 Wiltshire S, Bancroft A, Parry O and Amos A (2003) '"I came back here and started smoking again": perceptions and experiences of quitting smoking among disadvantaged smokers.' *Health Education Research* 18(3):292–303

116 Kotz D and West R (2009) 'Explaining the social gradient in smoking cessation: it's not in the trying, it's in the succeeding.' *Tobacco Control* 18:43–6

117 Ibid.

118 Hiscock R, Judge K and Bauld L (2011) 'Social inequalities in quitting: what factors mediate the relationship between socioeconomic position and smoking cessation?' *Journal of Public Health* 33(1):39–47

Forthcoming supportive resources

The DH Communications team is currently working on an insight guide to share research findings more widely. This will be available in 2011 at: http://smokefree.nhs.uk/resources.

WORKING WITH ROUTINE AND MANUAL EMPLOYERS

Table 11 below gives an overview of the occupations commonly associated with the R/M population.

Table 11: R/M occupations

Male R/M occupations	Female R/M occupations
Transport and haulage (363,000 are HGV drivers)	Sales and retail (884,000)
Construction (169,000 labourers, 139,000 in construction trades)	Carers (581,000)
Manufacturing (139,000 in metal work and maintenance)	Cleaners/domestic staff (549,000)
Sales and retail (233,000)	Educational assistants (295,000)
Other blue-collar trades (174,000 van drivers, 154,000 carpenters)	Kitchen/catering (288,000 assistants, 113,000 chefs/cooks)
Security (156,000 security guards)	Receptionists (220,000)
	Hairdressers (109,000)

As R/M smokers are concentrated in relatively few industry sectors, a range of resources has been developed to support local workplace stop smoking advisers.

These resources include case studies, advice on targeting, template presentations and leaflets and are available at: http://smokefree.nhs.uk/resources/employers/.

Pregnancy

Evidence rating: **B**

The impact of smoking during pregnancy on maternal and fetal health is significant not only in terms of morbidity and mortality but also in terms of healthcare costs. Evidence has demonstrated that babies born to women who smoke during pregnancy are around 40% more likely to die within the first four weeks of life than babies born to non-smokers.[119]

The adverse effects of smoking during pregnancy can result in the increased risk of miscarriage, preterm birth, low birth weight and stillbirth. It is associated with sudden infant death syndrome, childhood respiratory illnesses and attention deficit hyperactivity disorder[120,121,122] and behavioural problems in offspring.[123,124] The total annual cost to the NHS of smoking during pregnancy is estimated to range between £8.1 million and £64 million for treating the resulting problems for mothers and between £12 million and £23.5 million for treating infants (aged 0–12 months).[125] Estimates have placed the costs of a complicated delivery by a smoker at 66% higher than that of a non-smoker.[126] Smoking in pregnancy, therefore, remains a key public health concern, particularly since early intervention (i.e. stopping at three months' gestation) significantly improves outcomes.[127]

Between April 2009 and March 2010, 20,808 pregnant women set a quit date with NHS Stop Smoking Services, with a success rate of 45%. A total of 58% were CO validated as a percentage of successful quitters (self-reported).[128]

However, self-reporting has been found to be less reliable in pregnant smokers than in the general population due to social pressure and stigma, and biochemically validated prevalence rates among this population have been found to be significantly higher than self-reported prevalence rates.[129] Therefore every effort should be made to biochemically validate and record smoking status in pregnancy.

119 Gardosi J, Beamish N, Francis A, Williams M, Sahota M, Tonks A, McGeown P and Hart M (2007) *Stillbirth and Infant Mortality, West Midlands 1997-2005: Trends, factors, inequalities.* West Midlands Perinatal Institute

120 Royal College of Physicians (RCP) (1992) *Smoking and the Young: A report of a working party.* RCP

121 Charlton A (1996) 'Children and smoking: the family circle.' *British Medical Bulletin* 52, 90–107

122 Bastra L, Hadders-Algra M and Neeleman J (2003) 'Effect of antenatal exposure to maternal smoking on behavioural problems and academic achievement in childhood: prospective evidence from a Dutch birth cohort.' *Early Human Development* 75:21–33

123 Wakschlag LS, Pickett KE, Cook E Jr, Benowitz NL and Leventhal BL (2002) 'Maternal smoking during pregnancy and severe antisocial behavior in offspring: a review.' *American Journal of Public Health* 92(6):966–74

124 Button TM, Thapar A and McGuffin P (2005) 'Relationship between antisocial behaviour, attention-deficit hyperactivity disorder and maternal prenatal smoking.' *British Journal of Psychiatry* 187:155–60

125 Godfrey C, Pickett KE, Parrott S et al. (2010) *Estimating the Costs to the NHS of Smoking in Pregnancy for Pregnant Women and Infants.* Department of Health Sciences, The University of York

126 Adams E, Solanki G and Miller L (1997) 'Medical-care expenditures attributable to cigarette smoking during pregnancy – United States, 1995.' *Morbidity and Mortality Weekly Report* 46(44):1045–50

127 West R (2002) 'Smoking cessation and pregnancy.' *Fetal and Maternal Medicine Review* 13(3):181–94

128 NHS IC (2010) *Statistics on NHS Stop Smoking Services: England, April 2009 to March 2010.* NHS IC. www.ic.nhs.uk/statistics-and-data-collections/health-and-lifestyles/nhs-stop-smoking-services/statistics-on-nhs-stop-smoking-services-england-april-2009--march-2010

129 Owen L and McNeil A (2001) 'Saliva cotinine as an indicator of cigarette smoking among pregnant women.' *Addiction* 96(7):1001–6

NICE PUBLIC HEALTH GUIDANCE 26: HOW TO STOP SMOKING IN PREGNANCY AND FOLLOWING CHILDBIRTH

NICE Public Health Guidance 26 *How to Stop Smoking in Pregnancy and Following Childbirth*, published in 2010 (http://guidance.nice.org.uk/PH26) sets out eight recommendations for action.

1. Identifying pregnant women who smoke and referring them to stop smoking services – action for midwives

2. Identifying pregnant women who smoke and referring them to the stop smoking services – action for others

3. Stop smoking services – contacting referrals

4. Stop smoking services – initial and ongoing support

5. Use of NRT and other pharmacological support

6. Stop smoking services – meeting the needs of disadvantaged pregnant women who smoke

7. Partners and others in the household who smoke

8. Training to deliver interventions

NICE recommendations 1 and 2 – identification and referral of pregnant smokers

The guidance recommends actions for the identification of all pregnant women who smoke, and referral to stop smoking services. Actions that midwives should take at the first maternity booking and subsequent appointments includes assessing the woman's exposure to tobacco smoke, the use of a biochemical test to ascertain and record smoking status and referral to stop smoking services. It also advocates that those responsible for providing health and support services for pregnant women should use any appointment or meeting as an opportunity to ask these women if they smoke and provide a referral to stop smoking services.

The UK Centre for Tobacco Control Studies (UKCTCS) has been allocated funding to develop and pilot several projects to implement smoking cessation services in settings associated with health inequalities. The pregnancy project will develop and pilot an integrated referral pathway for smoking cessation in pregnancy to identify pregnant smokers in routine maternity care. Information can be accessed at: www.ukctcs.org/ukctcs/research/featuredprojects/ pregnancysmokingcessationprogramme.aspx.

Forthcoming supportive resources

In 2011, the NCSCT CIC will be developing and piloting a suite of resources to support the implementation of systematic service models for the identification and referral of all smokers in pregnancy and the postpartum period.

NICE recommendations 3 and 4 – actions for stop smoking services

Stop smoking services should offer pregnant smokers a full range of evidence-based services. They should ensure that service provision is proactive and responsive in contacting referrals promptly in order to effectively engage with this client group. Engaging with pregnant women to help them stop smoking involves communicating in a sensitive client-centred manner, particularly as some pregnant women find it difficult to say that they smoke.

It is recommended that:

☐ Pregnant smokers are provided with intensive and ongoing support throughout pregnancy and beyond.

☐ When a pregnant woman sets a quit date, the midwife should be informed of the quit by a locally agreed protocol.

☐ Information on the quit attempt, including the type of support provided and the outcomes, should also be given to the appropriate health visitor in the postnatal period.

☐ There should be a robust care pathway in place that allows for tracking of the pregnant smoker through their quit attempt and beyond into the postpartum period. This should be developed in partnership with primary care, the maternity care providers, and the community and voluntary sector health and support services.

NICOTINE REPLACEMENT THERAPY IN PREGNANCY

Evidence rating: **C**

NICE recommendation 5 – use of Nicotine Replacement Therapy in pregnancy

There is insufficient evidence available on the effectiveness of NRT in helping pregnant women to stop smoking.[130] The MHRA[131] has recommended that pregnant women should stop smoking without using NRT, but if this is not possible NRT maybe recommended to assist a quit attempt as it is considered that the risk to the fetus of continued smoking by

130 Bauld L and Coleman T (2009) *The Effectiveness of Smoking Cessation Interventions during Pregnancy: A briefing paper.* NICE. www.nice.org.uk/guidance/index.jsp?action=download&o=45552

131 MHRA Committee on Safety of Medicines (2005) *Report of the Committee on Safety of Medicines Working Group on Nicotine Replacement Therapy*

the mother outweighs any potential adverse effects of NRT. The Smoking, Nicotine and Pregnancy (SNAP) trial is currently conducting further research in this area.[132]

NICE recommends that NRT can be used by pregnant women as long as stop smoking service providers discuss the risks and benefits of NRT with pregnant women who smoke, prescribe NRT only if a smoking cessation attempt without NRT fails and ensure that they use professional judgement when deciding whether to offer a prescription to those who express a clear wish to receive NRT.

NICE recommendation 6 – socio-demographic factors associated with smoking in pregnancy

NICE recommends that stop smoking service providers should take into account other socio-demographic factors such as age and ethnicity of pregnant smokers and ensure that service provision is tailored to meet the individual needs of the local population. There is a wide ethnic variation in smoking in pregnancy and this should be taken into consideration in service provision and development. The overall rate would be substantially higher if it was not for the low rates reported by some population groups (most notably those whose ethnicity is south Asian). Services should aim to reach and support women from British and minority ethnic (BME) groups in their locality.

Women in R/M occupations were more than four times as likely as those in managerial and professional occupations to have smoked throughout pregnancy (29% and 7% respectively).[133] Stop smoking service providers should therefore continue to target this group of women. Services should also refer to the section on R/M smokers (see page 67) for guidance on this particular sector of the population.

NICE recommends that services should collaborate with the Family Nurse Partnership programme, other outreach schemes and work in partnership with agencies that support women who have complex social and emotional needs to identify additional opportunities for providing intensive and ongoing support. This should also include substance misuse services and mental health services.

NICE recommendation 7 – partners and others in the household who smoke

There is a strong association between a mother's own smoking behaviour during pregnancy and whether or not she lives with other smokers.[134] It is therefore recommended that stop smoking service providers encourage partners and family members of pregnant smokers (if they smoke) to quit and provide them with intensive ongoing support to help them to become smokefree. They should encourage partners and others in the household who smoke not to smoke around the pregnant woman, mother or baby; this includes not smoking in the house or car.

132 Coleman T, Thornton J, Britton J, Lewis S, Watts K, Coughtrie MW et al. (2007) 'Protocol for the smoking, nicotine and pregnancy (SNAP) trial: double-blind, placebo-randomised, controlled trial of nicotine replacement therapy in pregnancy.' *BMC Health Services Research* 7:2

133 NHS IC (2007) *Infant Feeding Survey 2005*. NHS IC

134 Ibid.

NICE recommendation 8 – training to deliver interventions

NICE recommends actions for commissioners of stop smoking services, maternity services, professional bodies and organisations, the NCSCT and other providers of smoking cessation training which meets the national standards.

Forthcoming supportive resources

The NCSCT is currently developing an online training programme for smoking cessation in pregnancy, which should be available in 2011.

The NHS Pregnancy Smoking Helpline

The NHS Pregnancy Smoking Helpline (0800 169 9 169) is a call-back service that offers pregnant women support throughout their pregnancy at a time that is convenient for them. A number of other resources are available through the helpline, as well as through the Smokefree Resource Centre (http://.smokefree.nhs.uk/resources).

Teenage pregnancy

Evidence rating: ✅

Rates of smoking in pregnancy are higher among young women (20 years of age or under), who are more than three times as likely to smoke before or during pregnancy as mothers aged 35 or over. They are also less likely to quit smoking during pregnancy.[135] Stop smoking service providers should ensure that they work in partnership with teenage pregnancy support services to develop services that meet the needs of this priority group; they should ensure that they are meeting the *You're Welcome* quality criteria and are delivering services that are young people friendly.

You're Welcome Quality Criteria: Making health services young people friendly sets out principles that will help health services develop services that are young people friendly.[136] The self-assessment toolkit covers areas to be considered by commissioners and providers of health services. The criteria build on the Royal College of General Practitioners and Royal College of Nursing initiative, *Getting it Right for Teenagers in Your Practice*, which has been supported by the Teenage Pregnancy Unit.[137]

Recommendations for both stop smoking service providers and midwifery services on helping teenage smokers to quit can be found in the DH and Department for Children, Schools and Families 2007 report, *Teenage Parents Next Steps: Guidance for local authorities and primary care trusts.*[138]

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135 DH (2005) *You're Welcome Quality Criteria: Making health services young people friendly.* DH. www.dh.gov.uk/enPublicationsandstatistics/PublicationsPolicyAndGuidance/DH_073586

136 Ibid.

137 Royal College of General Practitioners and Royal College of Nursing (2002) *Getting it Right for Teenagers in Your Practice.* RCGP

138 DH and Department for Children, Schools and Families (2007) *Teenage Parents Next Steps: Guidance for local authorities and primary care trusts.* DCSF

Smoking and mental disorder

Evidence rating: **B**

Smokers with a mental disorder are a key group, as identified in the English national Tobacco Control Plan and the proposed Public Health Outcomes Framework. According to the most recent adult psychiatry morbidity survey, compared with a smoking rate of 21% in the general population, smoking rates are 32% for those with depressive or anxiety disorder (common mental disorder), 40% for those with probable psychosis, 46% for those with alcohol dependence, 69% for those with illicit drug dependence and 57% for those attempting suicide in the previous year.[139] Even higher levels of smoking occur within psychiatric inpatient settings, where up to 70% are smokers and 50% heavy smokers.[140] People with mental disorder are also likely to be heavier, more dependent smokers and to have smoked longer than smokers in the general population.[141]

Due to the numbers affected in the population, those with mental disorder are also responsible for 42% of tobacco consumption in England, with 31% of all tobacco consumption accounted for by those with common mental disorder.[142]

Mental disorders are also the most significant risk factor in uptake of smoking in children and adolescents and are six times more common in those with conduct disorder and four times more common in those with emotional disorder.[143] This means that 43% of smokers aged 5–16 years are from the 10% of children and adolescents with conduct disorder and emotional disorder.

Such high levels of smoking increase the amount of smoking-related harm that people with mental disorders suffer. It is responsible for the largest proportion of the excess mortality of people with mental disorder.[144] Those with schizophrenia and bipolar affective disorder die many years earlier than the general population. A recent UK study highlighted that men living with schizophrenia in the community have 20 years' reduced life expectancy, while women have 16 years' reduced life expectancy.[145] The death rate from respiratory disease among people with schizophrenia, for example, is three times higher than the average.[146]

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139 McManus S, Meltzer H and Campion J (2010) *Cigarette Smoking and Mental Health in England: Data from the Adult Psychiatric Morbidity Survey 2007*. National Centre for Social Research. www.natcen.ac.uk/study/cigarette-smoking--mental-health

140 Jochelson J and Majrowski B (2006) *Clearing the Air: Debating smoke-free policies in psychiatric units*. King's Fund

141 Kumari V and Postma P (2005) 'Nicotine use in schizophrenia: the self medication hypotheses.' *Neuroscience and Biobehavioural Reviews* 29:1021–34

142 McManus S, Meltzer H and Campion J (2010) *Cigarette Smoking and Mental Health in England: Data from the Adult Psychiatric Morbidity Survey 2007*. National Centre for Social Research. www.natcen.ac.uk/study/cigarette-smoking--mental-health

143 Green H, McGinnity A, Meltzer H et al. (2005) *Mental Health of Children and Young People in Great Britain, 2004*. ONS

144 Brown S, Kim M, Mitchell C et al. (2010) 'Twenty-five year mortality of a community cohort with schizophrenia.' *British Journal of Psychiatry* 196:116–21

145 Ibid.

146 Saha S, Chant D and McGrath JA (2007) 'Systematic review of mortality in schizophrenia: is the differential mortality gap worsening over time?' *Archives of General Psychiatry* 64:1123–31

Smoking tobacco is significantly associated with increased prevalence of all mental disorders,[147] with smokers 50% more likely to suffer from a mental disorder than non-smokers[148] and more likely to commit suicide.[149]

It is therefore crucial that people with mental disorders have appropriate access to stop smoking support and be encouraged to stop.

PREVALENCE OF STOP SMOKING SERVICE CLIENTS WITH A MENTAL HEALTH PROBLEM

The prevalence of clients who have a mental disorder and are treated by stop smoking services is unavailable as this has never been a national data requirement. However, since 42% of overall tobacco consumption in England is by this group, they should represent a significant proportion of smokers seen by stop smoking services. The majority of this group are managed solely in primary care and not specialist mental health services.

While there is nothing preventing commissioners and service providers from collecting this data locally, a survey of services in the London region found that the majority of services interviewed did not routinely check mental health status and that only 11% would be able to provide data on the proportion of service clients with a reported mental health problem.[150] This is also an important clinical issue, as stopping smoking can result in a rapid rise in blood levels of certain medicines which require reduction upon cessation through communication with prescribers (see Stop smoking and medicines on pages 77–78). Therefore, it is vitally important from a clinical perspective that service providers routinely ask all clients about any mental disorder diagnoses, including information regarding any medicines being taken and the contact details for any relevant mental health professionals as well as the GP involved in the client's care (see the AIMS model on page 81).

To track the throughput and success rates of those with mental disorder, services need to routinely and accurately record mental health diagnosis and any medications. Collection of data regarding mental disorder is vital to ensure that appropriate access to smoking cessation occurs for the largest proportion of smokers who experience disproportionate inequality and therefore require more targeted approaches. Such data will also increase the available data on the most effective interventions for those with different mental disorder.

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147 McManus S, Meltzer H and Campion J (2010) *Cigarette Smoking and Mental Health in England. Data from the Adult Psychiatric Morbidity Survey 2007*. National Centre for Social Research. www.natcen.ac.uk/study/cigarette-smoking--mental-health

148 Cuijpers P, Smit F, ten Have M and de Graaf R (2007) 'Smoking is associated with first-ever incidence of mental disorders: a prospective population-based study.' *Addiction* 102(8):1303

149 Malone KM, Waternaux C, Haas GL et al. (2003) 'Cigarette smoking, suicidal behaviour, and serotonin function in major psychiatric disorders.' *American Journal of Psychiatry* 160(4):773–9

150 McNally L and Ratschen E (2010) 'The delivery of stop smoking support to people with mental health conditions: a survey of NHS Stop Smoking Services.' *BMC Health Services Research* 10:179

STOPPING SMOKING AND INEQUALITY REDUCTION

Since increased levels of smoking are responsible for the largest proportion of health inequality in this group, supporting people with mental disorders to stop smoking has an even larger impact on health outcomes, thereby directly reducing health inequalities. However, health inequality experienced by people with mental disorder will widen if investment in smoking cessation services for this group is not greater than for the general population. Making access to smoking cessation services easier for those with disability due to mental disorder will also comply with the Equality Act 2010.

POSITIVE EFFECTS OF STOPPING SMOKING ON MENTAL HEALTH

Evidence suggests that there is a link between the amount smoked and the number of depressive and anxiety symptoms.[151] On stopping, these symptoms are seen to reduce[152] and can be accompanied by a sense of achievement.

STOPPING SMOKING AND DEPRESSION

In a minority of cases, smoking cessation, with or without pharmacotherapy, is associated with the exacerbation of depression.[153] Stop smoking advisers should be aware of the possible emergence of depression in clients undergoing a smoking cessation attempt, and should advise both patients and the appropriate clinical team accordingly.

STOPPING SMOKING AND SCHIZOPHRENIA

In people with schizophrenia, there is little evidence to show any worsening of symptoms following stopping smoking.[154] Stopping smoking can result in significant reductions in the dosages of some medications, which can reduce the long-term consequences such medication can have.

STOPPING SMOKING AND MEDICINES

Cigarette smoke stimulates a liver enzyme responsible for metabolising some medicines in the body which means that the metabolism of these medicines increases, resulting in lower blood levels of such medicines and hence a lower therapeutic effect. Some of these medications have a narrow therapeutic window, meaning too small a dose will be ineffective and too much will be toxic. If the dose of the medicine is titrated while the

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151 Farrell M, Howes S, Bebbington P et al. (2001) 'Nicotine, alcohol and psychiatric morbidity: Results of a national household survey'. *British Journal of Psychiatry* 179:432–7

152 Campion J, Checinski K, Nurse J and McNeill A (2008) 'Smoking by people with mental illness and benefits of smoke-free mental health services'. *Advances in Psychiatric Treatment* 14:217–28

153 Hughes JR (2007) 'Depression during tobacco abstinence'. *Nicotine Tobacco Research* 9(4):443–6

154 Campion J, Checinski K, Nurse J and McNeill A (2008) 'Smoking by people with mental illness and benefits of smoke-free mental health services'. *Advances in Psychiatric Treatment* 14:217–28

person is smoking, then when the person stops smoking the result could be toxicity[155,156] or a significant increase in side effects from the medicine. Medicines affected in this way include (but are not restricted to) theophylline, insulin, paracetamol, propranolol, tamoxifen, verapamil and warfarin-R as well as some medicines related to mental health:

- antidepressants: tricyclics – tertiary (e.g. amitryptyline, clomipramine, desipramine, imipramine), fluvoxamine (partly), mirtazpine (partly)

- antipsychotic medication: clozapine, fluphenazine, perphanazine, haloperidol (partly), olanzapine (partly)

- benzodiazepines: diazepam, zotepine

- opiates.[157]

Since stopping smoking can reduce metabolism of some medication resulting in higher, sometimes toxic blood levels over a few days,[158,159] it is recommended that the client is supported to inform their key healthcare workers as soon as possible so that therapeutic levels can be monitored.

Further dose reductions within *British National Formulary* levels may be required with continued cessation.

Key messages

Client medical information and current medication should always be asked and recorded during the first stop smoking appointment.

The GP or the usual healthcare professional and key mental health worker of any client using medicines that may be affected by cessation should be informed of the quit attempt so that dosage of the medicine(s) can be reviewed and adjusted.

Quit status should be regularly reassessed and, if the client relapses, the GP or the usual healthcare professional and key mental health worker should again be made aware to ensure appropriate readjustment of their medicine(s).

155 Campion J, Checinski, K and Nurse J (2008) 'Review of smoking cessation treatments for people with mental illness.' *Advances in Psychiatric Treatment* 14:208–16
156 Taylor D, Paton C and Kapur S (2009) *Maudsley Prescribing Guidelines*, 10th edition. Informa
157 Schall US, Pries E, Katta T et al. (1996) 'Pharmacokinetic and pharmacodynamic interactions in an outpatient maintenance therapy of intravenous heroin users with levomethadone.' *Addiction Biology* 1:105–13
158 Campion J, Checinski, K and Nurse J (2008) 'Review of smoking cessation treatments for people with mental illness.' *Advances in Psychiatric Treatment* 14:208–16
159 Taylor D, Paton C and Kapur S (2009) *Maudsley Prescribing Guidelines*, 10th edition. Informa

STOP SMOKING INTERVENTIONS FOR THOSE WITH MENTAL DISORDER

A recent systematic review found that smoking cessation treatments that work in the general population work for those with severe mental illness and appear approximately as effective. The same review found that treating tobacco dependence in patients with stable psychiatric conditions does not worsen their mental state.[160] Combining pharmacotherapy with other support such as counselling can increase abstinence rates in those with mental health problems to rates similar to those of the general population.[161,162] However, up to now, people with mental health disorder have been less likely to receive smoking cessation interventions in primary care.[163]

Stop smoking medication and mental disorder

As for heavier smokers in the general population, those with mental disorder who are more likely to be heavier smokers often require combination and more intensive pharmacological and non-pharmacological interventions.

NICOTINE REPLACEMENT THERAPY

As for more dependent smokers in the general population, the amount of NRT required by heavy smokers with mental disorder is likely to be higher than that required by the rest of the population. Combination NRT increases cessation rates[164] and therefore a combination of different types of NRT, including use of a fast-acting type such as a nasal spray, increases cessation rates (see page 58). NRT has no specific contraindications or cautions relating to mental health disorders.

BUPROPION

Bupropion (see page 60) has been associated with increased anxiety and depression and is contraindicated in those with depression or suicidal ideation.[165] Bupropion can also increase blood levels of citalopram, which should be avoided for two weeks after stopping.[166] It is also contraindicated with monoamine oxidase inhibitors (MAOIs). It is contraindicated in bipolar affective disorder and should not be prescribed with drugs that increase risk of seizures, such as tricyclic antidepressants and some antipsychotic

160 Banham L and Gilbody S (2010) 'Smoking cessation in severe mental illness: what works?' *Addiction* 105(7):1176–89

161 Campion J, Checinski K and Nurse J (2008) 'Review of smoking cessation treatments for people with mental illness.' *Advances in Psychiatric Treatment* 14:208–16

162 Foulds JGK, Steinberg MB, Richardson D et al. (2006) 'Factors associated with quitting smoking at a tobacco dependence treatment clinic.' *American Journal of Health Behavior* 30:400–12

163 Phelan M, Stradins L and Morrison S (2001) 'Physical health of people with severe mental illness.' *British Medical Journal* 322:443–4

164 Stead LF, Perera R, Bullen C, Mant D and Lancaster T (2008) 'Nicotine replacement therapy for smoking cessation.' *Cochrane Database of Systematic Reviews* 2008(1):CD000146

165 MHRA guidance, last updated January 2011, available at: www.mhra.gov.uk/Safetyinformation/ Generalsafetyinformationandadvice/Product-specificinformationandadvice/Product-specificinformationandadvice%E2%80%93 M%E2%80%93T/Stopsmokingtreatments/index.htm

166 British Medical Association and the Royal Pharmaceutical Society of Great Britain (2008) *British National Formulary*. BMJ Publishing Group

medicine.[167] However, it almost triples cessation rates at six months in those with schizophrenia.[168]

VARENICLINE

Varenicline (see page 61) is not contraindicated for use in people with mental disorders. However, depression, suicidal thoughts, suicide attempts and completed suicides have been reported in people taking varenicline who have no pre-existing psychiatric conditions.[169] It advises particular care in patients with a previous history of psychiatric illness, and states that patients, family members and caregivers should be advised accordingly.

Patients should be advised to stop taking varenicline (or bupropion) and contact a healthcare provider immediately if they experience agitation, depressed mood, or suicidal thoughts or behaviour. Close regular monitoring by health professionals including stop smoking advisers, psychiatrists, GPs, pharmacists and community health staff should occur through a clearly negotiated plan of support with clear strategies for responding in the event of changes, especially in the first two to three weeks. If varenicline (or bupropion) is stopped due to neuropsychiatric symptoms, patients should be monitored until symptoms resolve and this should be reported using the Yellow Card Scheme (http://yellowcard.mhra.gov.uk/).

Supportive resources

For a complete list of all contraindications and cautions, refer to the SPCs for each product available at: http://emc.medicines.org.uk.

Campion J, Hewitt J, Shiers D and Taylor D (2010) 'Pharmacy guidance on smoking and mental health'. Forum for Mental Health in Primary Care. www.rcpsych.ac.uk/pdf/ Pharmacy_%20guidance%20for%20smoking%20and%20mental%20health%20 Feb%202010.pdf

Although half of smokers with mental disorder want help to stop smoking,[170] they have been less likely to receive smoking cessation interventions in primary care than the general population.[171]

167 Taylor D, Paton C and Kapur S (2009) *Maudsley Prescribing Guidelines*, 10th edition. Informa
168 Tsoi DT, Porwal M and Webster AC (2010) 'Efficacy and safety of bupropion for smoking cessation and eduction in schizophrenia: systematic review and meta-analysis'. *British Journal of Psychiatry* 196:346–3
169 MHRA guidance, last updated January 2011, available at: www.mhra.gov.uk/Safetyinformation/ Generalsafetyinformationandadvice/Product-specificinformationandadvice/Product-specificinformationandadvice%E2%80%93 M%E2%80%93T/Stopsmokingtreatments/index.htm
170 Siru R, Hulse GK and Tait RJ (2009) 'Assessing motivation to quit smoking in people with mental illness: a review'. *Addition* 104(5):719–33
171 Phelan M, Stradins L and Morrison S (2001) 'Physical health of people with severe mental illness.' *British Medical Journal* 322:443–4

Figure 5: AIMS procedure for supporting people with mental health problems to stop smoking

ASK
Ask ALL clients about mental health problems and details of treatment if applicable.

INFORM
Inform health professionals co-ordinating mental health treatment of the quit attempt.

MEDICATION
Advise client and professionals of the potential effects of smoking cessation on medication.

SUPPORT
Tailor support to specific needs of the client with input from mental health professionals.

Source: Adapted from McNally and Ratschen 2010 (see note 150, page 76)

Recommendations

There are a number of additional considerations that should be taken into account when providing stop smoking support for people with mental health problems in primary care, community or acute settings.

Community settings, including alcohol and substance misuse services

☐ Local mental health service providers as well as primary care providers need to be aware of the local stop smoking service.

☐ Mental health and primary care colleagues require very brief advice training and details of the local referral pathway into the stop smoking service.

☐ Stop smoking advisers should understand the potential interactions between smoking and medicines used to treat psychiatric conditions; they need to communicate with relevant prescribers (in primary and secondary care) about stop smoking attempts so that appropriate changes can be made to the doses of their medicine(s).

☐ Basic training for stop smoking advisers with the local mental health and primary care trust to increase their confidence in dealing with clients with a history of mental health problems is recommended.

☐ Links with local mental health services need to be maintained and guidance sought when specific issues arise.

Acute settings

☐ Clear leadership, commitment to education and training involving development of required practical skills and availability of combination NRT to both staff and patients are associated with much higher rates of successful smokefree policy within mental health settings.[172]

☐ The approval and support of leadership are important.

☐ As part of routine training, staff should attend very brief advice training. A champion who can offer ongoing support for practical issues arising on the ward can support such training.

☐ A variety of stop smoking medicines need to be available for patients who wish to stop smoking and those who require withdrawal management (i.e. those who do not wish to stop smoking but have limited access to outdoor space and opportunities to smoke and therefore experience nicotine withdrawal symptoms).

☐ Stop smoking medicines should also be available to staff who want to quit.

☐ A clear pathway is required to maintain support once the patient has been discharged into the community.

Forthcoming supportive resources

Health inequality pilot

In 2010, the UKCTCS was awarded funding to carry out six health inequality pilot projects, one of which relates to smoking and mental health. The aim of the project is to implement and pilot a tobacco-dependent treatment service tailored to the needs of people living with mental illness. Outcomes from the project are expected in autumn 2011.

NCSCT mental health module

The NCSCT, with the help of an expert group, is developing an online smoking cessation and mental health training module aimed at anyone involved in delivering stop smoking interventions. The module will be available in 2011.

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172 Lawn S and Campion J (2010) 'Factors associated with success of smoke-free initiatives in Australian psychiatric units.' *Psychiatric Services* 61(3):300–5

Secondary care

Evidence rating: **A**

A recent Cochrane review reported that delivering stop smoking services to inpatients has a positive impact. Trials found that programmes begun during a hospital stay, and including follow-up support for at least one month after discharge, are effective.[173]

Preoperative smoking cessation can significantly reduce the risk of postoperative cardiac and pulmonary complications and reduce the duration of hospital stay, as well as decreasing the risk of wound infection and delayed wound healing. It can also ensure optimum benefits to receiving treatment and in recovery. In addition to this, long-term abstinence reduces the risk of developing new diseases[174] and has been associated with a decreased risk in disease progression.[175,176]

It is thought that people are more receptive to health advice and support while they are in hospital as it is a credible health setting which often stimulates personal health evaluation. This therefore offers a prime opportunity to offer stop smoking advice, using the period of heightened motivation to stop smoking, encourage smokefree compliance and highlight any need for withdrawal management.

Recommendations

☐ All patients should receive very brief advice on admission to hospital and be referred for more intensive support from their local stop smoking service provider.

☐ All smokers' nicotine dependency scores should be assessed following admission and NRT provided as soon as possible, either to support a quit attempt or for temporary abstinence purposes.

☐ Patients should not have to wait for their local stop smoking service provider (either provided internally or externally) to assess them before receiving NRT.

☐ It should be locally agreed that at preoperative assessment patients who do not intend to stop smoking prior to surgery should be advised of the hospital's smokefree policy. As smokers are likely to experience withdrawal symptoms during a period of enforced abstinence, pharmacotherapy should be offered to assist withdrawal management and be provided through primary care.

173 Rigotti NA, Munafo MR and Stead LF (2007) 'Interventions for smoking cessation in hospitalised patients.' *Cochrane Database of Systematic Reviews.* 2007(3):CD001837

174 Doll R, Peto R, Boreham J and Sutherland I (2004) 'Mortality in relation to smoking: 50 years' observations on male British doctors'. *British Medical Journal* 328: 1519

175 Critchley JA and Capewell S (2003) 'Smoking cessation for the secondary prevention of coronary heart disease'. *Cochrane Database of Systematic Reviews* 2003(4):CD003041

176 Suskin NS, Sheth T, Negassa A and Yusuf S (2001) 'Relationship of current and past smoking to mortality and morbidity in patients with left ventricular dysfunction.' *Journal of the American College of Cardiology* 37(6): 1677–82

☐ Stop smoking service providers should be prepared to support patients who have stopped smoking while in hospital once they return to the community. Discharge information from the hospital will need to be communicated to the service via a locally agreed system. If the patient did not stop smoking during their hospital stay, they should be given very brief advice again on discharge, and referred.

☐ All frontline hospital staff should be trained to provide very brief advice to every smoker. This should be agreed as mandatory training and be part of all staff induction, and be included in frontline staff personal development plans.

☐ Commissioning for Quality and Innovation (CQUIN) contracts can be an excellent lever to embed systems of providing a brief intervention and referral to the local stop smoking service as part of locally agreed quality improvement scheme priorities within secondary care.

STOP SMOKING INTERVENTIONS IN SECONDARY CARE

In 2009, the DH Tobacco Control Delivery Team, with the aid of an expert working group, produced a guide to help stop smoking service providers develop planned and unplanned stop smoking support across acute settings. The stop smoking interventions in secondary care guidance is based on the premise that planned and unplanned admissions to hospital provide ideal opportunities to support people in stopping smoking.

A suite of clinical case studies have also been developed to support smoking care development within secondary care settings. These, in addition to the secondary care guidance, will also be made available electronically in 2011 via the Smokefree Resource Centre website.

CLINICAL CHAMPIONS

A project has begun, funded by DH, to support the British Thoracic Society to recruit and maintain a network of tobacco control clinical champions in secondary care. There are currently 70 trusts with a clinical champion. For more information, contact emma.croghan@dh.gsi.gov.uk.

COMMISSIONING TOOL

In addition, in 2010 NICE published a tool to help stop smoking services demonstrate the financial and clinical impact of preoperative stop smoking support services in acute settings to both acute and primary care commissioners.[177]

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177 www.nice.org.uk/usingguidance/commissioningguides/smokingcessationserviceelectivesurgery/commissioningtool.jsp

Prisoners

Evidence rating: **C**

It has been estimated that around 80% of the prison population smokes.[178] Data for 2009/10 from the English stop smoking services shows that 10,490 quit dates were set in a prison setting with a self-reported success rate of 56% (5,868).[179]

There is not yet enough evidence to suggest what the best type of intervention for prison settings may be. It would seem appropriate, however, that interventions offered to the general population should be available to a group with such high levels of smoking and high levels of mental illness. The basic quality principles remain the same, irrespective of the intervention setting:

☐ offer a menu of evidence-based support options

☐ ensure that the intervention is delivered by a trained stop smoking adviser

☐ allow access to NICE-approved pharmacotherapy

☐ use CO validation in at least 85% of cases

☐ provide support for the duration of the treatment episode.

Health inequality pilot

In 2010, the UKCTCS was awarded funding to carry out six health inequality pilot projects, one of which relates to embedding smoking cessation support within the English prison and judicial systems. Outcomes from the project are expected in autumn 2011.

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178 Singleton N, Farrell M and Meltzer H (1999) *Substance Misuse Among Prisoners in England and Wales.* ONS

179 NHS Information Centre (2010) *Statistics on NHS Stop Smoking Services: England, April 2009 to March 2010.* NHS IC. www.ic.nhs.uk/statistics-and-data-collections/health-and-lifestyles/nhs-stop-smoking-services/statistics-on-nhs-stop-smoking-services-england-april-2009--march-2010

DEPARTMENT OF HEALTH BEST PRACTICE CHECKLIST

Between April 2004 and March 2005, DH funded a study of smoking in prisons across the North West region.[180] The aims of the study were to:

☐ identify and assess various intervention models

☐ examine NRT usage and distribution

☐ collect and collate quarterly returns to provide quit rates among prisoners

☐ provide qualitative insight into the uptake and impact of NRT provision over the study period.

As part of the study, a best practice checklist was developed with the aim of helping prisoners to stop smoking. This included the following points:

☐ **A range of cessation delivery models should be available**, including both group and one-to-one support. These should offer flexible support that meets individual needs. Services can be offered through a range of prison staff, not just healthcare staff but others such as physical education instructors or prison officers. External stop smoking specialists may run support sessions but it is vital that internal prison staff remain involved.

☐ **Protected staff time and role development for those delivering the service need to be secured**: this means not just time for core interactions with quitters, but also for administration and record-keeping activities which may be more demanding in prisons than in community settings. If dedicated time is set aside then prison staff and stop smoking advisers will be able to plan programme sessions in advance. There should be enough staff to provide a substantial service, led by an enthusiastic 'champion' who promotes the service, co-ordinates activities and liaises across organisations. Cessation can therefore form part of their core work.

☐ **Clear record keeping will make it easier to promote the service**: telling people what is happening and 'selling' the successes of the service are important ways of providing rewarding feedback to those delivering the service and making a case for future developments.

☐ **Assessing and exploiting the expressed desire to quit among prisoners**, as well as interest from staff, will contribute to building the service. Needs assessments and keeping track of waiting lists will help.

☐ **Ring-fenced pharmacotherapy budgets for prisoners** and long-term funding commitment are recommended. Efficient and economical ordering procedures and effective supply mechanisms should be developed across areas, in conjunction with prison pharmacies and pharmaceutical companies.

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180 MacAskill S and Hayton P (2006) *Stop Smoking support in HM Prisons: the impact of nicotine replacement therapy – executive summary and best practice checklist.* Institute for Social Marketing.
www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4134515

- **Prescribing and dispensing** should be developed within the context of safety issues. For example, experience shows that dispensing NRT on a weekly basis, with used patches being returned, achieves a better balance between empowering prisoners and minimising the misuse of NRT as currency. Consistent guidance is needed, e.g. in the use of alternative NRT oral/non-gum products.

- **Staff training and ongoing support** by stop smoking specialist services will contribute to high standards and increase confidence among those delivering the service. Network meetings are valuable.

- **Care pathways** should be developed with mechanisms to cope with prisoners being transferred from one prison to another or released during a course of treatment (Prison Service Order 3050).

- **Staff cessation support should be considered**, within the prison or through links to community settings.

- **Being aware of relevant legislation and anticipating guidance** on prisoner health and workplace issues will help planning and preparation and so increase the effectiveness of interventions.

The full Prison Service Instruction regarding smokefree legislation and its application to the prison service can be accessed at: http://psi.hmprisonservice.gov.uk/PSI_2007_09_smoke_free_legislation.doc.

Substance misuse

Evidence rating: **C**

SMOKING AND ALCOHOL

The link between smoking and alcohol dependence is particularly strong,[181] with alcohol use disorders significantly associated with regular heavy smoking.[182] Stopping smoking does not seem to make it more difficult to stop drinking, although the evidence is contradictory and further studies are required.

Analysis of the most recent adult psychiatric morbidity survey highlights that alcohol dependence, which occurs in 6% of the adult population in England, is associated with 46% smoking rate while alcohol problems occurring in 24% of the adult population is associated with 30% smoking rate.[183]

181 Miller N and Gold M (1998) 'Comorbid cigarette and alcohol addiction: epidemiology and treatment.' *Journal of Addictive Disorders* 17:55–66

182 Dierker LC, Avenevoli S, Stolar M et al. (2002) 'Smoking and depression: an examination of mechanisms of comorbidity.' *American Journal of Psychiatry*, 159:947–53

183 McManus S, Meltzer H and Campion J (2010) *Cigarette Smoking and Mental Health in England: Data from the Adult Psychiatric Morbidity Survey 2007*. National Centre for Social Research. www.natcen.ac.uk/study/cigarette-smoking--mental-health

SMOKING AND SUBSTANCE MISUSE

People who smoke every day are more likely to have a co-morbid substance use disorder than people who have never smoked.[184] Smoking at an early age is also associated with substance misuse.[185]

Analysis of the most recent adult psychiatric morbidity survey highlights that drug dependence, which occurs in 3% of the adult population, is associated with 69% smoking rate.[186] Smoking status has also been found to be predictive of illicit substance use in methadone maintenance programmes, with a significant relationship between rates of change in heroin use and rates of change in tobacco use.[187]

People who smoke tobacco are more likely to use cannabis and abuse alcohol. Using cannabis also makes smokers less likely to stop.[188]

RECOMMENDATIONS FOR STOP SMOKING SERVICE PROVIDERS

Stop smoking service providers will encounter clients with dual dependencies – particularly if they have mental health problems or other substance misuse. Those with dual dependencies may find that their substance use increases their risk of relapsing back to tobacco use.

KEY RECOMMENDATIONS

☐ Ensure that staff in alcohol and drug services receive regular smoking cessation training.

☐ Develop links with alcohol and drug services to create referral pathways between the drug or alcohol services into the stop smoking services and vice versa (very brief advice training needs should be considered).

☐ Ensure that stop smoking advisers are trained in a manner appropriate for the needs of the population attending the service to deliver suitable information and advice on cannabis smoking and brief interventions concerning excessive alcohol use.

184 John U, Meyer C, Rumpf HJ et al. (2004) 'Smoking, nicotine dependence and psychiatric comorbidity – a population-base study including smoking cessation after three years'. *Drug and Alcohol Dependence* 76:287–95

185 Williams JM and Ziedonis DM (2004) 'Addressing tobacco among individuals with a mental illness or an addiction'. *Addictive Behaviours* 29:1067–83

186 McManus S, Meltzer H and Campion J (2010) *Cigarette Smoking and Mental Health in England: Data from the Adult Psychiatric Morbidity Survey 2007*. National Centre for Social Research. www.natcen.ac.uk/study/cigarette-smoking--mental-health

187 Frosch DL, Nahom D and Shoptaw S (2002) 'Optimizing smoking cessation outcomes among the methadone maintained'. *Journal of Substance Abuse Treatment* 23(4):426–30

188 Ford D, Vua H and Anthony J (2002) 'Marijuana use and cessation of tobacco smoking in adults from a community sample'. *Drug and Alcohol Dependence* 67:243–8

Routes to Quit and substance misuse

As part of the Routes to Quit pilots, the NCSCT CIC is working with a class A drug service to pilot the approach. Results will be available in 2011 and used to inform subsequent commissioner and provider guidance.

Black and minority ethnic groups

Evidence rating: **B**

BME communities have high smoking prevalence rates compared with the general population (see Table 12). Rates are highest among Bangladeshi, Irish and Pakistani males.

Table 12: Ethnicity, gender and smoking

Self-reported cigarette smoking by sex and ethnic group (adults aged 16 and over), England, 2004[189]

	General population	Black Caribbean	Indian	Pakistani	Bangladeshi	Chinese	Irish
	%	%	%	%	%	%	%
Men	24	25	20	29	40	21	30
Women	23	24	5	5	2	8	26

It is therefore especially important that local areas with significant BME populations carry out local mapping and joint needs assessments. They will then be able to tailor their services and promotions appropriately.

A number of areas have been networking with local faith groups and using local multilingual media to promote stop smoking services.

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189 NHS Information Centre (2006) *Health Survey for England 2004: Health of Minority Ethnic Groups.* NHS IC. www.ic.nhs.uk/statistics-and-data-collections/health-and-lifestyles-related-surveys/health-survey-for-england/health-survey-for-england-2004:-health-of-ethnic-minorities--full-report

NHS ASIAN TOBACCO HELPLINES:

Urdu   0800 169 0 881

Punjabi   0800 169 0 882

Hindi   0800 169 0 883

Gujarati   0800 169 0 884

Bengali   0800 169 0 885

These helplines are available between 9am and 8pm Monday to Friday and 11am to 5pm Saturday and Sunday.

Printed resources in the above languages are also available.

Children and young people

Evidence rating: 🟠 **I**

There is little published evidence of the effects of interventions that focus on cessation activity in adolescence.[190] In 2009/10, 23,752 smokers aged under18 set a quit date, achieving a self-reported quit rate of 32% (7,682 quitters); 61% of all self-reported quits were CO validated compared with 69% in all ages.[191]

Only 3% of service users who set a quit date were aged 18 or under, and this should be reflected in service provision. Services should be available for young people who want to stop smoking, and local stop smoking service providers should link with other programmes to ensure that they reach as many children and young people as possible (e.g. through healthy school programmes and health services on secondary school sites and other youth settings).

190 Thomas RE and Perera R (2006) 'School-based programmes for preventing smoking.' *Cochrane Database of Systematic Reviews* 2006(3):CD001293

191 NHS Information Centre (2010) *Statistics on NHS Stop Smoking Services: England, April 2009 to March 2010.* NHS IC. www.ic.nhs.uk/statistics-and-data-collections/health-and-lifestyles/nhs-stop-smoking-services/statistics-on-nhs-stop-smoking-services-england-april-2009--march-2010

PREVENTION AND TOBACCO CONTROL

Evidence rating: **B**

The evidence base for preventive strategies aimed at young people is improving. These include ASSIST[192] and wider tobacco controls aimed at denormalising smoking. These initiatives are driven by wider public health and tobacco control teams, so should not be a major focus of the clinical intervention service.

Health inequality pilot

In 2010, the UKCTCS was awarded funding to carry out six health inequality pilot projects, one of which relates to children's centres. The aim of the project is to pilot an integrated referral system to stop smoking services and to 'smokefree homes schemes' targeted at parents and carers registered with children's centres. Outcomes from the project are expected in autumn 2011.

SMOKE-FREE HOMES IN ENGLAND

A recent publication, which examined data from a series of Health Surveys for England from 1996 to 2007,[193] has identified a marked trend towards smokefree homes as well as a decline in cotinine concentrations in children living within smokefree homes.

SCHOOL-BASED INTERVENTIONS

In 2010, NICE published guidance about school-based interventions to prevent the uptake of smoking among children.[194]

192 Campbell R, Starkey F, Holliday J, Audrey S, Bloor M, Parry-Langdon N, Hughes R and Moore L (2008) 'An informal school-based peer-led intervention for smoking prevention in adolescence (ASSIST): a cluster randomised trial.' *The Lancet* 371(9624):1595–602. www.thelancet.com/journals/lancet/article/PIIS0140-6736(08)60692-3/fulltext

193 Jarvis MJ, Mindell J, Gilmore A, Feyerabend C and West R (2009) 'Smoke-free homes in England: prevalence, trends and validation by cotinine in children.' *Tobacco Control* 18(6):491–5

194 NICE (2010) *School-based Interventions to Prevent Smoking: full guidance.* NICE http://guidance.nice.org.uk/PH23/Guidance/pdf/English

Relapse prevention

Evidence rating: **I**

Survival rates among the general untreated population are shown in the figure below.

Figure 6: Relapse curve

True survival curves (solid lines) and line-graph curves (dotted lines) in self-quitters (open circles and triangles) taken from Hughes et al. (2004).[195]

There is currently little evidence suggesting which intervention are most likely to prevent people partially or totally resuming smoking,[196] although research in this area is ongoing.

Health inequality pilot

In 2010, the UKCTCS was awarded funding to carry out six health inequality pilot projects, one of which relates to relapse prevention initially among R/M smokers. The intervention, being tested in two London areas, includes extended support, text messaging and extended pharmacotherapy treatment. Outcomes from the project are expected in autumn 2011.

195 Hughes JR, Keely J and Naud S (2004) 'Shape of the relapse curve and long-term abstinence among untreated smokers.' *Addiction* 99(1):29-38

196 Hajek P, Stead LF, West R, Jarvis M and Lancaster T (2009) 'Relapse prevention interventions for smoking cessation.' *Cochrane Database of Systematic Reviews*, 2009(1):CD003999

Repeat service users

Evidence rating: ✓

Smokers often need several attempts before stopping successfully. Anyone who has made a previous, unsuccessful, quit attempt should therefore be offered very brief advice on how to stop smoking (see page 39). As the majority of successful quit attempts are unplanned or spontaneous, smokers should also be helped to stop whenever they want to (see Time between treatment episodes on page 110).[197]

Quit attempts should draw on experiences from previous attempts to stop, and should bear in mind factors that contributed to previous relapses (e.g. high nicotine dependency). Groups with higher rates of smoking, such as those with mental disorder, are more likely to be repeat service users, and specific provision should be made to encourage their re-engagement with stop smoking services.

Forthcoming supportive resources

The DH Communications Team is currently piloting materials to help service providers re-engage smokers with their service. These will be made available in 2011 on: www.smokefree.nhs.uk/resources

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197 Hughes JR and Carpenter MJ (2006) 'Stopping smoking: carpe diem?' *Tobacco Control* 15:415–16

PART 3: MONITORING LOCAL STOP SMOKING SERVICES

Local stop smoking services can be monitored monthly, with data submitted to the Department of Health (DH) using the brief reporting system introduced in 2007. Since November 2008, however, this process has been optional and not all strategic health authorities (SHAs) have chosen to follow it.

Formal data is collected through more detailed, quarterly data collections (ROCR/ OR/0028/009). Since the beginning of 2008/09, primary care trusts (PCTs) have submitted returns electronically directly to the NHS Information Centre (IC), whereas previously this happened through strategic health authorities (SHAs).

In response to the concerns of the Care Quality Commission (CQC) (formerly known as the Healthcare Commission) about data quality, changes to the system were also introduced in 2008/09. These included the exception reporting system, a new data verification and checking process that is now used by PCT smoking and clinical governance leads to ensure that the right definitions have been used and that results that fall outside an expected success rate range (derived from smoking cessation literature) are investigated (see below).

At the end of the monitoring period (a quarter plus six weeks), PCTs have a further four weeks to submit data to the IC in the case of Quarters 1 to 3 and five weeks in the case of Quarter 4. This means that, at the end of the quarter, SHAs have a total of 10 weeks to submit returns for Quarters 1, 2 and 3 and 11 weeks to submit the return for Quarter 4.

Revisions of previous quarters (to allow for late data) are permitted in the case of Quarters 1, 2 and 3 but **not in the case of Quarter 4** (due to the deadline for the CQC's Annual Health Check). Under this system, however, more time is available for submission of Quarter 4 data than for any other quarter. Late data from Quarter 4 may not be carried into Quarter 1 of the next reporting year.

For the first three quarters of the year, the IC produces three sets of tables at national, SHA and PCT levels accompanied by a summary describing key results. Within the Quarter 4 annual report, all provisional figures from previous quarters are confirmed and figures are deemed final. Extensive analysis is conducted at this point and a much more comprehensive report is produced. All published reports can be found on the IC website at www.ic.nhs.uk/statistics-and-data-collections/health-and-lifestyles/nhs-stop-smoking-services

Table 13: 2011/12 returns timetable

Quarter	End of six-week follow-up period	SHA deadline to submit data to IC and elapsed weeks	Deadline for data collection team to submit data to lifestyles team and elapsed weeks
April to June	12/08/2011	09/09/2011 (4 weeks)	W/C 03/10/2011 (provisional)
July to September	14/11/2011	09/12/2011 (4 weeks)	W/C 16/01/2012 (provisional)
October to December	14/02/2012	14/03/2012 (4 weeks)	W/C 9/04/2012 (provisional)
January to March	14/05/2012	18/06/2012 (5 weeks)	W/C 13/08/2012 (provisional)

In 2010/11, a receipt mechanism to acknowledge submission and validation of quarterly returns was introduced. This will be carried forward into 2011/12.

The monitoring and reporting process for 2011/12

There are no substantive changes to the quarterly monitoring and reporting process for 2011/12. As in each of the two previous years, there is no longer a requirement to collect data relating to carbon monoxide (CO) validation **attempts**. As a result, this information no longer needs to be entered on the quarterly monitoring form which is submitted to the IC. The requirement to submit monthly data on the number of four-week quitters through the UNIFY system ceased in November 2008.

SHAs are welcome to carry on submitting monthly statistics this way if they find it beneficial, but we know that some SHAs have chosen to opt out. Any data submitted on

a monthly basis through UNIFY is therefore only relevant to individual SHAs. No monthly national picture of NHS Stop Smoking Services is available.

'GOLD STANDARD' MONITORING

To encourage greater consistency in the data collected from the stop smoking service network, we have devised a gold standard monitoring form (see Annex I). This has recently been amended for the purposes of clarification. To improve consistency, we would urge services to use this form or adapt existing forms to include the same content; for example, when services are ready to reprint stocks of this form, they should use the new double-sided version.

RECORDING THE OCCUPATION OF PRISONERS – KEY POINT TO NOTE

The 'prisoner' occupation category was added to the quarterly monitoring form submitted to the IC in 2009/10 and subsequent years in an effort to reduce the number of clients recorded as 'unable to code'. This change is reflected in the 2011/12 gold standard monitoring form. With the exception of prison staff, clients treated in prison should all be recorded as prisoners.

Services will already have more detailed client record forms and systems that provide information about each stage of treatment as well as client motivation and quit history. Some PCTs have also invested in web-based information systems to help streamline their data collection processes and analyse service performance. Such systems can be of great benefit to commissioners and have proved a highly worthwhile investment in a number of areas.

RECOMMENDED ADDITIONAL INFORMATION TO ENHANCE LOCAL PLANNING AND ASSESSMENT

The following points of additional information will be useful for commissioners and providers of services but are not required in the quarterly returns.

- ☐ GP name and address
- ☐ Referral source
- ☐ Intervention provider
- ☐ Combination Nicotine Replacement Therapy (NRT) use
- ☐ Other drug use/health information (including mental health)
- ☐ Shortened Fagerström test for nicotine dependence score
- ☐ Length of treatment.

DEFINITIONS AND DATA QUALITY

It is important that we respond to the concerns about data quality. It is therefore essential that all local stop smoking services adopt strict criteria when deciding who to include in their monitoring return, and the four-week quit status of a client. These criteria also need to be applied consistently. When recording the number of smokers entering treatment and the number successfully quit at four weeks, it is essential that all services adhere to the definitions given in Annex C (see pages 107–111).

The purpose of the data monitoring system is to monitor and evaluate the effectiveness and reach of NHS Stop Smoking Services. It is designed to provide consistent information on people who have sought and received quitting help from an evidence-based local stop smoking service. **It is not a mechanism for counting all people who have stopped smoking in a locality, nor is it a prevalence measure**. For this reason, it should not include quits that have not resulted from structured stop smoking interventions delivered by stop smoking advisers.

COST PER QUITTER

Work is under way to develop clear guidance regarding cost per quitter submissions; however, in the interim, it should be noted that only monies spent on smoking cessation activity, not wider tobacco control measures, should be included in these calculations.

ENCOURAGING HONEST SELF-REPORTS

When carrying out four-week quit status checks, it is vital that staff phrase their questions in a way that encourages honest answers. For example: 'Are you sure that you haven't smoked at all in the past two weeks? Not even a puff?' The honesty of client's self-reports may be enhanced by using a multiple-choice question format:

'Which option best describes your smoking activity since your quit date?'

☐ I haven't smoked at all since my quit date, not even a puff.

☐ I did have the odd puff/cigarette early on in my quit attempt but haven't smoked at all in the last two weeks, not even a puff.

☐ I have had the odd cigarette/puff in the last two weeks.

☐ I am still smoking but have cut down.

☐ I am still smoking as much as before my quit date.

DISABILITY DISCRIMINATION ACT

Amendments to the Disability Discrimination Act 1995, which came into force in December 2006, require all NHS authorities to actively promote disability equality and monitor their compliance with it. To ensure compliance with this legal requirement, DH also published a practical guide to help NHS organisations develop disability equality schemes.[198]

This has since been replaced by the Equality Act 2010, which stipulates that all public authorities have an equality duty which covers race, disability, gender, age, sexual orientation, religion or belief, pregnancy and maternity, and gender reassignment.

Exception reporting system

Before submitting quarterly data, service leads should examine their data. If they find outlying data, they should carry out the exception reporting procedure. This should be done in co-operation with a PCT clinical governance or data lead. The information lead at the relevant SHA should be notified of the results before data is submitted to the IC.

Results for all intervention types and their settings should be checked by the PCT lead to determine whether all four-week quit rates (self-report and CO verified) fall between 35% and 70%. If the overall service results (or those for a specific intervention type/setting) fall outside this range, then the following checks should be carried out:

☐ **The service provider or adviser should be contacted and asked to confirm that all definitions contained within the guidance have been followed.** If this is not the case, then the total number of successful four-week quits should be recalculated using the approved definitions and the data re-entered onto the service database.

☐ **If the service provider or adviser asserts that the approved definitions have been used, a minimum of three random checks of smokers treated by the service provider concerned should be carried out** by telephone (or face to face if possible). This should establish whether they meet the criteria for self-reported or CO verified four-week quits at the four-week follow-up point and whether they have received an approved intervention of the required content and duration. A minimum of three successful random calls to clients must be made, so if attempts to contact one client fail, another client should be selected. If the random checks indicate that recorded quits are unreliable, all cases received from this provider should be checked using the approved definitions and the total number of four-week quits should be re-entered onto the service database. If, after the required checks have been carried out, the results are still outside the expected range, an assessment should be made of the most likely causes.

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198 DH (2006) *Creating a Disability Equality Scheme: A practical guide for the NHS.* DH.
www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4139666

☐ To facilitate service audits and comply with clinical governance, all service providers should maintain adequate client records (to include all client contacts, medications used and smoking status). **Service providers should return data on all clients treated (not just on successful outcomes) so that success rates may be accurately calculated. These requirements should be specified in Service Level Agreements.**

☐ **Service providers or advisers that repeatedly submit incorrect or incomplete data should receive refresher training in the approved definitions and procedures.** Any data they submit should be subject to regular spot checks until the service lead is satisfied that the correct procedures and definitions are being used. It is especially important to monitor the data supplied by providers who are paid for their work or for successful four-week quit data under an SLA. This will ensure that clients are receiving the appropriate treatment and that the service is getting value for money.

☐ **Extenuating circumstances that may clarify otherwise unexplained outlying data should be recorded in the comments box in the exception reporting section of the quarterly return.** If the extenuating circumstances in a given case are not contained within the drop-down menu, the service lead should select 'other' and explain the circumstances using free text.

Figure 7: The exception reporting procedure

| Service lead checks success rates of all intervention types and settings | → | Service lead and PCT lead carry out checks with service providers regarding any outlying data | → | Service lead recalculates quit totals and completes extenuating circumstances section if data still outlying

PCT lead notifies SHA regarding results of exception reporting procedure | → | Service lead submits data to IC |

ANNEX A: CHECKLIST FOR COMMISSIONERS

STRATEGIC PLANNING

Assessing needs, reviewing service provisions and deciding priorities.

Recommendation	Completed? (yes/no)	Action required (if no)	Expected date of completion
Is service take-up by routine and manual (R/M) smokers, pregnant smokers and smokers with mental health diagnoses proportional to your local smoking population?			
Have you established the composition of your local smoking population and its service needs, and is provider development informed by local intelligence, community engagement and customer evaluation involving different populations?			
Have you obtained local prevalence and current activity data on smoking populations? Have services been weighted in terms of deprivation and does this include high-risk groups such as pregnant women, prisoners or smokers with mental health diagnoses?			

PROCURING SERVICES

Designing services, shaping structure of supply, planning capacity and managing demand.

Recommendation	Completed? (yes/no)	Action required (if no)	Expected date of completion
Have you sought advice and guidance from internal and local networks, and is the commissioner(s) in regular communication with external sources of support?			
Are stop smoking service providers fully aware of all commissioning arrangements and how they should be working with other local providers of stop smoking support? (For example, are locally commissioned stop smoking services fully integrated?) Are clear communication channels in place to ensure that all providers are updated on local and national developments?			
Does your provider(s) have a clear treatment protocol?			
Does the provider(s) have a dedicated lead?			
Does your provider(s) offer the optimum balance of high-efficacy treatment, reach and accessibility?			
Does your provider(s) currently deliver a range of evidence-based interventions that consistently achieve auditable success rates of between 35% and 70%, and comply with the quality principles?			
Are all stop smoking advisers NHS Centre for Smoking Cessation and Training (NCSCT) certified and supported to attend relevant training events? Do they all have continuing professional development plans?			

Recommendation	Completed? (yes/no)	Action required (if no)	Expected date of completion
Are all National Institute for Health and Clinical Excellence (NICE)-approved stop smoking medicines available as first-line treatments for smokers wanting to quit?			
Does your provider(s) achieve carbon monoxide (CO) validation rates at the recommended minimum of 85% of all self-reported four-week quitters?			
Does your provider(s) benefit from a robust, integrated IT system that provides: ☐ systems for prompt and accurate return of quarterly service data? ☐ concordance with mandatory data requirements and the flexibility to update data fields when necessary? ☐ the facility to manage client appointments efficiently and conduct detailed analyses of local performance? ☐ the ability to analyse service performance and identify gaps in support provision?			
Does your provider's(s') budget include adequate provision for the supply and maintenance of the required equipment (e.g. CO monitors, tubes, calibration kits, etc.)?			
Have you budgeted sufficiently for local marketing and service promotion? Do local promotions use national Smokefree branding and campaign messaging, and are they integrated with regional and national marketing plans?			

Recommendation	Completed? (yes/no)	Action required (if no)	Expected date of completion
Do you have plans for consistent follow-up of referrals throughout the quitting journey? Do you have plans to re-engage smokers who have stopped using the service?			
Does your provider(s) have a contingency plan to deal with potential service disruption?			
Is the delivery of very brief advice and referral of smokers to commissioned stop smoking services contracted as part of all other commissioned services?			
Is very brief advice training available to staff working in potential referral services?			

MONITORING AND EVALUATION

Seeking the views of patients and the public, managing performance and supporting patient choice.

Recommendation	Completed? (yes/no)	Action required (if no)	Expected date of completion
Do you have access to the full range of data required and is there effective data sharing across all providers to provide quality assurance?			
Do you have robust and routine performance management and clinical governance systems to monitor service quality and facilitate independent audits?			
Do you have systems in place to measure service user satisfaction?			

ANNEX B: CHECKLIST FOR PROVIDERS

COMMUNICATION

Recommendation	Completed? (yes/no)	Action required (if no)	Expected date of completion
Are you in regular communication with your commissioner and other local providers?			
Are you fully aware of all commissioning arrangements for stop smoking provision, and are you following agreed protocols regarding working with other local providers of stop smoking support?			

DELIVERY

Recommendation	Completed? (yes/no)	Action required (if no)	Expected date of completion
Is the service's treatment protocol being adhered to?			
Do you currently deliver a range of evidence-based interventions that consistently achieve auditable success rates of between 35% and 70%, and comply with the quality principles?			
Are all stop smoking advisers NCSCT certified and supported to attend relevant training events? Do they all have continuing professional development plans, including regular training updates?			
Are all NICE-approved stop smoking medicines available as first-line treatments for smokers wanting to quit? If not, is your commissioner aware of this issue?			
Are a minimum of 85% of self-reported four-week quitters CO validated?			
Do you have sufficient levels of the required equipment (e.g. CO monitors) to adhere to the quality principles?			
Are you using the agreed IT system and only inputting data for treated smokers?			
Do all pilot projects include an evaluation strategy?			
Are contingency plans regularly reviewed to ensure minimal service disruption?			

DATA COLLECTION AND INFORMATION SHARING

Recommendation	Completed? (yes/no)	Action required (if no)	Expected date of completion
Are you feeding into agreed protocols regarding sharing information across providers and to the commissioner?			
Are detailed reports of all activity systematically being kept in case of independent audit, and is client data being treated in line with agreed data protection protocols?			
Is referral source data recorded to measure very brief advice and referral activity from other commissioned services? Are treatment outcomes being routinely fed back to the referrers?			
Is data regarding referrals generated from local marketing and service promotion activity routinely recorded to assist evaluation?			
Are you implementing agreed systems to measure service user satisfaction?			

ANNEX C: DEFINITIONS

Bank staff

Staff involved in the delivery of NHS stop smoking interventions who have been trained to NCSCT standards and who are paid to provide these services outside their normal working hours.

CO verified four-week quitter

A treated smoker whose CO reading is assessed 28 days from their quit date (−3 or +14 days) and whose CO reading is less than 10ppm (parts per million). The −3 or +14 day rule allows for cases where it is impossible to carry out a face-to-face follow-up at the normal four-week point (although in most cases it is expected that follow-up will be carried out at four weeks from the quit date). This means that follow-up must occur 25 to 42 days from the quit date (Russell standard).

Clients whose follow-up date falls outside this time span may not be counted for the purposes of quarterly data submissions to the NHS Information Centre (IC). CO verification should be conducted face to face and carried out in at least 85% of self-reported four-week quitters. Continine levels can be assessed using postal sample collections if necessary.

The percentage of self-reported four-week quitters who have been CO verified should be calculated as shown below:

$$\frac{\text{Number of treated smokers who self-report continuous abstinence from smoking from day 14 to the four-week follow-up point, and who have a CO reading of less than 10ppm}}{\text{All self-reported quitters}}$$

Exception reporting system

A data verification and checking system designed to improve data quality and identify the reasons for outlying data (i.e. data that falls outside the expected success rate range derived from the evidence base on smoking cessation).

Local stop smoking services

A local stop smoking service is defined as a locally managed, co-ordinated and provided service, funded by DH nationally, to provide accessible, evidence-based, cost-effective clinical services to support smokers who want to quit. Service delivery should be in

accordance with the quality principles for clinical and financial management contained within this guidance.

Lost to follow-up (LTFU)

A treated smoker who cannot be contacted either face to face, or via telephone, email, letter or text following three attempts to contact at different times of day, at four weeks from their quit date (or within 25 to 42 days of the quit date). The four-week outcome for this client is unknown and should therefore be recorded as LTFU on the monitoring form.

Monthly monitoring

Voluntary monthly collection and reporting system for which local stop smoking services collect and report data on the number of smokers entering treatment and setting a quit date and the number recorded as quit. **This return is now optional** (as of November 2008).

Non-treated smoker

A smoker who receives no support or is given brief or very brief advice and/or supplied with leaflets, helpline cards or pharmacotherapy only, and does not set a quit date or consent to treatment. Examples may include smokers seen at health fairs or community events, during a GP consultation or during a hospital stay where a quit date is not set and a quit attempt is not made.

Quarterly dataset

Stop smoking service data that is submitted to the IC on a quarterly basis.

Quit date

The date on which a smoker plans to stop smoking altogether with support from a stop smoking adviser as part of an NHS-assisted quit attempt.

Renewed quit attempt

A quit attempt that takes place immediately following the end of one treatment episode. A new treatment episode should be commenced in the database/service records.

Routine and manual smoker

A smoker whose self-reported occupational grouping is of a routine and manual (R/M) worker, as defined by the National Statistics Socio-Economic Classification.[199]

Self-reported four-week quitter

A treated smoker whose quit status at four weeks from their quit date (or within 25 to 42 days of the quit date) has been assessed (either face to face, by telephone, text, email or

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199 Office for National Statistics (2005) *The National Statistics Socio-Economic Classification User Manual.* ONS

postal questionnaire). The percentage of self-reported four-week quitters should be calculated as shown below:

> Number of treated smokers who self-report continuous abstinence from smoking from day 14 post-quit date to the four-week follow-up point
>
> ---
>
> All treated smokers

Smoked product

Any product that contains tobacco and produces smoke is a smoked product, including cigarettes (hand-rolled or tailor-made), cigars and pipes. Pipes include shisha, hookah, narghile and hubble-bubble pipes.

Smokeless product

There is evidence to show that the use of smokeless tobacco products (e.g. chewing tobacco, paan, khat) can have negative health effects, including oral cancers. There is some evidence to suggest that behavioural support can be effective.

Note for commissioners:

Commissioners who identify communities within their localities with high rates of smokeless tobacco use may also consider these priority groups and look to commission services to help them to quit. There is currently a limited evidence base regarding the most effective type of service for smokeless tobacco users, and consideration also needs to be given about how a client who self-reports cessation will be clinically validated. It is also important to note that clients who attend such services are not to be included in data monitoring returns as the outcomes relate specifically to smoking.

Smoker

A person who smokes a smoked product. In adulthood this is defined in terms of daily use, whereas in adolescence (i.e. for those aged 16 or under) it is defined in terms of weekly use.

Smoking cessation

In clinical terminology, used to denote activities relating to supporting smokers to quit.

Spontaneous quitters

Smokers who have already stopped smoking when they first come to the attention of the service may be counted as having been 'treated' for local accounting purposes (e.g. to justify resources used or to analyse performance) only if they have quit within the 14 days

prior to coming to the attention of the service and have attended the first session of a structured multi-session treatment plan within 14 days of their spontaneous quit date (which should be recorded as the quit date).

Services should note that these patients should not be included in the data submitted to the national dataset. The results of spontaneous quitters may be recorded for local monitoring only.

Smokers who have already stopped smoking when they first come to the attention of the service may be counted as having been 'treated' only if they have quit within the 48 hours prior to coming to the attention of the service and have attended the first session of a structured multi-session treatment plan within two days of their spontaneous quit date (which should be recorded as the quit date).

Examples of such quitters include clients who experience unplanned admission to hospital and stop smoking before receiving support or pregnant smokers who have already stopped smoking before approaching their local stop smoking service provider or one of the service's trained agents. While it is recognised that it is desirable to offer as many smokers as possible support to quit and maintain abstinence, local commissioners will need to balance the needs of their smoking population against available service resources.

Stop smoking

Preferred term to denote patient-facing communications relating to smoking cessation activity.

Stop smoking adviser

An individual who is NCSCT certified, has received stop smoking service training that meets the NCSCT published standards and is employed by a commissioned stop smoking service provider.

Stop smoking service provider

A stop smoking service provider is defined as a locally managed and co-ordinated service commissioned to provide accessible, evidence-based, cost-effective clinical services to support smokers who want to quit. Service delivery should be in accordance with the quality principles for clinical and financial management contained within this guidance.

Time between treatment episodes

(See 'treatment episode'.)

When a client has not managed to stop smoking, there is no definitive period of time required between the end of one treatment episode and the start of another. The stop smoking adviser should use discretion and professional judgement when considering whether a client is ready to receive support to immediately attempt to stop again. If this

is the case, the client must start a new treatment episode – i.e. attend one session of a structured, multi-session intervention, consent to treatment and set a quit date with a stop smoking adviser in order to be counted as a new data entry on the quarterly return.

Treated smoker

A smoker who has received at least one session of a structured, multi-session intervention (delivered by a stop smoking adviser) on or prior to the quit date, who consents to treatment and sets a quit date with a stop smoking adviser. Smokers who attend a first session but do not consent to treatment or set a quit date should not be counted.

Treatment episode

At the point of attending one session of a structured, multi-session intervention, consenting to treatment and setting a quit date with a stop smoking adviser, a client becomes a treated smoker and the treatment episode begins. The treatment episode ends when a client has either been completely abstinent for at least the two weeks prior to the four-week follow-up (see flow chart overleaf) or is lost to follow-up at the four-week point, or when a four-week follow-up reveals that a client has lapsed during the two weeks immediately prior to the follow-up and is therefore recorded as a non-quitter. Good practice dictates that if the client wishes to continue treatment after a lapse, treatment should be continued if it seems appropriate, but the client will not count as a four-week quitter for the purposes of that treatment episode.

Figure 8: Treatment episode flow chart

Lead contacted to offer service by trained stop smoking adviser offering structured multi-session interventions	Client participates in first session of a structured multi-session intervention, consents to treatment and sets a quit date	Client participates in weekly sessions of structured multi-session interventions, and receives behavioural support and offer of pharmacotherapy	If client stops participating and is lost to follow-up (LTFU) OR client relapses after day 14 post-quit date	Four weeks post-quit date (day 25–42) assessment: face to face if possible, CO recorded where possible (85% of cases minimum)	Treatment by structured multi-session intervention of behavioural support +/- pharmacotherapy complete as per local protocol (minimum six weeks)

Lead generated and contacted

Treatment episode begins – this client is now a treated smoker and should be included in the quarterly data monitoring

End of treatment episode

Four-week quit status defined:
• CO validated quit
• Self-reported quit
• Not quit/LTFU

End of treatment episode

New treatment episode may begin as required at any time following end of previous treatment episode

The intervention type chosen at this point is the intervention type to be cited in data monitoring

If client has already stopped smoking by this point, they are a spontaneous quitter and should not be counted

ANNEX D: ROUTES TO QUIT

The RTQ programme is a move towards a wider and more flexible approach that allows smokers to choose from the various evidence-based options for quitting, and to engage with the NHS. The premise behind this is that there should be a tailored quit plan (TQP) to meet the needs of individual clients.

To ensure that smokers are supported to make an informed choice and are given the greatest chance of success, support options need to be presented to smokers in line with the current hierarchy of evidence. This means that all smokers should receive a tailored quit plan assessment (TQPA) and be advised that the most effective method of quitting is the abrupt model, and only if they reject that offer should the second-line treatment offer be made. This should be repeated for the third-, fourth- and fifth-line treatment offers.

Figure 9: Overview of RTQ

Step 1
Very brief intervention (VBI)

↓

Step 2
Tailored quit plan assessment (TQPA)

↓

Step 3
Tailored quit plan intervention (TQPI)

1. TQP – abrupt (A)
2. TQP – rapid reduction (RR)
3. TQP – medication only (MO)
4. TQP – gradual reduction (GR)
5. TQP – self-care (SC)

Step 1 involves asking patients about their smoking status, advising smokers on the benefits of quitting and on the support available and then acting upon their response (act; advise; act). Smokers who are thinking of stopping smoking (in the near or distant future) or who would like more information are referred for a TQPA.

Step 2 is the TQPA and this document goes through this in detail.

Step 3 is the delivery of the intervention that the client has selected following on from the TQPA. It involves:

- TQP-abrupt (A): This is the standard and preferred treatment option as it offers the smoker the greatest chance of achieving abstinence. Behavioural support and medication are provided for a quit attempt that involves setting a quit date and not smoking even one puff after this.

- TQP-rapid reduction (RR): A period of rapid reduction is specified as part of the treatment plan (maximum four weeks) which can involve: extending periods of abstinence, only smoking at specific times of the day or setting a target number of cigarettes per day. During the reduction period, Nicotine Replacement Therapy (NRT) is used and behavioural support provided. The period of reduction is flexible up to four weeks but the quit date must be set at the start of that period and not even one puff must be smoked after the quit date.

- TQP-medication only (MO): All stop smoking medications are offered as appropriate to the smoker by a trained health professional. A quit date is set after which complete abstinence is aimed for; no additional behavioural support is provided.

- TQP-gradual reduction (GR): A period of gradual reduction may be specified as part of the treatment plan (maximum nine months) but shorter reduction programmes may be more effective than longer ones. Approaches can involve: setting a target number of cigarettes per day, extending periods of abstinence or delaying the first cigarette of the day. NRT can be used to assist with this reduction and the initial goal must be to halve tobacco consumption by six weeks (using similar methods to those in the rapid reduction programme).

- TQP-self-care (SC): The smoker is given verbal and written advice about self-management, over-the-counter (OTC) and harm reduction licensed NRT products, and will be offered an 'open door policy' to stop smoking services.

ANNEX E: USEFUL CONTACTS

Department of Health
Tobacco control delivery
emma.croghan@dh.gsi.gov.uk

NHS Centre for Smoking Cessation and Training (NCSCT)
enquiries@ncsct.co.uk
www.ncsct.co.uk

NCSCT Community Interest Company (CIC)
delivery@ncsct.co.uk
www.ncsct.co.uk

North East
Ailsa Rutter (Regional Tobacco Policy Manager (RTPM)) ailsa.rutter@freshne.com
Martyn Willmore (Regional Development Manager (RDM)) martyn.willmore@freshne.com
Andy Lloyd (Regional Communications Manager (RCM)) andy.lloyd@freshne.com

North West
Andrea Crossfield (RTPM) andrea.crossfield@smokefreenorthwest.org.uk
Tina Williams tina.williams@smokefreesouthwest.org.uk

Yorkshire & Humber
Patricia Hodgson (RTPM) patricia.hodgson@dh.gsi.gov.uk
Scott Crosby (RCM) scott.crosby@dh.gsi.gov.uk

East of England
Christine Harvey christine.harvey@eoe.nhs.uk
Hilary Andrews (RDM) hilary.andrews@eoe.nhs.uk

South West
Fiona Andrews (RTPM) fiona.andrews@smokefreesouthwest.org.uk
Andrea Dickens andrea.dickens@smokefreesouthwest.org.uk
Juniper Connal (RDM Southern) juniper.connal@smokefreesouthwest.org.uk
Laura Ridout (RDM Northern) laura.ridout@smokefreesouthwest.org.uk
Melissa Cullum (RCM Southern) melissa.cullum@smokefreesouthwest.org.uk
Kate Barrett (RCM Northern) kate.barrett@smokefreesouthwest.org.uk

OTHER USEFUL CONTACTS

NHS Stop Smoking Helplines 0800 169 0 169

NHS Pregnancy Smoking Helpline 0800 169 9 169

NHS Asian Tobacco Helpline

    Urdu 0800 169 0 881

    Punjabi 0800 169 0 882

    Hindi 0800 169 0 883

    Gujarati 0800 169 0 884

    Bengali 0800 169 0 885

For queries about using the Smokefree brand identity, please email smokefreebrand@dh.gsi.gov.uk.

ANNEX F: THE SMOKEFREE RESOURCE CENTRE

The Smokefree Resource Centre (http://smokefree.nhs.uk/resources/) is an online resource to support those passionate about reducing the prevalence of smoking in England. It contains comprehensive links to a wide range of policy, guidance, latest campaign information, marketing templates and free resources relevant to this area.

Designed for healthcare professionals, local service providers, employers and other partners, it is easy to navigate and allows users to search by topic, type and campaign as well as to access regional information. Users can also sign up for updates, including a newsletter, or set up an account that stores their previous orders.

The site will be reviewed regularly and new resources and functionality will be added on an ongoing basis. If you have any comments on the site, please contact **smokingorders@coi.gsi.gov.uk**.

ANNEX G: FURTHER USEFUL RESOURCES

Smokefree campaign website – www.nhs.uk/smokefree – with information, tools and video content for smokers who want to quit. Smokers can also look up their local stop smoking service provider.

NHS Centre for Smoking Cessation and Training – www.ncsct.co.uk – keep up to date with latest developments from the centre.

NHS Information Centre – www.ic.nhs.uk

The Cochrane Collaboration, Cochrane reviews – www.cochrane.org/reviews/

National Institute for Health and Clinical Excellence (NICE) – www.nice.org.uk/

Medicines and Healthcare products Regulatory Agency (MHRA) – www.mhra.gov.uk/index.htm

Electronic Medicines Compendium (eMC) – http://emc.medicines.org.uk/

GLOBALink – http://member.globalink.org/login

Action on Smoking and Health (ASH) – www.ash.org.uk/

UK National Smoking Cessation Conference – www.uknscc.org – keep up to date with future conferences and access presentations from previous events.

Stop Smoking Live! – www.stopsmokinglive.org – find out about future conferences.

HM Government (2011) *Healthy Lives, Healthy People: Tobacco control plan for England.* www.dh.gov.uk/en/Publicationsandstatistics/Publications/ PublicationsPolicyAndGuidance/DH_124917

MHRA (2010) *Public consultation: The regulation of nicotine containing products (NCPs).* www.mhra.gov.uk/Publications/Consultations/Medicinesconsultations/MLXs/ CON065617

ANNEX H: EVALUATION PROFORMA

Service information

Name of stop smoking provider	
Name and contact details of the work/project lead	
Key characteristics of the population within the area served by the service	

Project outline

Target audience for the intervention	
Rationale for developing the intervention	
Evidence used to support the rationale	
Aims of the work	
Objectives of the work	
Processes and timelines	
Methods used	

Outcomes

Number of leads generated	
Cost per lead generated	
Number of quit dates set (QDS)	
Cost per QDS	
Number of four-week quits (4wkq)	
Cost per 4wkq	

Costs

Item	Total cost (£)
Staffing	

Medication (please specify)
  NRT
  Varenicline
  Bupropion	

Access to medication costs:	
Marketing	
Overheads (please specify)	
Premises	
Travel	
Other (please specify)	
TOTAL	

Pre- and post-implementation data

Timescales	1 month four-week quits	6 month four-week quits	12 month four-week quits
Pre-implementation			
Post-implementation			

ANNEX I: GOLD STANDARD MONITORING FORM

(INSERT SERVICE NAME & ADDRESS) STOP SMOKING SERVICE

Note: All patient data will be kept securely and in accordance with Caldicott guidelines. Information can only be passed to another healthcare professional if this contributes to the provision of effective care.

DETAILS:

Department/Ward		Location/setting	
Name		Venue	
Contact tel. no.		Adviser code/ref	

CLIENT DETAILS:

Surname		First name		Mr/Mrs/Ms/other
Address				
Postcode		NHS ID no.		
Daytime tel. no.		Mobile no.		
Alternative contact number (friend/relative)				
Date of birth		Age (in years)	Gender	Male / Female
Exempt from prescription charge	Y / N	Pregnant	Y / N	Breastfeeding	Y / N

Occupation code (*see reverse for further information*)

- Full-time student ☐
- Never worked/long-term unemployed ☐
- Retired ☐
- Home carer ☐
- Sick/disabled and unable to work ☐
- Managerial/professional ☐
- Intermediate ☐
- Routine manual ☐
- Prisoner ☐
- Unable to code ☐

ETHNIC GROUP (*please tick relevant group*)

a] White		b] Mixed		c] Asian or Asian British	
British	☐	White and Black Caribbean	☐	Indian	☐
Irish	☐	White and Black African	☐	Pakistani	☐
Other white background	☐	White and Asian	☐	Bangladeshi	☐
		Other mixed groups	☐	Other Asian background	☐
d] Black or Black British		e] Other ethnic groups		f] Other	
Caribbean	☐	Chinese	☐	Not stated	☐
African	☐	Other ethnic group	☐		
Other Black background	☐				

HOW CLIENT HEARD ABOUT THE SERVICE (*please tick relevant box*)

GP	☐	Friend/relative	☐	Pharmacy	☐
Other health professional	☐	Advertising	☐	Other (please specify)	☐

Agreed quit date		Date of last tobacco use		Date of 4-week follow-up	

TYPE OF INTERVENTION DELIVERED (*for the purpose of data capturing, the intervention type is the one chosen at the point the client sets a quit date and consents to treatment*)

Closed group	☐	Telephone support	☐	Other (please specify)	☐
Open (rolling) group	☐	Couple/family	☐		
One-to-one support	☐	Drop-in clinic	☐		

TYPE OF PHARMACOLOGICAL SUPPORT USED (*please tick all relevant boxes. Use 1 or 2 to indicate consecutive use of more than one medication – e.g. Champix followed by NRT product*)

None	☐	Zyban	☐	NRT – gum	☐
NRT – lozenge	☐	NRT – inhalator	☐	NRT – patch	☐
NRT – microtab	☐	NRT – spray	☐	Champix	☐

TREATMENT OUTCOME

Not quit	☐	Lost to follow-up	☐	Quit self-reported	☐	Quit CO verified	☐

Adviser signature

Client signature (indicating consent to treatment and follow-up and pass on of outcome data to GP)

Notes:

1. Location/setting should be one of the following: stop smoking services, pharmacy, prison, primary care, hospital ward, dental practice, military base setting or other.

2. A client is classified as long-term unemployed if they have currently been unemployed for one year or more. If unemployed for less than a year, last known occupation should be used for classification.

3. Home carer – i.e. looking after children, family or home.

4. If a client is self-employed, please use the flowchart below to determine classification.

5. Supervisor is responsible for overseeing the work of other employees on a day-to-day basis.

6. Managerial and professional occupations include: accountant, artist, civil/mechanical engineer, medical practitioner, musician, nurse, police officer (sergeant or above), physiotherapist, scientist, social worker, software engineer, solicitor, teacher, welfare officer; those usually responsible for planning, organising and co-ordinating work or finance.

7. Intermediate occupations include: call centre agent, clerical worker, nursing auxiliary, nursery nurse, office clerk, secretary.

8. Routine and manual occupations include: electrician, fitter, gardener, inspector, plumber, printer, train driver, tool maker, bar staff, caretaker, catering assistant, cleaner, farm worker, HGV driver, labourer, machine operative, mechanic, messenger, packer, porter, postal worker, receptionist, sales assistant, security guard, sewing machinist, van driver, waiter/waitress.

9. The 'prisoner' occupation category has been introduced for collections from 2009/10 onwards in an effort to reduce the number of clients recorded under 'unable to code'. With the exception of prison staff, clients treated in prisons should all be recorded as prisoners.

For further assistance in determining socio-economic classifications, please see the flowchart below. If you are still unable to establish this, please record as unable to code.