School *for* Health

Guidance for the NHS and other sectors on interventions that reduce the rates of premature death in disadvantaged areas: proactive case finding and retention and improving access to services

Mapping review

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Acknowledgements

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1 Executive Summary

Background
In August 2006 the Centre for Public Health Excellence (CPHE) at the National Institute for Health and Clinical Excellence (NICE) was asked by the Department of Health to develop intervention guidance for the NHS and other sectors on interventions that reduce the rates of premature death in disadvantaged areas through proactive case finding, retention and improvement of access to services. This review, one of four commissioned to inform the guidance, maps relevant projects, service developments and other initiatives and was carried out between May and August 2007 by a team based at Durham University.

Aims
This review aimed to identify and describe interventions on smoking cessation and the use of statins for under-served areas and disadvantaged groups in relation to three areas:

- proactive case finding;
- retention;
- improvement of access to services.

Methods
Projects and interventions for both topic areas were identified using four methods:

- telephone interviews
- documentary analysis
- questionnaires
- scanning of selected conference archives and databases (where these were available online).

Work was carried out in two phases over a three month period: an initial exploratory phase; and a second phase that focused on mapping local interventions.

In phase 1, 54 semi-structured exploratory telephone interviews were carried out with representatives from a wide range of organisations at national and regional levels, in order to identify contacts at local level, interventions and key approaches. Selected conference archives and project databases were also scanned. During phase 1, categories of interventions were identified that were subsequently used to structure results in phase 2.

In phase 2,, interventions were identified through completed questionnaires from local stakeholders, and through analysis of local documents. Questionnaires were sent to regional/national leads for distribution to NHS stop smoking service managers and the All Wales Tobacco Forum, tobacco control coordinators (Northern Ireland), cardiovascular disease nurse leads, PCT pharmacy advisers, and PCT CHD leads. In addition, documentary analysis of PCT Local Delivery Plans and Local Area Agreements for the Spearhead areas (62 PCTs and 70 local authorities), where these were available, was carried out and other relevant documents were searched opportunistically. Less detailed searches were carried out for a sample of 60 non-Spearhead PCTs.

Results

Local priorities (including how interventions are combined) are influenced by national targets and the way in which they translate into local targets and priorities. Both areas of this mapping review - smoking cessation and the use of statins - are located within this policy context. Different activities seem to be required for achieving the 'quick wins' needed to meet 2010 national inequalities targets, than are needed for health improvement over the longer term .

Tackling disadvantage by increasing the numbers from disadvantaged groups and areas who successfully give up smoking, or who are treated with statin therapy to reduce their risk of cardiovascular disease (CVD), is, in part, a function of the effective targeting of services. Our review provides examples of the different approaches that are currently being used to identify target populations. These include:

- ward-based (or Super Output Area) based approaches
- the use of GP practice registers
- health equity audits (for both heart disease and for smoking)
- lifestyle surveys
- client databases.

This review also documents the use of new geo-demographic tools such as Mosaic.

Reaching these target populations is more complex. Social marketing techniques and other approaches based on understanding the needs and motivations of different groups of smokers are being used to increase awareness and use of mainstream services. The use of ex-smokers as advisers, and the recent introduction of health trainers to provide lifestyle support, are also examples of a more client-centred approach.

This review identifies many interventions designed to make services more accessible. However, these interventions do not fit neatly into categories of 'proactive case finding' and 'improving access to services' as, for both smoking cessation and statins, the two areas are closely related and providing community-based accessible services also enables proactive case finding.

Many smoking cessation services identified in this review were adopting client-centred approaches including more flexible times and locations for clinics, drop-in models and rolling programmes (the mainstream service in some areas). Services may be provided in community-based locations in disadvantaged wards, or via a wide range of leisure and work locations, including pubs, clubs and bingo halls, and through other initiatives such as Sure Start. They can be targeted at specific groups (e.g. pregnant women in disadvantaged areas, or black and minority ethnic groups). A number of areas reported success with drop-ins, free NRT, social marketing techniques, stop smoking shops, and widespread availability of level 2 advisers..

This review also illustrates several different approaches to identifying those at risk from cardiovascular disease, from city-wide proactive case finding across practice populations, to interventions targeted at practices in disadvantaged areas, or combinations of practice and community-based proactive approaches targeted at specific groups. Pharmacies, one stop shops and roving clinics are among the options for community-based proactive case finding. Practice-based approaches to identifying

target populations fall into two main areas: Those related to better performance against the Quality and Outcomes Framework (QOF) and NSF standards; and those which build on practice registers to develop proactive approaches to case finding. Software development is key to identifying practice populations at risk, given current difficulties. This review took place at a time where there is a lack of alignment between QOF incentives and national guidance and while this gap informs local incentive schemes currently being developed, the situation is also subject to change.

Incentives provided through the local enhanced service element (LES) of the GP and pharmacy contracts are also being used in innovative ways to target disadvantaged groups and areas for both smoking cessation and screening for statins. Many PCTs are adopting the local enhanced service element of the nGMS contract to improve stop smoking services in primary care, and there is local evidence that this is effective. The use of pharmacies to help target specific areas is evident in a number of PCTs, and activities include proactive case finding (through, for example, Heart MOTs) and involvement in NRT voucher systems. There are also examples of promoting concordance with statin therapy and providing on-going support for quitters. Pharmacy-based approaches have many advantages, such as high street locations, commercial marketing experience, and long opening hours.

Follow up by text, phone (including telephone consultations) or letters are used for relapse prevention in smokers, but it is also suggested that flexible drop in services and support from others (who could be at different stages of the quit process) are also helpful. Service level agreements may be implemented to help reduce drop out rates.

In relation to concordance with statin therapy, as well as working through the QOF, or through concordance structured medication and medicines use reviews, the review found examples of statin audits carried out through community pharmacies. There was also evidence of more targeted approaches in development, including prompts for compliance through text messaging or inclusion in local incentive schemes.

Discussion

This mapping review is a snapshot in time, and its content is influenced by those who responded to our requests for information and the availability of relevant documents. In spite of these limitations, this review presents a good overview of the range of interventions being adopted, providing a framework within which to consider the range of activities being developed. It also highlights gaps in knowledge and practice.

This review identified a large number of interventions targeted at disadvantaged groups and areas, and a broad range of ways in which national targets are translated into local interventions. These interpretations of national priorities reflect local contexts, needs and population groups. With a range of different models emerging for flexible outreach and proactive case finding, there is a case for carrying out further research into the costs and benefits of different approaches to providing smoking cessation services (such as drop-ins), and the impact on inequalities of different models of community-based opportunistic screening for cardiovascular disease. There is also scope for applying what has been learnt from outreach methods in smoking cessation to other areas, including screening for cardiovascular disease, and work to develop joint approaches.

Few examples of evaluation were identified, partly because many of the activities associated with evaluation are locally considered to be part of mainstream service provision (rather than separate initiatives) and are therefore less likely to have been written up or reported.. However, the wealth of examples here provides fertile ground for further comparative analysis, recognising that certain outreach activities are dependent on the local context. Smoking cessation services are often eclectic and opportunistic in their choice of locations, and in the ways in which they capitalize on national campaigns. Furthermore, smoking cessation activities do not occur in isolation. They are often combined with keep fit activities, other community or work-based healthy lifestyle initiatives, incorporated into a wide range of community development initiatives or form part of wider tobacco control strategies.

While the local enhanced service element of pharmacy contracts and GP contracts can provide a vehicle for PCTs through to target disadvantaged groups, more research on differential uptake is needed. There are also concerns that GP registers may under-record prevalence. Monitoring the implementation of a local enhanced service will allow uptake to be evaluated, which could inform the future development of this incentive.

This review considers interventions separately for both topic areas. Yet in practice, different kinds of approaches are often combined. For example, some stop smoking services may use a social marketing approach inform messages that are used to target priority groups in order to promote client-centred services that reflect the communities in which they are located.

Strategies to address inequalities in health combine and prioritise interventions in different ways. The effectiveness of specific interventions in reducing rates of premature morality may therefore need to be considered in the context of broader local strategies for narrowing the health gap.

2 Background

In August 2006 the Centre for Public Health Excellence (CPHE) at the National Institute for Health and Clinical Excellence (NICE) was asked by the Department of Health to develop intervention guidance for the NHS and other sectors on interventions that reduce the rates of premature death in disadvantaged areas through proactive case finding, retention and improvement of access to services. This guidance will focus on interventions related to proactive case finding, retention and improving access to services for underserved areas and disadvantaged groups in two key areas as case studies: smoking cessation and the use of statins to prevent or reduce the risk of cardiovascular disease (CVD).

As outlined in the scope, (available at: http://guidance.nice.org.uk/page.aspx?o=425069), guidance is intended to cover the following groups:

- *adults at increased risk of developing CVD (primary prevention using statins);*
- *adults with CVD (secondary prevention using statins);*
- *people aged 16 years and over who smoke and therefore are at increased risk of CHD and lung cancer. This includes pregnant women, manual workers and disadvantaged groups.*

Research questions identified in the scope for both smoking cessation and statins were as follows:

- *What are the most effective and cost-effective methods of identifying and supporting people at increased risk of developing CVD, or who already have CVD, people aged 16 years and over who smoke, in particular pregnant women, manual workers and those from disadvantaged groups?*
- *What are the most effective and cost-effective methods of improving access to services, under what circumstances, for whom and when?*
- *What type of support is most effective for different groups, under what circumstances, for whom and when?*
- *Is there a trade off between equity and efficiency?*

As part of a series of 4 reviews to inform the development of this guidance, the CPHE at NICE commissioned the Centre for Public Policy and Health, Durham University in May 2007 to carry out a mapping exercise over a three month period. The project specification defined the tasks as follows:

undertake a mapping exercise to identify and describe relevant interventions. This exercise should highlight and describe current PCT methods that focus on proactive case finding and the retaining and supporting of cases. The exercise should also highlight and describe the methods currently used by the PCTs to provide and improve access to their services. This mapping exercise should focus on the areas of smoking cessation and statin utilisation.

In this review, we used a combination of methods to map interventions targeted at disadvantaged groups and areas in relation to smoking cessation and statin use: questionnaires; interviews; documentary analysis; and searches of selected conference

archives and project databases. In an initial, exploratory phase we carried out brief telephone interviews with a wide range of national and regional stakeholders and trawled selected conference archives and good practice databases. In the second phase of the study, focused at a local level, we sent out questionnaires to a range of local stakeholders and scanned local documentation. We focused on the Spearhead areas, as the fifth of areas with the worst health and deprivation indicators. We also included examples from elsewhere in the UK where these were relevant to an English context. Many initiatives and interventions involve a range of partners, including local authorities, local employers, voluntary organisations and community pharmacies. We did not limit this mapping review to PCT and practitioner-initiated interventions, although these form a major part.

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All mapping reviews raise questions over the level of detail required, and the extent to which comprehensiveness of coverage is achieved. It is important to strike a balance between providing a descriptive directory of interventions targeted at specific groups or areas and providing examples to illustrate categories and themes which emerge from the range of interventions identified. In sections 3 and 4 of this report we adopt the latter approach, but additional interventions are summarised in Appendix 8, which is ordered in line with Sections 3 to 5 of the text for ease of reference.

Our mapping review was framed in relation to the three distinct areas outlined in the specification: proactive case finding; retention; and access to services. However, it became clear that, in practice, distinctions between proactive case finding and providing accessible services were not always easy to draw. Smoking cessation advice in pubs and clubs combines both functions, for example. Likewise, mobile cardiovascular risk assessment services are designed to be accessible to those who are less likely to access mainstream services. Moreover, proactive case finding may incorporate a number of distinct processes for identifying target populations (for example, through equity audit, practice registers, ward-based analyses), as well as providing services designed to be accessible for these target populations (such as through mobile units, or clinics based in specific locations). For these reasons, we have structured this review to reflect different aspects of proactive case finding, outreach and access, while recognising that the boundaries between them are not water tight. Section 3 concerns smoking cessation and begins by outlining how target populations are being identified (section 3.3) while sections 3.4 - 3.7 describe a range of methods used for targeting and making services more accessible for these populations. Common threads are to develop services which are responsive to the needs of clients and to exploit the potential of new contractual arrangements. Smoking cessation services often form part of wider initiatives to tackle disadvantage, to promote healthier lifestyles or form part of wider tobacco control measures spanning the activities of a wide range of partners. These are briefly discussed in sections 3.8 and 3.9. Interventions designed to prevent relapse are separately described in 3.10, although it should be emphasised that flexible and accessible services are also considered to contribute to the prevention of relapse. We have also included some examples of what local practitioners consider to have worked well in smoking cessation (3.11). Although this review considers different aspects in isolation, in practice a combination of approaches is adopted.

Section 4 is concerned with the use of statins. As for smoking cessation, there is a section concerned with ways in which target populations are being identified (section

4.3) to include health equity audit, practice-based approaches and ward-based approaches (singly or in combination), followed by examples of key approaches to community-based proactive case finding. These include community-based clinics, pharmacies and a range of sporadic initiatives (section 4.4.1). Section 4.4.2 looks at proactive case finding though GP practices (and associated incentive schemes) and peer educators (section 4.4.3). In practice, as with smoking cessation, there is often a combined approach. We discuss concordance with statin therapy but were unable to find many examples in our mapping review. We then provide examples of how respondents interpreted successes in driving down rates of premature mortality. Unlike smoking cessation, cholesterol screening is not typically included as part of lifestyle-orientated interventions, but largely limited to screening programmes. As mentioned above, projects often combine a range of approaches and in section 5 we briefly discuss some examples. While a detailed study of such projects lies outside the focus of this review, it raises the wider question of how interventions for smoking cessation and statin use are being prioritised within a broader strategic framework for addressing inequalities in health.

Finally, section 6 brings together conclusions from this mapping review, identifies emerging trends and indicates research gaps.

3 Methods

Projects and interventions for both topic areas were identified using four methods: telephone interviews; documentary analysis; questionnaires; and scanning of selected conference archives and databases where these were available online. The aim was to try and identify as many and as broad a range as possible. This triangulated approach is described below for the two main phases of the project. Further details are included in Appendix one.

3.1 Phase 1: exploratory phase (May 2007)

In the first, exploratory phase we carried out a total of 54 brief interviews with representatives from a wide range of organisations at national and regional levels (see Appendix 1 for a list of organisations) following an emailed letter of invitation (Appendix 2) which explained the purpose of the interview. These were exploratory semi-structured telephone interviews, tailored to particular organisations and individuals. Appendix 3 indicates questions asked of the two largest groups (regional tobacco policy managers and cardiac network leads for primary care). There is no central list of cardiac network leads for primary care and these were identified through contacting the cardiac networks directly. We interviewed 10 national stakeholders for smoking cessation and 6 for statin use; at regional level we interviewed 15 regional stakeholders for smoking cessation, of whom ten were regional tobacco control policy managers (for all 10 regions), and 23 cardiac network leads for primary care (out of a possible total of 29). We also carried out desk-based searches for examples of interventions targeted at disadvantaged groups and areas through the archives of the UK National Smoking Cessation Conference (UKNSCC) (2005-7), and for interventions related to both smoking cessation and statin use through the UKPHA conference (2007), National Pharmacy Association Awards, the DH database on health inequalities and Big Lottery projects. We were unable to locate a central database for NRF-funded projects and relied on local sources of information.

3.2 Phase 2: local interventions (June and July 2007)

We investigated local interventions through a combination of questionnaires and documentary analysis. These are discussed in turn.

3.2.1 Questionnaires

We emailed questionnaires to a range of stakeholders in order to identify local interventions. The following networks were accessed through the cooperation of national and regional organisations, as described below, with the exception of PCT CHD leads, where there is not a separate database. These were identified through contacting each of the cardiac network leads for primary care.

- *NHS Stop Smoking Service Managers*: a list of questions (Appendix 4) was forwarded to regional tobacco policy managers for distribution to their networks of NHS stop smoking service managers in nine of the ten regions (excluding the North East region). There were 26 responses. In the North

East region, information was gathered, by agreement, from a concurrent survey of the twelve stop smoking services.

- *All Wales Tobacco Forum*: a list of questions was forwarded to members of the All Wales Tobacco Forum, via ASH Wales. There were 7 replies. *Tobacco control coordinators* (Northern Ireland). The four tobacco control coordinators in Northern Ireland were contacted via ASH Northern Ireland. There were 2 replies.
- *Cardiac networks*: a request for information was emailed through the fortnightly bulletin for cardiac networks through the NHS Heart Improvement Programme. There was no response.
- *CVD nurse leads*: a list of questions (Appendix 5) was emailed to the network of nurse leads for CVD (approximately 40 members). There were no responses, but three members were interviewed on a separate basis.
- *PCT CHD leads* (100 in total) were individually emailed, once their contact details had been identified through the cardiac network leads for primary care (Appendix 6). 15 replies were received.
- *PCT pharmacy advisors*: a list of questions (Appendix 7) was forwarded through the database held by the National Prescribing Centre. 12 replies were received.

We did not have independent access to networks of stop smoking managers, PCT pharmacy advisers or nurse leads for CVD and are therefore unable to confirm the exact number of people who received questionnaires. We relied on the cooperation of others to access these networks.

3.2.2 Documentary analysis

Concurrently, we scanned local documents for examples of interventions related to smoking cessation and screening for cholesterol. Our main focus was on the Spearhead areas (70 local authorities and 62 (reconfigured) PCTs which map to them); the main documents searched were PCT Local Delivery Plans (LDPs) and Local Area Agreements (LAAs), which are three year agreements between a local area and central government and a key delivery mechanism for addressing inequalities. We also scanned in less detail a sample of 60 of the remaining PCTs. As the level of detail in LAAs and LDPs is variable (and many LDPs were not easily available), we also scanned, in an opportunistic fashion, other documents including the most recent PCT Annual Reports, tobacco control or CHD strategies or the Annual Reports of Directors of Public Health for the Spearhead PCTs.

Following the exploratory phase, and in the light of local interventions, we categorised interventions into different groups and these are reflected in the structure of this review.

4 Results: smoking cessation

4.1 Introduction

A mapping review inevitably raises questions over which interventions to include and which to exclude. Many projects and initiatives are ephemeral or may be modified in the light of the availability of funding, funding priorities or in response to changes in service demands. Moreover, smoking cessation activities may form part of a wide range of projects directed towards promoting healthy lifestyles. These contextual issues are briefly discussed in turn, before describing the main results.

Despite the policy priority attached to addressing inequalities, many services specifically targeted at disadvantaged groups or areas have been set up as pilots with short-term funding. The former English Health Action Zones (HAZ), established in areas of disadvantage, provided the pilots for the national smoking cessation services. In its report on smoking cessation services, the Healthcare Commission (2007) noted that favourable results in driving down inequalities in some PCTs could be traced directly to initiatives initially developed through the HAZs. Nevertheless, many projects related to smoking cessation and the prevention of CVD continue to be funded on a short-term basis, through, for example, Neighbourhood Renewal Funding (NRF), New Deal for Communities (NDC), Big Lottery, the Tobacco and Inequalities Project (in Scotland) or the Inequalities in Health Fund (in Wales). Different funding and monitoring arrangements mean that the impact of these projects is difficult to assess. Many face uncertain futures, may be partially or fully absorbed into mainstream services or be discontinued. In England, the funding for mainstream stop smoking services is no longer ring-fenced. From a mapping point of view, therefore, the picture is fluid and subject to change for both mainstream services and project-based interventions and the results should be interpreted in this context.

Smoking cessation activities do not always occur in isolation. They are often combined with keep fit activities, other community or work-based healthy lifestyle initiatives or incorporated into a wide range of community development initiatives, including Healthy Living Centres (introduced in 1999). Interventions designed to increase access amongst groups who are disadvantaged in relation to any one of the many dimensions of inequality may act as a portal for a wide range of services. Moreover, smoking cessation services form part of a wider picture of tobacco control and the success of smoking cessation services is influenced by these wider policies, demonstrated by the recent bans on smoking in public places across the UK. Finally, PCTs work in partnership to reduce smoking in local communities, often as part of broader strategies to address inequalities in health. In its review of stop smoking services, the Healthcare Commission noted that one characteristic of high performing PCTs was their *engagement in partnerships with local agencies, including councils, hospitals and prisons* (Healthcare Commission 2007, p.18). Although the ways in which different approaches are combined may be an important factor in driving down inequalities in health, in this part of the review we focus on ways in which disadvantaged groups and areas have been targeted through smoking cessation services. We have not mapped in any detail the range of community-based projects which may incorporate smoking advice as part of a wide range of activities, nor non-

targeted, PCT-wide approaches to tobacco control. We include just a few examples in sections 3.8 and 3.9.

In the sections that follow, we summarise our findings on how smokers in disadvantaged groups and areas have been identified and then targeted, drawing on results from all four of our mapping methods described in section 2. The results for smoking cessation are based on 25 telephone interviews, the analysis of documents, and 50 questionnaires (of which 12 referred to both smoking cessation and statins). Desk-based searches of selected conference archives and project databases were carried out. More detailed information on interventions, additional examples and sources of information for interventions mentioned in the review can be found in Appendix 8, which is numbered in line with the text.

We begin by briefly setting out national inequalities targets and local responses (3.2) as the backdrop and rationale for developing interventions designed to reach smokers (3.3-3.5), make services more accessible (3.6-3.7) and prevent relapse (3.10). Sections 3.8-3.9 briefly discuss smoking cessation as part of combined approaches. The final section for this topic area (3.11) provides examples of what has been considered to work well in practice.

4.2 Policy context: national and local targets

There is a complex system of national targets within which local indicators and targets for smoking cessation are framed. These are discussed in turn.

4.2.1 National targets

The national smoking targets, reinforced in *National Standards Local Action* (2005/6-2007/8) (DH 2004) are (1) to reduce adult smoking rates from 26% in 2002 to 21% or less by 2010 and (2) to reduce the prevalence among routine and manual groups from 31% in 2002 to 26% or less by 2010. The national inequalities target - by 2010 to reduce inequalities in health outcomes by at least 10% as measured by infant mortality and life expectancy at birth - is also to be addressed, in part, through smoking cessation services.

In addition to these are 'floor targets', initially used in the 2000 Spending Review (and subsequently revised in 2002 and 2004) to describe those targets which set a minimum standard for disadvantaged groups or areas, or which measure the narrowing of the gap between them and the rest of the country. Neighbourhood Renewal Funding (NRF) is directed towards achieving floor targets. The Public Service Agreement (PSA) targets agreed in the Spending Review of 2004 gave an increased profile to tackling inequalities in health, with an emphasis on ensuring that interventions are prioritised for deprived areas and groups. Relevant targets for this mapping review are as follows:

Substantially reduce mortality rates by 2010:

- from heart disease and stroke and related diseases by at least 40% in people under 75,with at least a 40% reduction in the inequalities gap between the fifth of areas with the worst health and deprivation indicators and the population as a whole;

- from cancer by at least 20% in people under 75,with a reduction in the inequalities gap of at least 6% between the fifth of areas with the worst health and deprivation indicators and the population as a whole;

and, in relation to the national inequalities target:

- starting with local authorities, by 2010 to reduce by at least 10% the gap between the fifth of areas with the worst health and deprivation indicators (the Spearhead areas) and the population as a whole.

A mandatory indicator for the Spearhead areas is to reduce health inequalities between the local authority area and the England population by narrowing the gap in all-age, all-cause mortality. For all other areas (and optional for Spearhead areas) the target is to reduce health inequalities within the local area, by narrowing the gap in all-age, all-cause mortality. However, many Spearhead LAAs also specify targets for reducing inequalities within their local area, typically through targets to reduce the gap in premature mortality rates between the most deprived 20 per cent of wards or neighbourhoods and the least deprived 20 per cent, although some focus on reducing health inequalities between the most deprived neighbourhoods and the district average.

A further PSA target is concerned with the practice population aged between 15 and 75 on a GP register recorded as being a smoker in the last 15 months; this is reflected in the performance indicators for the Healthcare Commission. However, there are concerns that GP registers under-record prevalence and may not be the most effective route for identifying target populations.

4.2.2 Local indicators/targets

Against this backdrop, interventions to target smokers typically form a priority in LDPs and LAAs (as part of the Healthier Communities and Older People's (HCOP) block) as a key priority for tackling the mandatory health inequalities target. Action plans will often include baseline and target data, specifying the number of quitters required to meet national targets and, in some cases, stretch targets with an associated reward element, for reaching these local targets. A number of local indicators also identify targets for quitters for specific deprived wards, specific groups, such as pregnant smokers or for black and minority ethnic communities, or for targeting GP practices in deprived wards. We have not listed these for all the PCTs and local authorities in England, as the focus of this mapping review is interventions designed to meet targets. There is also a great deal of repetition. However, examples include:

- *Oldham,* which has a specific LAA target for black and minority ethnic communities accessing the service;
- *Rochdale*, which plans to target pregnant women in disadvantaged areas;
- *Redcar and Cleveland*, which specifies a LAA target for quitters from 20 per cent of the most deprived wards;
- *Middlesbrough,* where the local smoking target is to ensure the ward with the highest smoking prevalence is no more than 10% above the average for Middlesbrough by 2015;
- *Lewisham PCT and Haringey PCT*, which plan to target specific wards;

- *Nottingham*, which plans to increase the number of smokers living in the target wards who report that they have quit at the 52 week follow up with NHS stop smoking services;
- 52 week quitters are also included in LAAs in *Preston, Stoke on Trent and Tameside and Wigan;*
- *Leicester* has a LAA to increase the number of adults in named deprived wards who access stop smoking services by the end of March 2009, against a baseline of 2005/6 and to increase the number of residents in the named deprived wards who remain smoke-free at 4 weeks by the end March 2009;
- *Bradford*'s LAA refers to health trainers working with stop smoking groups being recruited from the target groups, for example, ethnic communities;
- *Hillingdon* aims to reduce CVD risk in adults by increasing the number of four-week smoking quitters from neighbourhoods with the 20% highest proportion of routine and manual occupations;
- *Sandwell* has smoking cessation as a LAA priority (with the number of 4 week smoking quitters as a stretch target);
- *North Tyneside* aims to reduce the gap in premature mortality rates for circulatory disease between the most deprived 20% of neighbourhoods and the least deprived 20% of neighbourhoods with a particular focus on reducing the gap in smoking prevalence in those areas.

A health inequalities intervention tool, developed by the London Public Health Observatory, enables PCTs to determine whether they are on or off-track in meeting their local life expectancy targets by 2010. (Available at: http://www.lho.org.uk/HEALTH_INEQUALITIES/Health_Inequalities_Tool.aspx).

LAAs focus on partnership approaches and may include targets and interventions across a broad range of services. *Sandwell's* 'six towns' Health Improvement Plans (2007-8) are targeting wards and groups to improve equity of access and each plan has smoking as a priority, delivering programmes at a local level (through Nicotine Replacement Therapy (NRT), Choosing Health, the Community Health Network, Stop Smoking Services and the Communities for Health programme), with an emphasis on: men, particularly young men under 34; black and minority ethnic groups; and the five most deprived wards.

LAAs contain varying levels of detail about their plans for reaching targets. *Salford's* LAA (2007-10) states the intention to increase the numbers accessing the stop smoking service and the numbers quitting by a wide range of interventions, including the following:

- raising awareness of and marketing the service;
- continuing to improve access to effective treatments such as NRT;
- training staff to offer brief interventions, using an improved pathway into the service for front line health professionals, City Council staff and others;
- increasing the number of pharmacists offering stop smoking advice;
- targeting priority groups through piloting community stop smoking groups, promoting stop smoking services in workplaces (particularly those with large numbers of manual employees), continuing to promote training for midwives, developing work in hospital settings and working with black and minority ethnic communities to develop culturally appropriate services.

Birmingham has a 'Life Expectancy and Health Inequalities Toolkit', which is aimed at assisting the Birmingham Health and Well-Being Partnership to meet the national life expectancy and mortality targets set for 2010 through ward-based action plans (see Box 1 and also section 3.2.1). It identifies swift implementation (quick wins) for 2010, as well as medium term actions. Selected indicators are grouped by area; wards scoring in the worst two quartiles on a majority of indicators in the group are identified. The indicators are clustered together conceptually to identify patterns, for example, poor housing/emergency admissions of under 16s for respiratory infection with high smoking prevalence. The fourteen priority areas for action to address health inequalities and increase life expectancy are identified in relation to these indicators over the short, medium and longer term

BOX 1

Birmingham's 'Life Expectancy and Health Inequalities Toolkit'

Birmingham's 'Life Expectancy and Health Inequalities Toolkit' is aimed at assisting the Birmingham Health and Well-Being Partnership to meet the national life expectancy and mortality targets set for 2010 through ward-based action plans

The fourteen priority areas for action to address health inequalities and increase life expectancy are identified in relation to these indicators. In this model, actions most likely to impact on life expectancy floor targets for 2010 for smoking include the following, (although these form a small part of the planned actions).These are distinguished from actions which are deemed to be effective in the medium to longer term.

- The Smoke Free Home Scheme.
- Training of midwives in smoking cessation in all priority wards.
- Targeting all high rate wards with tobacco control measures.
- Pharmacy-based smoking cessation advice to be extended to all high rate wards where affordable.
- Smoking cessation interventions targeted at 60 year olds will on average extend longevity by three years for those who quit at their own or their partner's retirement age.
- Smoking cessation following myocardial infarction will reduce the risk of a further incident by 10%. Therefore, particular cessation interventions should target this group, using NRT and counselling known to produce a 25% quit rate.
- A "quit smoking at 60" campaign, which will add three years of longevity, must be actively promulgated through primary care services and pension and income support services.
- Smoking cessation programmes should target COPD; patients with heart failure and angina; stroke patients and diabetes.
- In addition to recording the smoking status of pregnant women, women should be given a cotinine test at first booking.
- All teenage mothers must not only have their smoking status checked, but be subject to specific targeting of cessation services.
- Smoking cessation services including NRT must be offered to pregnant smokers at all antenatal consultations, in particular teenage pregnant women should be specifically targeted with respect to their smoking behaviours.

Actions impacting on life expectancy in the medium to longer term included:

- The smoking cessation service should prioritise lone parents and that both GPs and Health Visitors should be trained and encouraged to practice such interventions.
- Use of the Quality and Outcomes Framework (QOF) by the PCT to ensure accurate recording of a patients' smoking status and the advice given.

Source Birmingham Health and Well Being Partnership
http://www.bhamsp.org.uk/html/healthinequalitiestoolkit.php (Accessed July 2007)

Increasing numbers of quitters from black and minority ethnic communities is a priority, especially in the light of higher rates of diabetes and CVD, and given under-representation in accessing smoking cessation services. As such, targets for this group are represented in many LAAs (for example, *Lambeth, Oldham, the Wirral, Nottingham and Sandwell).* In *Leicester*, one of the LAA objectives is to improve monitoring by ethnicity, particularly in primary care, given the lack of ethnicity coding on relevant data sets.

This differentiation of short and longer term targets has an important influence on strategies developed to target populations, and is informed by national guidance on where efforts should be focused in order to meet the national inequalities targets. In *Hartlepool*, following an analysis carried out by the North East Public Health Observatory (NEPHO 2005), it has been demonstrated that, even though targets for CVD and cancer for under 75s are being met, this will not prevent the life expectancy gap from widening and that what is required to hold the gap at current levels is a 20% reduction in all cause mortality, spread evenly across all age groups. In the same way, smoking cessation services, unless directed at older people, and those who are already ill, might not achieve short-term gains in relation to the inequalities target. The interventions which are more likely to impact on life expectancy in the shorter term are therefore those which improve treatment outcomes and survival rates and are being addressed through achieving standards set in National Service Frameworks. For example, *Nottingham's* Floor Target Action Plan makes it clear that the 2010 timescale of the life expectancy, cancer and CVD targets means that action is focused on stopping premature death for people who already have a disease, or are at high risk of disease, with an emphasis on the over 50s. In *Leicester*, analysis by age shows that the burden of the inequalities gap is borne primarily by people over the age of 50, who contribute around 80% of premature deaths among both men and women. They are adopting a two pronged approach: addressing the broader determinants of health through the wider public health agenda; and a more immediate focus in the next few years on specific clinical interventions which are known to reduce the risk of people dying, with a particular emphasis on those aged 50-69. In *Newham*, the age group to be targeted to reduce death rates in the short term is the over 50s, through better identification and control of high blood pressure and high cholesterol levels as well as through tackling smoking.

This indicates potential tensions between strategies for meeting short and longer term inequalities targets; how these are resolved in practice will influence how interventions, including smoking cessation interventions, are prioritised.

4.3 Proactive case finding: identifying target populations

While service developments target populations of smokers, there are different ways of identifying these populations and of estimating whether they are accessing stop smoking services. Six approaches are described in turn. Information of this kind allows for more targeted outreach activities.

4.3.1 Ward/Super Output Area- based approaches

There are many different approaches and tools for identifying target populations. The simplest and most widely adopted approach is to identify deprivation by wards or Super Output Areas (SOAs) through the Index of Multiple Deprivation (IMD) and estimate the prevalence of smoking in each ward. For example, ASH has produced, as an online resource, interactive maps showing smoking rates and deprivation in every ward in England, drawing on estimates of smoking prevalence developed for the Health Development Agency (Twigg et al. 2004) and the deprivation index for each ward (ASH 2006).

Some areas have adopted variations of this approach. In addition to the IMD, *Newcastle* uses its own Vitality Index (compiled by the Newcastle Neighbourhood Information Service) to help highlight those areas most in need of extra help to close the gaps in relation to the six Neighbourhood Renewal themes. It is considered that this index is more effective in helping partners to target activities and initiatives at a neighbourhood level because the indicators included are focused on measuring key policy issues in Newcastle.

Knowsley's Health and Well-Being Partnership is currently measuring deaths from cancer and respiratory disease at ward level, Area Forum level and Area Partnership level in order to support the targeting of neighbourhoods which are below Knowsley and the national average. They are also exploring the use of Mosaic as a tool for targeting interventions more effectively. Mosaic is a geo-demographic tool that classifies all UK consumers into 11 distinct lifestyle groups, and within those groups, 61 types based on socio-economic and socio-cultural behaviour. *Nottingham*, too, is using Mosaic as an adjunct to other sources of local information and smoking cessation service uptake is being analysed by Mosaic type to ascertain those types with high smoking prevalence but low uptake of smoking cessation services. It is argued that information provided on these types will help to improve the accessibility of the service (see case study 1).

Case study 1

Title: Targeting groups and areas:
Mosaic and health equity audit (Nottingham, New Leaf)
Aims*: To determine whether services were appropriately targeted at deprived groups.*
Target population: *Deprived groups in central Nottingham.*
Methods: *Mosaic is a geo-demographic tool that classifies all UK consumers into 11 distinct lifestyle groups and, within those groups, 61 types based on socio-economic and socio-cultural behaviour. Smoking is one behaviour that can then be ranked by group and type. This is often used in conjunction with a social marketing approach. Sources of data include the Census, Electoral Register, Experian's lifestyle surveys, Land Registry Data, DVLA data, Council Tax data and market research.*
Background: *Nottingham New Leaf needed to assess the appropriateness of its delivery to deprived groups in order to inform a health equity audit.*
Outcomes: *Using the results of the health equity audit, New Leaf was able to identify underserved areas ('cold spots') in central Nottingham and has worked more proactively with the GP practices there; clinic times and locations have been changed and new sessions set up, including at a local pharmacy. Also, an NRF-funded social marketing stop smoking campaign will be implemented this year by the PCT, focused on the Mosaic groups who are the heaviest smokers in target areas.*
Comments: *This approach appears to offer a useful way of identifying target populations, enabling services to consider whether they are actually aiming at the right place. Used in conjunction with, for example, social marketing techniques, it appears a valuable addition to the tools available.*
Source:
de Gruchy J and Robinson J. (2007) Stop-smoking service benefits from geodemographic profiling. British Journal of Healthcare Computing and Information Management; 24: 1.29-32.
de Gruchy J, Robinson J, Hari I. (2006) Health Equity Audit. The New Leaf Smoking Cessation System in Nottingham City. Nottingham City Primary Care Trust Available at: http://www.empho.org.uk/pages/viewResource.aspx?id=9803.
www.appliedgeographic.com/mosaic.html

4.3.2 GP practice registers

GP practice registers are used to identify (and as a basis for targeting) smokers in a variety of ways. Some practices have information on the smoking status of all their patients, which can be used for direct contact and promotion of smoking cessation services. Others make use of disease-based registers for diabetes, CHD or lung disease.

For example, a *Liverpool* practice sent out letters to all its smokers inviting them to an evening at the surgery where they could speak to an adviser and receive a voucher for NRT and then attend a FagEnds session that suited them (30 attended). Similarly, *Ealing and Hounslow* smokers on GP registers were invited to a drop-in at a GP practice. The former *Derwentside* and *Durham and Chester-le-Street PCTs* used GP mail-outs targeting individual smokers in two GP practices in deprived communities. *Enfield and Haringey PCTs* aim to contact, up to twice-yearly, all patients registered as smokers.

Funding was made available through NDC in *North Fulham* to recruit smokers from GP practices in the most deprived areas. A telemarketer was involved and two practices cooperated in the scheme. The telemarketer rang up smokers, checked whether they were still smoking (there was often a discrepancy between their account and GP records) and then referred them to stop smoking services or asked the service to contact them after faxing a referral sheet.

In some areas, stop smoking services may ask GPs to inform smokers on their registers about available services or notify smokers when a drop-in clinic is being held in their area.

In *Shropshire*, regular reports are run from practice systems to gather smoking prevalence information and readiness to quit. A template is added to each EMIS system to specifically record 'readiness to quit'.

Some stop smoking services report difficulties with using GP registers, including:

- lack of robust data (a number of plans highlight the importance of recording smoking prevalence in general practice);
- access difficulties.

In summary, there are interesting initiatives designed to identify and contact smokers drawing on GP practice registers, but this is not currently a major focus of activity for stop smoking services.

4.3.3 Analysis of QOF data

The implementation of the Quality and Outcomes Framework (QOF) in 2004 has enabled better use of data from general practice. Under QOF arrangements, smokers should be offered smoking cessation advice once a year. Practices record smoking status under the QOF framework in a number of ways: for patients with specific diseases, smoking status is to be recorded within the past 15 months; for the patient population aged over 16, smoking status is to be recorded within the past 27 months. (In contrast, the PSA target focuses on the practice population aged between 15 and 75 years and recorded within the last 15 months, so there is some discrepancy between the different frameworks.)

Newcastle PCT intends to analyse variation in smoking prevalence across Newcastle using QOF data, using this to set local targets for reducing the observed variation in prevalence between practices.

In *Central Lancashire*, GPs identify through the register the number of patients in each of the relevant QOF indicators who smoke and are required to give advice or refer to specialist services. The stop smoking services use the GP contract as a lever to engage with primary care as it helps to bring QOF points to the practice. They identify referral pathways and develop and deliver training courses to primary care staff to increase capacity and support to help people stop smoking. An electronic system is planned, linking with GPs for immediate intervention/referral to the stop smoking service. Post-code data is used to identify more smokers and to identify service provision.

4.3.4 Health Equity Audit

The requirement for PCTs to use health equity audit to inform service planning and delivery was set out in the *Priorities and Planning Framework 2003-06.* Subsequently, as part of *National Standards, Local Action* (2005/6-2007/8), all PCTs were required to work in partnership with local authorities, using health equity audit '*to demonstrate that effective interventions are provided for all groups in the population, targeting those with highest needs*'. It is noted that key interventions to reduce inequalities in life expectancy are likely to be associated with the following: '*in the poorest areas and groups, there is a significant reduction in smoking prevalence, and targeted action on prevention and treatment of cardiovascular disease (CVD) and cancers. There may also be local inequalities factors affecting access to primary care services, such as those experienced by minority ethnic groups'.*

Health equity audits serve to identify inequalities in service planning and delivery, inform action that will address such inequalities and then measure effectiveness. Public Health Observatories and numerous PCTs have carried out health equity audits related to smoking (for example, *Lambeth, Newham, Newcastle* and *North Tyneside, Rotherham*). North East Public Health Observatory carried out an equity profile commissioned by Smoke Free North East Office and found that a higher proportion of smokers was quitting through these services in the more deprived areas than in the affluent ones. They used the *Health Survey for England* to estimate prevalence and used post codes as a proxy for deprivation. It was concluded that these services were therefore appropriately targeted to reduce socioeconomic inequalities (NEPHO 2005). Using similar methods, East Midlands Public Health Observatory worked with local smoking cessation services (Fresh Start Stop Smoking Service, Erewash PCT) (EMPHO 2005) to develop a practical methodology to support the health equity audit of stop smoking services. 'Synthetic estimates' of smoking prevalence (to identify need) were compared with data collected by the stop smoking services and use/need ratios were calculated for all groups. An equity audit was also carried out by EMPHO for New Leaf Smoking Cessation Service in *Nottingham City*, using Mosaic (de Gruchy and Robinson 2007). This also found that services were appropriately targeted to deprived groups. In contrast, an equity profile of *Sandwell* stop smoking service found that smokers in disadvantaged areas were less likely to access services, as were non white groups.

Other audits involve monitoring the uptake of smoking cessation services from wards with the highest expected smoking prevalence (in *Hammersmith and Fulham* PCT, for example).

It is also worth bearing in mind that many other Health Equity Audits will be of relevance, for example those focusing on coronary heart disease (see section 4.3.1), ethnicity or older people. For example, the CHD audit carried out by *Brent* Teaching PCT (tPCT) in 2005, showed that the wards with the highest deprivation did not generate the highest referrals (see section 4.3.1).

4.3.5 Lifestyle surveys

The *Health Survey for England* provides regional data on prevalence and the *Household Panel Survey* includes information on smokers. However, some PCTs have carried out their own detailed 'lifestyle' surveys. Local lifestyle data can be used to identify areas of need, for example, *Dudley* holds a weekly drop-in session in a location identified by postcode data and local lifestyle data. *Hartlepool* carries out a MORI poll every two years.

In *Bradford City* tPCT, in a change from previous questionnaire type surveys which have limited capacity to collect information from people whose first language is not English, a survey was carried out by face-to-face interviews with over 1,500 people in community languages. This covered wider determinants of health as well as lifestyle issues.

In *Newham,* the Household Panel Survey indicated that 46% of Bangladeshi men and 33% of Pakistani men were smokers, compared to the Newham average of 22%. Service reviews also showed that the numbers of smokers from these groups accessing the service in 2003-04 were very low, considering the high prevalence rate. In response to this they created a 'Stop Smoking Adviser for Communities' post supported by NRF funding.

4.3.6 Other approaches

Other innovative approaches have been developed including local mapping exercises, mailouts to selected post codes, and the use of client databases. Examples are described below.

- A local mapping exercise identified pockets of deprivation in *Surrey*, which were then targeted, for example through providing services in community settings with a crèche provided. The work involved church community workers and police and housing groups.
- Postcode areas have been targeted using letterbox mailouts to advertise local drop-in services but *Sutton and Merton* report limited uptake with this method.
- Client databases for Bingo Halls have been used to contact their customers through questionnaires (in *Bury*, for example).

As well as identifying populations to target, there are many instances of professionals (for example, pharmacists) opportunistically identifying individual smokers. Such examples are discussed in sections 3.5.4 and 3.5.5, below.

In practice, PCTs and partners may adopt a combination of the approaches described above in order to identify where best to target their outreach activities.

4.4 Proactive case finding: client-centred approaches

In this section we identify the ways in which target groups are being reached, focusing initially on methods which allow for the development of a tailored and client-centred approach to specific groups. The ways in which services are being delivered to improve accessibility are discussed in section 3.6 and 3.7.

4.4.1 Social marketing

Social marketing is concerned with the application of marketing concepts and techniques to enhance social ends. It considers the product, the price (money, time and effort), the place to reach consumers and the incentives which can be put in place. This can be used to tailor health messages to specific (or 'segmented') groups. It is premised on understanding the motivation of different groups and communities and then tailoring services and the ways in which they are promoted to reflect this. Focus groups and related community-based initiatives may be carried out in order to develop services which are more attractive to target groups. Thirteen examples are identified in section 3.4.1 of Appendix 8.

There are clear parallels between social marketing ideas and a wide range of client-sensitive stop smoking services already in place; to some extent, rebranding of existing initiatives has taken place. However, many PCTs have developed social marketing approaches to reach target groups, including *Knowsley, Sunderland* (see case study 2) and *Oldham.* Social marketing may also be combined with other approaches. *Medway and Swale* used commercial data sets for targeting disadvantaged wards, and smokers were contacted by both mail and phone.

Others are currently investigating the use of social marketing techniques and developing marketing strategies to target specific groups of smokers. *Liverpool PCT* is planning a social marketing exercise (2007) targeted at smokers (18-35 year old men) and a '*Catch your breath'* campaign targeted at high risk communities and particular wards; *Birmingham* is also developing targeted marketing for men; and *City and Hackney* PCT developed a publicity strategy with a social marketing focus to help target hard to reach communities, black and minority ethnic groups in particular.

As with conventional marketing campaigns, evaluations are usually carried out to gauge the effect of the campaign. Social marketing approaches in both Knowsley and Medway and Swale led to significantly more smokers being attracted to the service and a dramatic increase in both the numbers quitting and quit rates.

Social marketing techniques have been used not only to target specific groups of clients but to assess aspects of the service. For example, *Yorkshire and Humber* Public Health Observatory is using social marketing with GPs to investigate differences in referral rates.

Case study 2

Title: Social Marketing to increase recruitment of pregnant smokers
Aims: *to identify barriers to smoking cessation and to find ways of attracting pregnant smokers to the cessation service.*
Target population: *pregnant women in a disadvantaged area.*
Method: *A qualitative focus group method was used over a ten year period, with focus groups involving mainly women from deprived areas, social class C2, D and E. Groups were segmented in relation to age, social class and smoking behaviour. To avoid bias the participants were told that the discussion would be centred on the topic of 'health and illness'. However, the moderator ensured that the main topics of the research were covered.*
Background: *Sunderland is a disadvantaged area with high rates of smoking, both generally and amongst pregnant women. Pregnant women had long been recognized as a hard-to-reach group generally, so the combination of deprivation and pregnancy posed particularly difficult*

problems.
Outcomes: *The study identified several barriers that women face in relation to smoking cessation during pregnancy, including unsatisfactory information and a lack of enthusiasm or empathy from healthcare professionals. Interventions were designed to overcome these, including proactive working with a dedicated worker and home visits; design and pretesting of marketing/information material with the target population; role play to engage health professionals; consumer-friendly support (including dedicated worker) with "no nagging".*
Recruitment of pregnant smokers increased 10-fold during the intervention phase. Quit rates have significantly increased since the development of the dedicated pregnancy service.
Comments: *The study is an example of the use of social marketing and of a client-centred approach. The success of the intervention showed how social marketing can bring about behaviour change in a hard-to-change population. Ensuring that clients' views and needs are taken into account has led to the service becoming more approachable and accessible to this disadvantaged group.*
Source:
Lowry RJ, Hardy S, Jordan C, Wayman G. (2004) Using social marketing to increase recruitment of pregnant smokers to smoking cessation service: a success story. Public Health 118: 239-243.

4.4.2 Other qualitative studies

A study of health beliefs, attitudes and behaviour underpins much health promotion activity. Social marketing is just one way of translating evidence on health beliefs and factors influencing the use of services into service improvements. For example, many services use information from questionnaires completed by clients to help them to improve services, although it is recognised that this does not represent the views of people who have not used the service.

Studies are often relatively general in nature. For example, *Central and Eastern Cheshire* is using focus groups to gather patient and public views on how they would like a stop smoking service to be provided.

Other studies have concentrated on specific client groups and examples are provided below.

- *Southwark* PCT carried out a small scale focus group study '*to investigate why stop smoking services were not taken up or if used, not necessarily adhered to by young people (girls excluded from school), pregnant women and parents of young children, unemployed people and male manual workers'*. Potential service changes were used to inform a parallel equity audit that took place over the same period (Rickard, UKNSCC, 2007).
- *Islington PCT* commissioned University College London (Health Behaviour Unit) to research health behaviour in the Somali community. This research was carried out in collaboration with Somali community organisations. The research (Straus, McEwen and Croker, 2006) demonstrated little understanding of NRT or the stop smoking services and some cultural beliefs which could undermine conventional methods of service delivery.
- *Leicester City* has worked with Dr Foster using focus groups with those aged over 50.
- *Stockport PCT* is developing support mechanisms to reduce the drop out rate, including qualitative research to identify barriers and blocks.

- *Croydon* stop smoking services have carried out research looking at low uptake of services by local black and ethnic minority communities and at perceptions of PCT stop smoking service delivery (funded through NRF), with service needs analysis and assessment carried out as part of both research projects.
- *Lambeth* conducted qualitative studies looking at the barriers that black adult smokers face in accessing stop smoking services and completing treatment.

Funding is an issue for both social marketing and other qualitative research. Services sometimes allocate non-recurrent funds to particular projects. In *Blackpool*, for example, a marketing company is currently working on branding a new campaign, to be launched in September 2007 (£10K non-recurrent funds allocated).

4.4.3 Clients as stop smoking advisers

Developing appropriate support through the involvement of members of the local community as advisers is evident in a wide range of interventions, including projects designed to enable a transition from client to adviser, develop peer support, or ensure that advisers are familiar with the communities they are working with, and ideally drawn from those communities. This is an established approach in community development and is not new in stop smoking services. It was used, for example, in QUIT's poverty and smoking project (1996-9) (funded through the Department of Health) which recruited successful ex-smokers from low income communities and provided training for smoking cessation and group facilitation. These community advisers then ran a support group in their local communities. It also trained professionals who were in contact with those on low incomes. The latest iteration of this approach is the national programme of health trainers, described in more detail in section 3.4.4 below.

Case study 3

Title: Fag Ends Smoking Cessation Service
Aims: *to make stop smoking support widely available and immediately accessible.*
Target population: *smokers in deprived/disadvantaged communities.*
Method: *There are about 50 drop-ins across Liverpool each week. These are rolling (on-going) groups, with new people joining each week. Some clients are referred by health professionals but many are self-referrals. Self-referral is simple: the clients can just walk into a group session. This should mean that there are no problems with waiting lists.*
While most services use health professionals to deliver advice, Fag Ends was established by ex smokers and still draws on the support of ex smokers as advisers. A strong emphasis is placed on helping clients to understand their own smoking habits and related issues.
Background: *The Fag Ends Smoking Cessation service began life in 1994 in a deprived area of Liverpool. Starting as a self-help group, it became an arm of the Roy Castle Lung Cancer Foundation and is now commissioned and partly funded by Liverpool PCT. The service attempts to ensure that the typically harder-to-reach groups are attracted to the service, as it is recognized that generally more service users and quitters come from less disadvantaged areas. Knowsley PCT is also working with Fag Ends.*
The service provides an example of the use of clients as advisers and involves social marketing. It also shows the importance of appropriate locations and the value of rolling drop-in sessions, along with good consideration of clients' motivation.
Outcomes: *A 1999 participatory evaluation found that, amongst other things, users felt that the strengths of the service were its use of ex-smokers as advisers and the fact that it was not*

attached to any GP practice.
A later evaluation (Owens and Springett 2006) found that two major factors were the service's flexibility (venues that fitted clients' daily lives) and the ways in which advisers focused on individuals.
Moreover, in terms of outcomes as measured by quit rates in relation to socio economic background and cost effectiveness, the approach is at least as good as comparable areas (Owens, 2001. Torque, Barker and Fullard, 2005) and recent reports indicate increased effectiveness.
***Comments:** A range of techniques appears to contribute to the ongoing success of the scheme. Rolling drop-ins without prior referral, having clients as advisers, being flexible to the needs of individuals and having varied venues make the service very accessible. Its ability to succeed in severely disadvantaged areas suggests that the approach is well-suited to addressing the inequalities agenda for smoking cessation.*
Sources
Fag Ends website: http://www.roycastle.org/fagends/
Lake, J. R. (1999) A Participatory Evaluation of Roy Castle Fag Ends, Liverpool John Moores, Institute for Health.
O'Brien, B (2007) Dramatically increasing quitters through social marketing: a practical example. UKNSCC. Conference report (Ben O'Brien, Head of Marketing & Communications, Knowsley Health & Social Care).
Owens, C. (2001) Smoking Statistics and Information about socio economic breakdown of Liverpool, Liverpool, Roy Castle Fag Ends, Community Stop Smoking Group (unpublished).
Roy Castle Lung Foundation website: http://www.roycastle.org/quit/index.htm.
Owens C and Springett J (2006) The Roy Castle Fag Ends Stop Smoking Service: A successful client-led approach to smoking cessation. Journal of Smoking Cessation Vol 1. No 1.
Torque, K, Barker, A. & Fullard, B. (2005) Tobacco Control Bulletin 3 March, North West Health Observatory, Liverpool.
Washington, C (the Roy Castle Lung Foundation) Making stop smoking support more widely available in the community - presentation slides. (Chris Washington, the Roy Castle Lung Foundation).

There are numerous examples of such initiatives. One of the best known examples is Roy Castle FagEnds Community Stop Smoking Service, which started in 1994 in one of the most deprived areas of *Liverpool* and was originally formed by people who required further support to stop smoking (see case study 3). It has gradually expanded to provide helplines, hospital advisers, community-based advisers, workplace advisers and support groups (including at evenings and weekends). A wide range of people work as facilitators, including some ex-smokers from the community.

4.4.4 Health trainers

Health trainers, an initiative arising from the *Choosing Health* White Paper (DH 2004a), form a key plank in government policies to promote healthy lifestyles. This peer educator approach is based on the assumption that people are more likely to personalise messages and change their attitudes if they believe the messenger is similar to them.

Health trainers fall within the tradition of lay health advisers/ outreach workers, peer educators and advocates. NHS-accredited health trainers are recruited from local communities and are funded to offer one-to-one tailored information, motivation and

practical support to individuals (and also to groups) who want to adopt a healthier lifestyle and help them to set personal goals in areas such as stopping smoking, doing more exercise, healthy eating, practising safe sex, dealing with stress and tackling social isolation. They are also intended to identify barriers to healthier choices and signpost people to local services. The initiative has been described as 'taking the NHS to people' (DH 2004b).

Following the 12 early adopter sites in areas of disadvantage, health trainers were rolled out first across the Spearheads (2006) with the intention of establishing them across England in 2007/8 (although, at the time of writing, the majority are located in Spearhead PCTs). The documentary analysis demonstrates that a focus on targeting disadvantage is evident in the ways that health trainers are being recruited, deployed and performance managed.

The deployment of health trainers is also sometimes included as an indicator in LAAs. For example, the number of health trainers working solely in the 20 per cent most deprived wards is a LAA indicator for *Redcar and Cleveland* and for *Walsall*. In *Rochdale*, indicators are designed to ensure equitable uptake of health trainers in NRF and SOAs. *Liverpool's* LAA states that community-based smoking prevention interventions will be delivered with the support of health trainers to targeted neighbourhoods.

In some areas (for example, *West Sussex*), health trainers are trained to provide brief interventions and signpost smokers to the stop smoking service. Elsewhere, for example in *Camden*, health trainers take referrals from within GP practices and from other health professionals and provide stop smoking support.

In *Nottingham,* CVD Peer Educator Health Trainers work with individuals, specific GP practices and through 'assertive outreach' to increase awareness of risk factors for CVD (smoking, diet and physical activity) as part of an integral city-wide programme for preventing CVD. They are recruited from the target communities (men over 40, black and minority ethnic communities, those identified by GPs as high risk, and those on incapacity benefit) in targeted neighbourhoods. In this case, targeted neighbourhoods are defined as SOAs within inner Nottingham City which fall within the 20% with the highest CVD mortality rate in the city. There are specific numbers of client contacts required as part of the contract.

In the same way, health trainers in *Bradford* work in the most deprived areas of the city and one of their roles is to accompany people using health services, such as smoking cessation. They can also provide support for the changes that people want to make. The health trainer and client meet for up to six weeks and at each session they review progress, identifying and working through any difficulties.

Despite the lifestyle focus of most health trainer schemes, *South Tyneside* has developed a variation of this approach, addressing geographically-based inequalities through six health and lifestyle advisers and six community health officers, with the latter developing community activities and groups.

4.4.5 Other peer group schemes

Many PCTs are setting up support mechanisms and training to make the most of volunteers and peers. A further development in peer support is evident in Sure Start (see also section 3.8) where 'community parents' are involved in advice and support. For example, in *Manchester*, at Longsight Sure Start, community parents work alongside the health visiting team. In *Tees*, informal peer support, when clients are waiting to see staff at drop-ins, is encouraged and sometimes facilitated by the coordinators or advisers.

4.5 Proactive case finding: client- friendly outreach services

As policies for training a wide range of people in providing smoking cessation advice and for providing advice in different settings are widespread (although the degree of saturation may vary), we consider these as a part of providing mainstream services, discussed in more detail in section 3.6. This section addresses outreach approaches targeted at disadvantaged areas, although many services often span the range of potential locations in areas of greatest need in flexible ways; what is considered a mainstream service will vary from place to place. As the examples below illustrate, stop smoking services are often eclectic and opportunistic in their choice of locations and in the ways in which they capitalize on national campaigns.

4.5.1 Ward/neighbourhood-based

In the light of analyses of levels of disadvantage (sometimes combined with comparisons of service uptake with need), many services target specific wards, neighbourhoods or rural areas in order that the distribution and focus of services better reflects need. A combination of interventions may be used, encompassing GP practices in deprived wards, community centres, pubs and clubs, pharmacies and telemarketing. Many services stress the advantages of a community-based service, making use of local knowledge in order to increase accessibility. For example, in *Knowsley*, the stop smoking service has launched 24 clinics across the borough with an emphasis on community-based venues, leading to increased uptake and an improved quit rate. *Sutton and Merton* uses community development colleagues' knowledge of the area and of community networks and meets community centre managers and staff prior to starting, offering level 1 brief intervention training.

Sure Start areas have provided a further route into addressing smoking in disadvantaged areas and these are discussed separately in section 3.8. In the same way, the Smoke Free Homes initiative, while available to all, is also targeted at Sure Start areas and is further described in section 3.7.4.

As described earlier, various approaches can be identified, (a focus on disadvantaged wards or estates, or acting on the results of health equity audits) although, in practice, they often occur in tandem. For example, in *Leicester PCT*, a Smoking and Inequalities project, originally funded through NRF, but now funded by the PCT, tried to engage smokers in the 10 most deprived wards in the city, through increasing first contact with Leicester Stop Smoking Services (STOP!), pharmacies or GP surgeries. There are also smoking cessation projects involving community smoking advisers in a number of areas of high prevalence in the west of the city.

Following a health equity audit, *New Leaf* (the *Nottinghamshire* Stop Smoking Service), has worked more proactively with GP practices in the 'cold spot' areas of central Nottingham. Where necessary, they have changed clinic times and venues (see case study 1); they have also set up new sessions, including at a local pharmacy. There are many initiatives focused on GP practices in deprived areas and on providing out-of-hours services for deprived groups and rural areas.

Wards and neighbourhoods can also be targeted through health buses. Initiatives of this kind are described in section 3.6.3.

4.5.2 Specific locations

Locations for stop smoking services for disadvantaged groups fall into several broad categories: pubs, and working men's clubs; community centres and leisure centres; workplaces with large number of manual workers; job centres; supermarkets; one stop shops in town centres (on a drop-in basis). Stop smoking services may target any or all of these locations (36 illustrative examples are included in Appendix 8).

For example, the *Easington* stop smoking service arranges one-to-one sessions or informal quit smoking groups in the community or workplace, and organises quit groups in working men's clubs, pubs, cafes, bingo halls, community centres or any other place people meet regularly.

As part of Smoke Free *Cardiff,* and funded through the Big Lottery Fund, workplaces with low income employees are targeted. Activities include information stalls in large workplaces, the development and distribution of a smokefree workplace toolkit, development of a website with free posters for workplaces and the distribution of 100,000 beer mats promoting the All Wales Smoking Cessation Service to licensed premises.

Both *Rotherham* and *Wakefield* have centrally-located shops. In the latter, the PCT has set up a Quit shop, in Wakefield market, as a drop-in centre for would-be quitters to find out more about the support that the PCT's stop smoking team can offer. Rotherham's Stop Smoking Shop, located in the town centre, has proved popular and is extending its opening hours.

In *Derbyshire County*, Top Ten Bingo have enlisted the help of Derbyshire County PCT's trained stop smoking advisers and are forming a new weekly group to help customers that want to quit.

Several services use targeted advertising in specific settings, for example, *Ealing and Hounslow* targets local community groups, local authority sites, religious sites, work places and other organisations, with targeted advertising undertaken by the stop smoking service in the local press. *Middlesbrough* carries out poster promotions at Middlesbrough Football Club. *Croydon* has focused a range of methods in NRF wards (including outreach services, local participatory research, service advertising and engaging residents through primary care and pharmacy settings) because of evidence of traditionally low levels of engagement with statutory services, the areas in question being poorly served by local transport links.

Stop smoking services may also form part of broader one stop shops, developed in partnership with other organisations. For example, in *North Warwickshire*, NHS Warwickshire has decided to base its 'Wellness Centre' at the One Stop Shop. Amongst the services on offer are blood pressure and diabetes checks, weight management sessions and advice on stopping smoking. Also offered as part of the service are monthly guided walks and literacy and numeracy classes. Other organisations such as the North Warwickshire Credit Union, the Council for Voluntary Service and the Police also hope to hold advice sessions in the One Stop Shop.

4.5.3 Group-specific

We did not include in this review smoking cessation services in prisons, for pregnant women in general or for people with mental health problems. However, we include examples of interventions for pregnant women in disadvantaged areas and black and minority ethnic groups, given their prominence in local strategies to tackle smoking and address disadvantage.

Targeting stop smoking services at disadvantaged groups and areas has been a government priority since *Smoking Kills* (DH 1998) which specified that smoking services should be aimed at all smokers, but especially targeted at the economically disadvantaged, young people and pregnant women. Interventions targeted at disadvantaged groups were a priority for Health Action Zones (from 1998 onwards) and mainly achieved through locating services in disadvantaged neighbourhoods and through recruiting advisors from the local population (Coleman et al. 2001). Smoking cessation services were rolled out nationally from 1999. HAZ smoking cessation services were separately evaluated (Adams et al. 2000).

There are separate initiatives in Scotland to target disadvantaged groups. The Scottish Executive funded 11 projects for up to three years through *Partnership Action on Tobacco and Health (PATH*), based in ASH Scotland, and this is being externally evaluated. The majority were interventions taking varying approaches with key groups (pregnant smokers, low income populations, mental health groups, prisoners and dental hospital patients). Three projects were more research-based, focusing on ethnic minorities, older people and low income communities. Also in Scotland, the *Tobacco and Inequalities project* (2003-7) (ASH Scotland) is a national community development project, now in its third phase. The three target areas are mental health and wellbeing, black and minority ethnic groups and older people. ASH Scotland have commissioned the Scottish Centre for Research on Social Justice, University of Glasgow, to conduct the external evaluation of the third phase of this work and establish pieces of good practice that can be replicated and rolled out across Scotland. The 2-year evaluation will end in the autumn of 2007. (Information available at: http://www.ashscotland.org.uk/ash/4161.6.914.html).

In this section, we focus mainly on two groups: pregnant women and black and minority ethnic communities. We also include a few examples of services developed for other disadvantaged groups in Appendix 8.

4.5.3.1 Pregnant women in disadvantaged areas

Two recent mapping reviews have been carried out on smoking in pregnancy, against a backdrop of national guidance that smoking status is to be ascertained for all pregnant women and appropriate advice offered. First, a literature review and mapping exercise on smoking cessation and pregnant women has been carried out (personal communication) and this is currently the basis of service redesign in Birmingham, where locally-recruited pregnancy outreach workers will target disadvantaged wards. Midwives will monitor CO levels. This project is funded through the Neighbourhood Renewal Fund and will be mainstreamed if it proves successful. Second, a report from Yorkshire and Humber region (DH 2007) was based on a literature review, a conference on smoking and pregnancy (held in 2006), and consultation with practitioners. It identified eight high impact actions: promoting cessation to women of childbearing age; improving data collection; reaching pregnant smokers as soon as possible and throughout pregnancy; increasing effectiveness of current interventions; supporting continuing smokers; involving partners/families; maintaining postpartum cessation; and promoting smoke free families. For each of these interventions the report summarises the evidence base and identifies implications for capacity building (in relation to partnerships, implementation tools, technical assistance and resources). Local good practice examples reflecting the high impact interventions were described:

Other examples identified in this review include the following:

- Intensive support from a stop smoking specialist involving weekly home visits, NRT prescription and CO monitoring (*South Birmingham* PCT).
- Home visits are provided in *North Staffordshire* (YOU Two Can QUIT) along with text messaging and telephone support.
- *Blackpool* is planning a scheme with pharmacies under which Stop Smoking Service cards are to be given out with pregnancy test kits.
- Automated text messaging is used for motivational support (*Isle of Man*).
- *Sunderland* has achieved Beacon status, and has employed social marketing techniques to achieve high quit rates.
- In *Leicester PCT*, there is a full time Specialist Advisor to improve the availability of smoking cessation advice and support to pregnant smokers and training and support to those who come into contact and work with pregnant smokers.

Services to pregnant women in disadvantaged areas are commonly offered through links with Sure Start or Children's Centres. For example, in *Central and Eastern Cheshire* and in *Central Lancashire* there are clinics in local community settings, including Children's Centres. Support can be provided along with childcare facilities. *Ealing and Hounslow* PCT links in to health awareness days with other agencies such as Sure Start, school promotion days and provides information and resources to health visitors and midwives. In *Easington*, support is provided in all the children's centres in the district, alongside midwife clinics. Other Sure Start initiatives are separately discussed in section 3.8.

In *Central Lancashire,* due to the clear link between smoking in pregnancy and health inequalities, plans are in place to continue to develop outreach programmes to reach and motivate this group. In addition to this, the service will continue building

capacity through training and development to encourage midwives, practice nurses and health visitors' involvement in reaching pregnant smokers and signposting for support.

The *Sutton and Merton* stop smoking service considers the language issue for pregnant women from black and minority ethnic groups and has a project with Tamil pregnant women, providing antenatal information in their own language.

4.5.3.2 Black and minority ethnic groups

Interventions targeting black and minority ethnic groups range from the provision of information in a range of languages, through training level 2 advisers from these groups, to specific campaigns that include promotion and delivery of services. A key thread is the development of culturally sensitive interventions. These include the provision of standard services, including quitlines and promotional material, in different community languages or in different locations; tailored programmes informed by research into cultural beliefs of particular ethnic groups; and initiatives drawing on national campaigns linked with religious occasions, of which 'giving up over Ramadan' is the most widespread example, with initiatives of this kind in *Bradford, Manchester, City and Hackney, Newham, Walsall* and elsewhere.

National organisations have developed a wide range of services, as have PCTs with large minority ethnic communities and they often work in tandem. For example, each year QUIT targets Muslim, Hindu and Sikh religious festivals by coming up with a theme or 'PR hooks' that are appropriate, such as "SmokeFree Ramadan", "Safety over Diwali-Cigarettes Cause Fires" and "New Year Resolution for Hindu New Year'. The campaigns are backed by intensive media coverage, posters, talks, exhibitions and outreach work by the counsellors.

There have already been a number of mapping exercises devoted to smoking cessation targeted at black and minority ethnic groups (ASH Scotland 2005; Brown 2005; Crosier and McNeill 2003; Fox 2004). Research is also underway into the best ways of reaching certain communities, for example, *Heart of Birmingham PCT*, in conjunction with the University of Birmingham, is exploring ways of reaching the Bangladeshi community.

Local media are often used to get the stop smoking messages across. *Ealing and Hounslow* uses local radio stations like Sunrise Radio, Desi Radio, and newspapers such as Manjeet Weekly, Asian Times, Eastern Eye. It also uses advertising in Polish magazines.

The language issue is tackled in different ways. Some services make use of national initiatives such as the national Asian Tobacco Control Pack. Many services have dedicated advisers from black and minority ethnic communities. *Brent* was able to use the services of local level 2 pharmacists who spoke Somali and Polish. *Harrow* also has pharmacists who speak several languages. *Lancashire* has a multi-lingual adviser working through links with mosques. *Camden* has a freephone Bengali line and also identifies all its Level 2 advisers by language spoken. In *Islington*, Turkish and Somali advisers target GP practices with a high proportion of patients from black and ethnic minority groups.

Aside from language issues, cultural and religious issues are taken into account. *Camden* uses Church advertising for its Black Caribbean communities. Culturally appropriate services are also being developed through identifying and training lay advisers and peer education schemes *(Nottingham, Bristol*). Many initiatives have been centred on Ramadan, which forbids smoking during the day.

Black and minority ethnic groups in areas of high social deprivation are specifically targeted by some services. *Southall* is piloting drop-in clinics linked in to GP practices in relevant areas. Level 1 and Level 2 training has also been offered to community groups with a view to training them to be community advisers providing stop smoking advice and support to members of black and ethnic minority communities.

Barnet is one of several services carrying out specific work with refugee communities and is involved in Refugee Day. *Southall* also works with newly arrived refugees. *Lewisham* offered an adviser at a day centre for refugees and asylum seekers for some time. However, in this case, the adviser reported that until people had secure housing or status, they were not ready to stop smoking.

There are overlaps with services designed to make services more accessible to disadvantaged groups. For example, the *Yorkshire and Humber* Smokefree Region Bus is used by all services in the region, is taken to disadvantaged areas and also visits Asian events.

4.5.3.3 Other groups

Several stop smoking services work with homeless groups, including *Central Lancashire,* which has links with South Ribble Key, a charity giving practical assistance and support to people aged 16-24 with housing problems. Staff at a hostel for homeless people have been Level 2 trained by the *Ealing and Hounslow* stop smoking service, which also operates drop-in clinics in areas of deprivation. *Hammersmith and Fulham* stop smoking service has advisers in a local homeless centre.

Some services, such as *Herefordshire*, rely on GP contacts for referrals from people on low incomes or on benefits and living in public housing.

Hospital-based services are becoming increasingly common, aimed particularly at people suffering from smoking-related diseases.

Clients with disabilities are often particularly considered. *Liverpool* has 3 members of staff who achieved level 1 British sign language. *Tees* chooses its clinic venues with consideration for disabled access and also has leaflets available in large type, Braille and on tape and CD. *Gateshead and South Tyneside* carries out home visits for clients with mobility problems and other various special needs and also encourages people to use the patient transport service, although it is reported that very few do so.

4.5.4 One-off events

Stop smoking services take advantage of opportunistic media coverage (such as No Smoking Day), and, in particular, recently capitalised on the ban on smoking in public places to set up events including include health fairs, road shows and other one-off events.

Fairs are often held in conjunction with events such as National No Smoking Day and held in partnership with other organisations. For example, in *Stockton*, a partnership initiative across the PCT, Borough Council and Fire Service provided a trailer in the town centre where people could receive advice on stopping smoking, advice on the dangers of smoking in the home and the benefits of smoke alarms, check their breathing capabilities on a smokalizer machine and receive advice on healthy lifestyles.

For National No Smoking Day, *Salford* held a series of events aimed at helping those wanting to quit the habit. This included an '*If I Can Do It, You Can Do It'* information stand at Salford Shopping City, where smokers could talk to successful quitters about their experiences while accessing advice, help and support. GP surgeries and pharmacies across the City also marked the day with special sessions offering information on the help and support available to those who want to give up.

Road shows have taken place in shopping centres or supermarkets. These have met with mixed success. Respondents from *Barking and Dagenham* reported that a supermarket event had gone very well. On the other hand, it is reported from *Brent* that, in many cases, numbers interested in its promotional stalls are low for the amount of effort involved.

Some services have used workplace road shows. *South West Essex* involves trained occupational health nurses to offer support.

4.6 Improving access to smoking cessation services

Barriers to accessing stop smoking services are well rehearsed and an example of ways to address these is provided in Box 2.

Box 2

Addressing the barriers to access

- remove delays to service entry;
- more flexible and user-focused schedules;
- convenient time and location of clinics;
- improve strategies to reach priority groups, especially pregnant smokers;
- greater collaboration between health promotion services and stop smoking services;
- remove barriers to the use of NRT;
- improve marketing and publicity for NHS stop smoking services;
- improving outreach in deprived areas;
- wider availability of NRT, particularly to manual groups, through local authority outlets;

- community services for pregnant women, particularly those on low incomes (PCT);
- enforcing the advertising ban and the prohibition on underage cigarette sales;
- advice to households on fire safety from Fire and Rescue

(Extracted from North Tyneside Local Area Agreement 2007-10)

An earlier mapping exercise (Crosier 2001) identified a wide range of interventions including training of community workers, NRT voucher schemes, services targeted at minority ethnic groups, services in different locations, using community pharmacies and peer support, and working through other agencies. Many initiatives of this kind are also reflected in this mapping review. However, despite a wealth of access-related information and examples of good practice, the implementation of such approaches varies widely. As one example, information from South Yorkshire shows that services were predominantly based in GP practices (except in Rotherham) with only a small number accessible at evenings or weekends (Annual Public Health Report, Rotherham).

4.6.1 Expansion in numbers and locations of staff providing advice

GP practices, practice nurses and pharmacists, including counter staff, are providers of services but broader approaches to training are also common across health care and community and voluntary organisations.

Many GP practices have PCT-funded specialist stop smoking advisers. In *Wirral,* advisers are funded to support GP practices with the highest rates of smoking. In *Salford*, almost all GP practices have at least one smoking cessation adviser, usually one of the practice nurses, but it may be an assistant practitioner or a health visitor.

Other services rely on training large numbers of NHS staff. For example, hundreds of NHS staff in *Newcastle* have already been trained by the service to deliver cessation support (including GPs, community nurses, school health advisers, pharmacists and dentists).

Newham provides one-to-one interventions in the community through a network of over 170 level 2 advisers, usually pharmacists and practice nurses. They also provide intensive group support, which is particularly suitable for more heavily dependent smokers. These groups are run by level 3 trained advisers from within the core stop smoking team based at the PCT. They attribute the success of the stop smoking service in Newham in achieving national targets on a willingness of pharmacists and practice nurses in particular to undergo further training to become stop smoking advisers. This means that smokers who want to quit can find professional support in every neighbourhood.

In *City and Hackney* PCT, a map of existing advisers was produced (2006) to identify areas of poor coverage and organisations were then targeted accordingly. The tPCT is training staff in organisations that come in contact with smokers with level one advisers in a wide range of settings in a range of statutory, community and voluntary organisations, including benefits agencies and voluntary workers.

Different approaches are taken to increase capacity for out-of-hours services. In *Gateshead* and *South Tyneside*, the stop smoking services have 280 intermediate advisers providing stop smoking support from a variety of settings, including GP practices, pharmacies, Sure Starts and community settings.

In *County Durham* and *Darlington* PCTs additional support sessions are available in pharmacies, community settings and through leisure services, including increased out-of-hours support at weekends and evenings. This has been developed with LAA grants. Also, in *Walsall*, sessional advisers increase service provision in the evenings and at weekends.

An expansion in venues where stop smoking advice takes place, as well as in the range of people trained to offer level one advice, is widespread and therefore not discussed in more detail.

4.6.2 Drop-in models and rolling programmes

One important development is the drop-in centre, providing flexible and convenient services, with no appointments necessary. They are an alternative model of service to the typical smoking cessation format of one-to-one sessions or group support for an hour a week for several weeks. Drop-ins are less formal than groups, with visits lasting approximately 15 minutes. Referrals are taken via formal referral systems or clients can self-refer. Participants set a quit date on week one, then may attend weekly for four weeks. There are different models, with some areas combining drop-in centres and a group (*Chiswick, Hampshire, Southampton*). They may also be run as separate events with media coverage (*Hartlepool, Newcastle, Gateshead, South Tyneside* (see case study 4)).

Case study 4

Title: Drop-in 2 Quit
Aims: *To attract more people to the stop smoking service in order to meet challenging targets.*
Target population: *smokers resident in the disadvantaged area of South Tyneside.*
Methods: *The coordinator attended training delivered by South Birmingham Stop Smoking Service, to learn from their experiences of developing and delivering a large scale successful 'Drop-in' programme.*
Letters were sent from GPs to smokers and there was distribution of posters, leaflets and fliers, along with emails to PCT and LA staff (as major employer). Local media promotion included a radio advertising campaign.
Thirty staff were involved, including stop smoking advisers, pharmacists, administrative staff and crowd control staff. A local community venue was used and sessions ran on Saturday mornings for eight weeks, with NRT provided free of charge for this period. It was a one-stop shop, with the client pathway comprising: administrative staff; stop smoking adviser; NRT adviser and pharmacist/dispenser.
Background: *Gateshead and South Tyneside Stop Smoking Service covers a mainly urban geographical area. The population of the South Tyneside part, an area of historically poor health, is around 150,000.*
The service has evolved since 1999, delivering a mixture of one to one, group support and home visits where necessary.
An ambitious PSA stretch target was set and it was felt that an innovative approach to attracting larger numbers of clients to the service was required to achieve the target.

Outcomes: *The total cost was £72k. Almost 700 people accessed the service and set quit dates. This was more than the numbers accessing the general service during the same time period. The quit rate was 55%.*
Comments: *This case illustrates the successful use of several techniques. The drop-in element allowed easy access to the service. Free NRT provided an additional incentive. Saturday morning sessions enabled those with standard working weeks to attend easily and the multi-agency approach enabled a simple one-stop experience for the smokers. The media campaign ensured good publicity. The fact that more people accessed this programme than the general service suggests that these factors played a very important part.*
Sources:
Brown J, Williams M. (2007). Increasing access to stop smoking services: drop-in sessions in South Tyneside. UKPHA Conference.
Williams M, Carter D. Development and Delivery of a 'Drop-in 2 Quit' smoking cessation programme. PCT paper.
Personal communication.
(Maria Williams, Gateshead and South Tyneside Stop Smoking Service, Maria.Williams@stpct.nhs.uk)

Some drop-ins were originally developed through short term funding (for example, through NRF in *Nottingham*) but their use is now widespread, especially in NRF areas. Expansion of drop-in services is also reflected in LAA targets. In *Tower Hamlets*, for example, drop-ins outside normal hours are a LAA target.

Drop-in sessions are provided in a wide range of locations which include: town centres (*Barnsley, Bradford, Doncaster, Hull* (Whistle Stop drop-in sessions)), and are often designed to provide better access to services in disadvantaged areas. There are many ways of capitalising on the flexibility of drop-ins. For example, in *Newcastle* city centre, people could drop-in to see a trained adviser without an appointment on each Saturday in January (building on New Year resolutions). Drop-in sessions in *North Tyneside* were held prior to the non smoking ban and at the end of a seven week period, people were referred to on-going drop-in clinics should they still need support. Drop-in centres may be provided over limited and specified periods with media coverage (*South Tyneside*, Drop-in 2 Quit (see case study) or at one stop shops in community venues. They are often combined with incentives such as free NRT for up to 7 weeks (for example, in *North Tyneside*).

Drop-in services can easily be targeted at deprived communities, for instance, *Croydon* provides them in NRF areas in the district. Similarly, *Ealing and Hounslow's* drop-in clinics and motivational groups are located in areas where there are disadvantaged groups. *Sutton and Merton* offer drop-in services with free NRT for those not registered with GPs.

Tees almost totally relies on drop-in services.

It is claimed that drop-ins are successful in attracting smokers because of the flexibility and lack of appointments as well as community-based convenient locations. It is believed that they are, however, better suited to urban than to rural locations. Further examples of drop-ins are provided in Appendix 8.

Rolling groups are a mixture of drop-in clinic and a group. This integrates clients at different stages of their quit attempt. *Chiswick* Health Centre runs rolling groups using cognitive behavioural therapy and there is a pharmacy on site. Four-week quit rates are on a par with the national average but as clients continue to visit after 4 months it is assumed that 52 week quit rate is higher. Findings from *Hampshire* and *Southampton* suggest that rolling groups are more successful in urban than rural areas.

One of the best known examples of drop-ins is Roy Castle Fag Ends in *Liverpool.* There are over 50 informal 'drop-ins' at community venues - they are at regular times and places and held on a weekly basis. This was included as a case study in section 3.4.3.

4.6.3 Mobile services

Mobile services have been used in various settings, in both rural and deprived urban areas. *Cornwall and Isles of Scilly* stop smoking service, because of the rural nature of the area, does not use specialised clinics but relies on GP surgeries, pharmacies and dedicated roving staff. It reports good success in both quit rates and the ability to reach the most deprived areas. Further examples are described below.

- The *Yorkshire and Humber* Smokefree Region bus, which has been operating for about five years, is used by all the services in the region, and is taken to disadvantaged areas. Sometimes stop smoking groups are run on the bus as well, as the drivers are trained in smoking cessation.
- In *Herefordshire*, an outreach bus visits travellers' sites, giving healthcare information and service. At least one staff member is a trained stop smoking adviser.
- Health buses can be targeted at specific wards and neighbourhoods. For example, *Hartlepool* 'Drop-in for Health' Health Bus is a mobile health service, partly funded by the local NDC. The project offers a drop-in health facility at four sites in the NDC area and is staffed by six part-time practice nurses from local GP practices. The bus provides an easily accessible venue for smoking cessation clinics, national promotional campaigns such as National Heart Week and demonstrations on healthy eating, oral and personal hygiene. The health bus is used by approximately 40 people per two-hour session.
- In *Sandwell*, there is a Mobile Lifestyle Awareness Unit which delivers a service in targeted areas of the borough.

Specific high-risk groups are sometimes targeted, for example, the Partnership with Older people (POP) mobile unit (POPstop bus) was launched in *Croydon* in May 2007 (with funding from the Department of Health). It aims to identify older people at risk and will provide health and social care support; smoking cessation is included amongst its activities. The POP team include a pharmacist who will conduct medication reviews and support patients with medication management and will also identify risk factors for a range of conditions, including CHD.

4.6.4 Community pharmacies

There is an increasing recognition of the role of community pharmacies in public health, including smoking cessation, and in managing long term conditions (Royal Pharmaceutical Society of Great Britain and Webstar Health 2006). The new contract for community pharmacy (nPhS) (April 2005) provides greater flexibility for commissioning services from pharmacies. There are two tiers of services commissioned nationally: essential services provided by all pharmacies; and advanced services which require the pharmacist to be accredited and the pharmacy to have a private consultation area. A third tier of services, enhanced services, are commissioned locally by PCTs.

Health inequalities: a programme for action (DH 2003) highlights the importance of community pharmacies and *Vision for Pharmacy in the new NHS (*DH 2003) states that pharmacists are probably the biggest untapped resource for health improvement. The nPhS contract reflects the potential contribution of community pharmacists to public health, for example through the provision of opportunistic health promotion advice to patients presenting prescriptions, and for self care. Pharmacies are also involved in public health campaigns, mainly around smoking, such as 'Free NRT vouchers for the New Year' (see for example, *West Essex*)). Pharmacy chains also have initiatives to tackle smoking which are independent of PCTs.

Pharmacies are accessible, with long opening hours, including Saturdays, are widely dispersed and are relatively informal. Staff often live locally and are well positioned to identify smokers. They are, therefore, a key avenue for providing stop smoking services and this is reflected in the growth of pharmacy-based stop smoking services and the provision of intermediate level support in pharmacies. Examples are given below.

- The *Hounslow and Ealing* Stop Smoking Service has a number of Level 2 trained pharmacy advisers who are able to generate their own referrals.
- Over 70 pharmacists are involved in *Croydon* PCT stop smoking services, providing approx. 60% of all activity. Some pharmacists are extremely proactive in identifying and engaging smokers in their local areas, others less so. There are accredited smoking cessation advisers in pharmacies.
- In *City and Hackney* PCT, there is a named stop smoking lead in every pharmacy.
- Alliance pharmacy in *Newcastle* (trained by Newcastle stop smoking services) has more than 30 staff in 12 of its branches across the Newcastle area who were fully trained to provide stop smoking advice and support in time for the smoking ban in public places on 1 July, 2007.

Patient Group Directions (PGDs), dating from the early 1990s, allow participating pharmacies to prescribe NRT (or provide NRT in return for vouchers).

- In *Hull*, all community pharmacies support NRT voucher schemes run by the stop smoking services.
- In *Glasgow,* the majority of community pharmacists offer one-to-one support for smokers who want to stop (5-10 minutes once a week for up to 12 weeks). They can also directly supply NRT.
- *Northumberland's* 'Pharmacy Direct Scheme' is a partnership between the Stop Smoking Services, PCT pharmacy leads and local community

pharmacies. The scheme is supported by local GP surgeries which, prior to its inception, were responsible for generating all NRT prescriptions for patients seen by stop smoking specialists. In this scheme, the specialist can issue a Pharmacy Direct form, which the client takes directly to a participating pharmacist. The pharmacist discusses the product and its use, building on the advice given by the stop smoking specialist, and issues the product. GPs are informed of the client's involvement in the process and their quit-smoking outcome. It has been piloted in the Central Northumberland locality and will be rolled out county-wide.

- In *Central Lancashire,* the stop smoking service in Chorley works closely with pharmacies through the operation of a NRT voucher scheme. Brief Intervention training is delivered to support staff in the operation of this scheme, and this equips pharmacy staff with the skills to ask, advise, assist and arrange support for smokers who need help in stopping.
- In *Knowsley,* pharmacies dispense NRT vouchers issued by Roy Castle Fag Ends Counsellors, if appropriate, through a service level agreement with the PCT. They can also offer in house smoking intermediate services (including two 24 hour pharmacies).
- Since 2000*, Islington PCT* has been operating a scheme that allows trained pharmacists to offer stop smoking advice and dispense NRT to their clients as a one-stop-shop. A peer-support project was set up to improve the service. It is reported that the proportion of quitters coming from pharmacists has increased.

Although, in general, opportunities are offered to all pharmacists, some PCTs are commissioning services from local community pharmacies in line with needs assessments for the local area. *Newham* has encouraged all pharmacists in two specific localities to provide level 2 stop smoking services, and examples were found for PCTs planning to extend smoking cessation advice in pharmacies in high rate wards as far as resources allowed. In *Birmingham East and North PCT* area, pharmacies are involved in major health improvement initiatives as part of the new pharmacy contractual framework. One of these initiatives has been the expansion of smoking cessation services.

There is also a range of other initiatives:

- In *Blackpool,* a scheme is planned (from September 2007) for pharmacies to distribute NHS Stop Smoking Service cards with pregnancy test kits.
- In *Camden*, through LAA funding, a pharmacy is working to target Somali and Bangladeshi groups. Initiatives targeted at black and minority ethnic groups through the LAA are linked to disadvantaged areas.
- In *Liverpool,* a drug company recently funded a leaflet (with a list of the groups in that specific area) to be put in prescription bags at the local pharmacies.
- *Warwickshire* has also made use of information in prescription bags.
- Boots has a personalised quitting plan (with QUIT's stop smoking counsellors giving additional support).
- Lloyd's pharmacies are planning to offer a cessation service across the country.

As part of the movement towards greater integration of pharmacy into healthcare delivery the Department of Health has sponsored a pilot across *Greater Manchester*, where up to 6,000 people with diabetes and/or cardiovascular disease are being offered the choice of having their next consultation carried out in an approved pharmacy. The service started in 2005, for a period of 18 months.

Incentive schemes for pharmacies are discussed elsewhere. Some services have experienced difficulties with funding. For example, pharmacists were formerly involved with cessation in one PCT area until April 2007 when, due to PCT cost savings, they were told they would no longer be paid for smoking cessation work. They were encouraged to continue providing the service if they were able.

4.6.5 Dental practices

Opportunities for involving dentists in smoking cessation have long been recognized, although only a limited number are actively involved with stop smoking services. Dentists are well placed to identify and advise smokers. There is a "shock factor" when a smoker realises that smoking has a visible effect on teeth and mouth appearance.

There is a range of interventions carried out in dental practices. In *Salford*, a pilot project has been established where a dental nurse has been trained to provide intermediate advice to patients wanting help to quit smoking. This has been running in one dental practice since June 2005. If the results of this are favourable, they will be used to encourage other dental practices to be involved. In *Central Lancashire* they are working in collaboration with dental practices to incorporate brief interventions and referral into routine care.

A three year project is under way to understand the range of services related to smoking cessation in dental practice in *Leeds* (funded through Leeds PCT Research Consortium).

4.6.6 Times and locations of clinics

Many examples already discussed have specially chosen times or locations to meet the needs of certain groups. Additionally, *Camden* organises open groups in the day time, targeting people who are retired, unemployed or mothers with young children.

In *Easington* district, transport networks are poor and there is low car ownership, therefore a service is provided in every GP practice. Drop-in groups are offered throughout the district to provide accessible sessions.

Central Lancashire makes use of hospital outpatient clinics, where appointments can be made around other hospital visits.

Many services now provide clinics outside standard working hours. Evenings and Saturday mornings are the most usual options. In *Liverpool*, numbers of people (new and returning) attending sessions are monitored and if sessions continue to be poorly attended, despite targeted advertising, they consider moving to another venue or altering the time of the session.

4.6.7 Home visits, telephone support and other technologies

Home visits are generally offered for those who are housebound or for pregnant women. In *Manchester*, community midwives have been trained to intermediate level and can provide interventions in the home or the clinic within a few days. Intensive support from a stop smoking specialist involving weekly home visits, NRT prescription and CO monitoring is implemented in South *Birmingham* PCT. As mentioned above, home visits are provided in *North Staffordshire* (YOU Two Can QUIT) along with text messaging and telephone support. The *Dudley* Quit Smoking Programme, a two year project, provided one-to-one intensive support at home for pregnant women, partners and families through a full time midwife smoking cessation specialist and support is provided throughout the pregnancy, which is reported to have helped prevent relapse. Smoking activity is updated and kept in hand held notes.

There are examples of home visits being more widely used. The Bangladeshi Tobacco Cessation Project in *Tower Hamlets* provides culturally sensitive support, NRT, and male or female workers where appropriate. They provide home visits to those who cannot access the service. It is funded by Tower Hamlets PCT and is a four week programme based on weekly meetings. The meetings are followed up with regular phone calls or further meetings, if needed.

The *Blackpool* stop smoking service regularly carries out telephone consultations with clients who cannot come to a one-to-one clinic appointment. *Central Lancashire* has a telephone support programme in place for disabled or housebound clients, with daytime calls agreed on a weekly basis.

Buckinghamshire has links to web-based support for patients who work shifts or are unable to attend groups.

4.6.8 Realignment of stop smoking services and clinics

In this review, interventions have been considered separately, but in practice, they may occur together. For example, Roy Castle FagEnds (*Liverpool*) is a flexible client-centred service which includes ex-smokers from the community as advisers, offers drop-ins in a wide range of community venues and at different times and provides NRT vouchers. Their database allows them to text clients and they are also using social marketing techniques. *Lewisham* has a weekly town centre stall on Saturday, a health bus visiting a disadvantaged estate, a NDC project to begin Fulham-style telemarketing to smoking clients on GP lists, and a 'Stop before the Op' programme in preparation. The ways in which different interventions are combined and the extent which they are effectively targeted are likely to influence success.

4.7 Encouraging access to services through incentive schemes

4.7.1 Local Enhanced Services: GPs and dentists

As discussed in section 3.3.3, GPs are already incentivised to record smoking status as part of the QOF, although the PSA target is slightly different. Research into the effect of these incentives (Millett et al. 2007) concluded that financial incentives introduced in UK primary care appear to have increased cessation advice being given by primary care staff and reduced the percentage of people with diabetes who smoke, with improvements generally greatest in the groups with the poorest performance before these incentives were introduced.

However, achievement of smoking targets is patchy. For example, *Barking and Dagenham* PCT set a target to ensure that 78% of the population had their smoking status recorded in the previous 15 months, but records showed that only 48% of the population were checked in this period. The PCT intends to work with local practices to improve this figure in future years.

Many PCTs are adopting the Local Enhanced Service element of the nGMS contract to improve stop smoking service in primary care and there is evidence that this is effective. *Walsall* reports that since implementation of the LES in 2003/2004 there has been a 104% increase in the number of quit dates set compared to 2002/2003. Improvements in service uptake of primary care-based smoking cessation services continue to be demonstrated year on year since the introduction of the guidance. Walsall stop smoking services were runners up in the Guidelines in Practice Awards (2006) for their role in developing and implementing a Locally Enhanced Service.

Rotherham has shown that LES practices have higher quit rates (Public Health Annual Report 2007). *Islington* is also planning to develop a LES under nGMS to complement the QOF and incentivise achievement of practice-based targets of number of quitters. *Stockport* has a LES whereby GPs are paid to achieve target numbers of 4 week quitters. Targets are set on an individual practice basis and calculated using prevalence models. *Bury* has a GP incentive scheme (using *Choosing Health* monies) for quit dates plus CO validation. It also has an incentive scheme for dentists, again with CO validation. *East Midlands* has some locally enhanced agreements for GP case-finding. It also works with acute trusts on referral systems.

4.7.2 Local Enhanced Services: community pharmacists

The new pharmacy contract, introduced in 2005, includes the aim of helping to promote public health, tackle health inequalities and improve health. It is a requirement of this contract (through essential services) to provide information about the benefits of stopping smoking. Local enhanced service agreements with pharmacies are common and pharmacies can also help practices achieve their QOF targets (see also section 3.6.4).

In *Northumberland*, community pharmacies have also been offered an enhanced contract to provide level 2 stop smoking services, combined with a voucher system for supply of NRT. The success rate at four weeks is reported as 66 per cent, higher than for GPs and the specialist service.

Pharmacists in the *Birmingham East and North* PCT area are involved in major health improvement initiatives as part of the new pharmacy contractual framework.

One of these initiatives has been the delivery of smoking cessation services. Pharmacies either carry out the service themselves or signpost patients where appropriate.

4.7.3 Incentive schemes for smokers and businesses

Incentives are being used to encourage smokers to quit, although such an approach has been evident in national campaigns for some time (such as 'Quit and Win', for example). Free NRT is one route and this is often combined as an added incentive to specific campaigns, such as special drop-in events. In *North Tyneside*, seven weeks free NRT was made available by a 'join in to quit' held every Saturday in June prior to the ban on smoking in public places in July. At the first meeting, it was reported that over 50 people took advantage of free NRT and expert support from stop smoking advisers. Trained stop smoking advisers can provide NRT direct and free of charge for up to seven weeks, at which point, people will be referred to on-going drop-in clinics should they still need support. *Central Lancashire* also has a voucher scheme, targeting clients without referral to GP and providing a more streamlined service. *South West Essex* offers 8 weeks NRT for the price of one script.

There is a wide range of other schemes, often dependent on local contexts and opportunities. For example, in *Rochdale* (2007), home match tickets (meeting the players and VIP treatment) were made available for those quitting for over 4 weeks and the promotion was timed to coincide with New Year resolutions. *Camden* has a refer-a-friend scheme for people who have used the service and for local businesses, under which cinema tickets are provided for every person who attends (and another, if they quit). In *Manchester*, both pregnant women and staff that support them have been offered prizes on quitting.

Although the remit is wider than for smokers, the *Sandwell* Healthy Passport Programme is an incentive scheme, aimed at over 50s, with health targets (which include stopping smoking or health checks) in return for points which can be exchanged for prizes. This was funded through NRF.

Funding for such schemes can be difficult to obtain. *Newham* considered an income maximisation approach with the local social inclusion unit, which would have been linked to credit unions. The idea was that smokers wishing to quit could open a savings account with their local credit union and if they were successful at 4 weeks, 3 months and 6 months they would get a cash bonus to add to their savings. Participants would have been encouraged to save the money they would normally have spent on cigarettes. Unfortunately they were unable to gain funding for this proposal.

4.7.4 Smoke-free homes

Smoke free homes are open to all, but targeted to families and young children (and pregnant women) in Sure Start areas. *West Yorkshire* Smoking and Health, a tobacco control alliance, was funded as a pilot project by the DH in 2002 to develop a smoke free homes campaign, subsequently rolled out across the region. It is now available in many Sure Start areas, and therefore focused on areas of disadvantage. (See case study 5 and Appendix 8.)

Case study 5

Title: Smoke free homes

Aims: *With a primary aim of reducing the exposure of the family to second-hand smoke in the home, this is part of a holistic approach and is linked with helping pregnant women to quit.*

Target population: *Families and children in disadvantaged (Sure Start) areas, particularly including pregnant women.*

Methods: *Project workers set themselves up at supermarkets, shopping centres and community events and give out information and application forms for people to apply for smoke free home status. People fill out the form and send it back to the project. Applicants are then sent a certificate awarding them Gold, Silver or Bronze Smoke Free Home Status. These three tiers of achievement give parents something to aim at and mean that it is not necessary to become entirely smoke free all in one go. The Gold certificate is for a totally smoke free home. The Silver certificate is for a home that is smoke free in all but one room. The Bronze certificate is for homes where people do not smoke in front of the children. In practice, 80-85% of people who apply go for the Gold status. Applicants are also sent a goodie bag which contains: tips on how to make the home smoke free and information from the fire service about safety; fun things for children; a sticker declaring the home a smoke free home.*

Project workers also work to build capacity in the community and train other health professionals and volunteer parental advisors from Sure Start areas to use the Smoke Free Homes materials and approach their clients and friends about participating in the project.

Background: *Sure Start Smoke free homes, developed by Chris Burton in Weston Super-Mare, is an initiative that has been taken up in many parts of the country. Taking advantage of Sure Starts' position in the community, it is a holistic approach to dealing with smoking problems. Here we refer to the scheme's results in Manchester and to the operation and results of the programme in West Yorkshire.*

In West Yorkshire, the project is managed by WYSH, with funding from the Department of Health and the West Yorkshire PCTs. A steering committee helps guide the work. Partners in the project are: Yorkshire ASH, West Yorkshire Fire Service, Sure Start, health professionals and the PCTs/NHS. The annual cost is around £20k.

Outcomes: *In one of Manchester's Sure Start areas, Harpurhey and Moston, 45 women set quit dates and there was a quit rate of 62%.*

Client feedback in West Yorkshire indicated that participants enjoyed receiving the goodie bag. Other outcomes include an increasing number of smoke free homes. (However, this is unmeasured as people don't always send off the application form and simply 'get on with it themselves'); increasing awareness of second hand smoke and its dangers; and the denormalisation of smoking within society.

Comments: *Feedback suggests that the project is particularly successful as it gives health professionals of all disciplines an easy to use, effective and non judgemental tool to discuss smoking cessation with their clients. As with the other case studies, it contains a mixture of approaches: multidisciplinary working; working through other initiatives; providing incentives; a holistic approach.*

Sources:

http://www.healthinequalitiesdirectory.co.uk/show_detail.php?id=7

Carole F (2005) Manchester's Smoke Free Homes. 12 months report. April 04- March 05. Manchester Public Health Development Service.

Personal communication.

Contact: Pat Hodgson, Yorkshire and Humber GO. Patricia.Hodgson@dh.gsi.gov.uk

Other incentives are now included as part of some Sure Start initiatives. For example, *Lowestoft* Sure Start offers a pack of freebies and, for those who sign the smoke-free promise, entry into a series of £100 prize draws. This project relies upon Sure Start workers and health professionals to promote the initiative.

A report on Smoke Free homes in *Manchester* (2004/5) (Carole 2005) demonstrated that the majority of people referred on to the scheme joined through Sure Start and midwives across Manchester. This report claims that there is evidence that the Smoke Free Homes scheme provides a useful strategy to help reduce second hand smoke exposure in the home and to help people to change their behaviour.

4.8 Encouraging access through working through other initiatives tackling disadvantage

Many projects related to smoking cessation (and the prevention of CVD) have initially been funded through NRF and NDC and are linked to LAAs. For example, in *Haringey*, the NDC will be working towards LAA targets in smoking cessation, increasing physical activity and improving homes. *Hammersmith and Fulham* is also carrying out targeted programmes within NDC, Sure Start and Children's Centre Programmes. In *Lincolnshire,* the LAA states that they will continue to work with Sure Start and community development programmes in wards with high deprivation scores to reduce smoking and smoking-related illness. The LAA for *Nottingham* states that, for smoking cessation in pregnancy, all Sure Start/ Children's Centres should have trained staff to deliver 'New Leaf' smoking cessation programmes.

There is varying involvement in the community sector. For example, *Oldham* comments on the need to increase capacity across all teams and train community development workers to provide brief interventions for smoking cessation.

There is a range of interventions on stopping smoking from Sure Start, in line with the Sure Start PSA targets for 2003-06, which include the following:

In fully operational programmes, achieve by 2005-06 a 6 percentage point reduction in the proportion of mothers who continue to smoke during pregnancy.

Eight examples of 'promising practice' are available on the Sure Start website. (Sure Start Promising Practice). These include: peer support in tandem with health professionals; training for all peer support workers; referral from midwives, stop smoking services and others; individual support for pregnant women; home visits; working with partners; ongoing support to prevent relapse; parents trained in cessation work. Further examples are included in Appendix 8.

Smoking is an important co-factor in the long-term health of those living with HIV, with smoking increasing the risk from certain opportunistic infections. *Positive East* (East London) is working at improving the health and quality of life for all individuals and communities infected and affected by the virus, offering one-to-one support to stop smoking.

Many services are working with local borough councils, taking advantage of the enforcement issues around legislation, to target high risk businesses and give information about cessation. *Camden* takes this approach and also works with 'Holborn Rangers', who are distributing their group posters to local businesses, and housing offices, which are distributing promotional material within council housing.

Working with charities is an approach used by several services. *Hillingdon* works closely with charities, local communities and companies to set up stop smoking services.

4.9 Combined approaches

4.9.1 Cessation combined with other health interventions

As mentioned earlier, interventions do not necessarily occur in isolation. It has been argued that the effectiveness of smoking cessation services may be enhanced through being combined with other activities. One example (of the many available) is the combination of smoking cessation advice and leisure initiatives. There are 'Quit and Get Fit' initiatives across the country, often carried out with support from councils or specialist advisers based in sports and leisure centres. For example, *Sheffield* stop smoking services and Sheffield International Venues (SIV) joined forces to encourage smokers to adopt healthier lifestyles through vouchers redeemable at SIV. Other projects include stop smoking in combination with aerobic classes ('stepping for stopping') and exercise referral schemes (from GPs and specialist advisers) for smokers. Projects of this kind, which are targeted at areas of deprivation, include the *Cardio-Wellness Charity*, which has tailored, culturally sensitive multi-lingual programmes specifically targeting minority ethnic communities.

Many healthy workplace initiatives also include smoking cessation advice for employees.

4.9.2 Lifestyle approaches which include smoking cessation

There is a wide range of other initiatives in which smoking cessation forms an important part. Group exercise schemes focus on diet and fitness but have the potential to look at smoking behaviour as well. Examples of these schemes are discussed in section 6 as they also refer to the prevention of CVD.

4.9.3 Working with other agencies

There is much scope for other statutory agencies to become involved in smoking cessation. For example, *Islington* carries out joint marketing with strategic partners and the fire service, community police and schools work with primary care teams to enhance referrals. The Fire Service has occasional opportunities to assess the smoking status of a household, following a fire, and to recommend the stop smoking service. *Lancashire* Fire and Rescue makes use of its Home/Fire Safety checks to raise awareness and refer clients to the stop smoking service. When fire officers carry out home visits to fit smoke alarms in *Liverpool*, they ask whether there are any smokers living on the property and give out appropriate information. *Bury* PCT is offering training for fire officers in giving intermediate advice.

4.10 Preventing relapse

One important factor at the early stage, mentioned by several respondents, was that of the client's readiness to quit. Efforts are being made to improve the assessment of the client's motivation at the time the client wants to set a quit date (as in *Shropshire*, for example). Qualitative research is also being carried out in some PCTs (as in *Stockport* and *Lewisham*) in order to identify reasons for dropping out of programmes.

During the quit attempt, various factors have been identified by respondents as significant, including:

- service ease of access and availability;
- length of expected contact with clients;
- social support;
- reminding clients of appointments;
- and discussion of relapse prevention.

Drop-ins (discussed earlier) have been cited as easy access options, offering clients the ability to attend without having to arrange appointments. They are often out-of-hours, which eases access for people who work standard days. Tees offers support for a minimum of three months at clinics.

As social support has been found both to improve quit rates and reduce relapse, a range of interventions has been developed to include 'buddy systems' and working with other family members. An ASH project (see appendix 8) recommended that buddying should be offered alongside other smoking cessation services, but another study showed that buddy systems did not add substantially to success rates (May et al. 2006). However, the authors argue that there could be merit in different forms of buddying.

Several services telephone or text clients to remind them of appointments. In *Enfield* and *Haringey* those who book in to clinics and do not attend the first session are telephoned and invited to attend the second session. This has led to an improvement in those who fail to attend. To prevent those attending in community settings from dropping out, advisers are encouraged to offer some sessions as telephone consultations. It is reported that this can help keep clients from giving up on the quit attempt.

In *Gateshead and South Tyneside*, advisers are encouraged to discuss relapse prevention throughout quit programmes. Clients are also provided with leaflets, a helpline number is given out at the end of the session and postcards are sent at specific times throughout the quit attempt (for pregnant smokers only); *Burnley, Pendle and Rossendale* sends letters to those who fail to attend, offering services if needed and finds this a successful approach.

Preventing relapse after clients have become 4-week quitters is attracting increased attention. The flexible nature of drop-ins is considered to encourage smokers to return if they need continued support and a number of PCTs offer ongoing support and 12 month follow ups. A good relationship with clients means that they are more likely to return to the services if they relapse. Several services make use of motivational

messages with follow-up contact. In 2002, *Bristol and North Somerset* began sending motivational postcards to clients who quit with the aim of providing ongoing support and preventing relapse. This was reported to be successful. *South West Essex* sends text messages or cards post quitting at 3, 6 and 9 months in an attempt to increase the 52-week quit rate. It also re-invites clients lost-to-follow-up. It reports that many clients do re-enrol after contact. *Sunderland,* however, had a poor response when it sent a postcard to all clients at 6 months to remind them that if they relapsed they could try again with the stop smoking services.

Contractual arrangements are sometimes in place to address the problem. *Croydon* encourages Level 2 advisers to be proactive in contacting lost-to-follow-up clients and has instigated a "no quit no fee" payment scheme. *Hammersmith and Fulham* also uses a no success, no reward approach, decommissioning the service if success rates drop to less than 10%. *Buckinghamshire*'s direct supply protocol means that patients need to come back weekly to get their NRT.

Combinations of approaches are adopted by many services. In *Central and Eastern Cheshire,* a number of methods have been adopted to reduce the drop out rate:

- service level agreements have a specification which states that pharmacist and GP services must fall within a maximum 'lost to follow up' rate of 20% or payment may not be made;
- there is ongoing training for all advisers to stress importance of follow up;
- data collection methods are regularly revised;
- clients are encouraged to make a new quit attempt as soon as possible if they relapse, and will be fully supported.

In *Central Lancashire* the following methods have been adopted to try and reduce the drop out rate:

- telephone follow-up is offered for clients, as part of the programme of support;
- agreeing text, email and mobile phone communication methods;
- terms of agreement, which are discussed and agreed at the outset of the support programme;
- clients are reminded they can re-register with the stop smoking service for further support;
- accessible clinics in local communities are held during the day and evening;
- easy access to drop-in clinics;
- clear information/expectations are given at first point of service by admin staff;
- 52 week follow-up offers further support. This encourages many smokers who have relapsed to access the service and set a new quit date. The 52 week follow up has encouraged smokers to feel comfortable about accessing the service again as this acts as an invitation to return for support (a letter with tear off slip and sae).
- all smokers who have accessed the service are invited to contact for further help and support in event of relapse.

They have found that a high number of clients who relapse will access the service for further support.

4.11 Examples of what is considered to work well

There are many different ways of assessing 'what works well'. Assessments of performance and improvement reviews by the Healthcare Commission (see for example, Healthcare Commission 2007); routine monitoring of 4 week quitters for the Department of Health; and internal PCT equity audits are all used to assess and then modify services. However, the detail may be difficult to interpret. As one example, a high proportion of smokers accessing services (one indicator of success) may not be matched by successful quit rates. The latter may be influenced more by the demographic and socioeconomic composition of the population than by the nature of the services provided. The target of four week quit rates masks differential relapse rates. Moreover, elements of stop smoking services are combined in different ways, which makes comparison difficult. Services that demonstrate partnership working were found to be more successful in the improvement review carried out by the Healthcare Commission, which underlines the point that services can not be considered in isolation from wider strategies.

However, in line with the major themes outlined in this report, the preceding sections provide examples of services which adopt client-centred and flexible approaches in the ways in which services are organised. Innovative approaches to providing services in community locations or town centres, combined with effective targeting strategies, appear to be successful, as measured by quit rates for the target groups and in terms of those who access the stop smoking service. Flexibility of response and a knowledge of community networks are both important. In addition, social marketing techniques have been used to make messages more relevant for the groups for whom they are targeted and, as shown in the case studies, results have been encouraging.

The mapping review found examples of services which had exceeded their quit targets and which had reflected on their success. For example, *Tees* highlights successful partnership approaches across the Tees Startstopping service, GP practices, community nursing teams and Sure Start. As part of this network, *Hartlepool* attributes its success to its drop-in clinics and a one stop shop, as well as identifying local people to provide stop smoking support in drop-in centres. *Barking*, too, attributes high quit rates (63 %) to drop-ins. *Heart of Birmingham* provides clinics in community languages and has an extensive training programme for health professionals, support staff and community volunteers; *Nottingham's* New Leaf has accessible clinics in all city wards and priority areas and is successful at targeting smokers from deprived wards and in generating GP referrals from the most deprived parts of the city. It also involves peer educators in black and minority ethnic groups to encourage and inform people in their community about giving up smoking. Free NRT has also been identified as an important element in recruiting quitters from deprived areas.

Some services combine all of the above, so that social marketing research may inform messages which are used to target priority groups in order to promote services which are client-centred and which reflect the communities in which they are located (in the sense that local ex smokers or other peer educators are involved in supporting them, for example, Fag Ends in *Liverpool* and *Knowsley*). Alongside this is the provision of smoking cessation advice across a wide range of organisations, especially those which can access smokers, and further encouraged through extensive training programmes for those who come in to contact with smokers.

Against this general backdrop, specific initiatives have also been considered successful including: social marketing recruitment techniques; group drop-ins; stop smoking shops; pharmacies; and the use of the local enhanced service contract. Outcome information, where available, is included in Appendix 8.

5 Results: statin utilisation

5.1 Introduction

This section outlines local interventions directed towards reducing inequalities in premature mortality from coronary heart disease (CHD), with an emphasis on interventions intended to result in statin prescription for those at risk. It is based on the findings from 29 telephone interviews; 26 questionnaires, of which 12 referred to both smoking cessation and statins; analysis of documents including supplementary documents sent by respondents; and desk-based searches of selected databases. Other documents consulted are listed in Appendix 8, under the appropriate sections.

A number of issues arise in mapping activities related to CHD prevention and statin utilisation. Firstly, local interventions are not routinely collated through cardiac networks or their primary care leads, although there is a good practice database (Rapport), which is available to cardiac networks and there is also a separate network for cardiovascular nurse leads, which shares good practice. Secondly, with some exceptions, the 29 regional cardiac networks have largely focused their activities on secondary care and rehabilitation, although strategic approaches to the prevention of CVD are now being developed and supported (see section 4.3.2.1). Thirdly, due to reconfiguration, many cardiac network primary care leads and PCT CHD leads are not in post (and there is also uncertainty in relation to some specialist pharmacy advisors in merged PCTs). We also came across examples of delays in making progress with the work of cardiac networks as a result of reconfiguration. Finally, there are several validated models for CVD risk assessment and this has led to local variation in how populations at risk are identified. While various cardiac networks have provided guidelines on CVD assessment, guidance on vascular risk assessment, following recommendations from the UK National Screening Committee, is likely to lead to a more uniform approach.

In some of the examples identified in our mapping review, programme implementation is being delayed until guidance on risk management becomes available.

In a summary of the recommendations of the Vascular Disease Control Programme (Muir Gray 2006) four risk management strategies are identified: self assessment; record-based; population-based; and sporadic. Interventions related to the latter three elements, with a particular emphasis on disadvantaged groups and areas, are included in this review. The Department of Health has provided a vascular programme briefing pack to the ten health authorities (DH 2007) as part of the DH Vascular Programme, and this provides comparator information which can help target activity.

Against this backdrop, disease prevalence models have been developed which allow comparisons between data from GP practices through the Quality and Outcomes Framework (QOF) and expected prevalence, thereby supporting PCTs in developing their 2007/8 Local Delivery Plans and in carrying out health equity audits. These models were produced by the Association of Public Health Observatories through a collaboration between Doncaster PCT and Yorkshire and Humber and Eastern Region

PHOs (available at: http://www.apho.org.uk/apho/models.aspx). They can also be adapted to validate prevalence at local authority level. These developments are likely to influence the targeting strategies and protocols currently being developed.

NICE issued guidance in 2007 recommending that statins should be used as part of the management of people who are at a high risk (20% or greater 10 year risk) of developing CVD, as well as of people who already have CVD. This is supported by the second Joint British Societies' guidelines on the prevention of CVD in clinical practice (JBS2) and is reflected in more recent strategies for the development of at risk registers. This review is therefore taking place at a time where there is a lack of alignment between QOF incentives and national guidance and while this informs the local incentive schemes currently being developed, this situation is also subject to change.

Much of this review is concerned with targeting, as narrowing the health gap depends on effective targeting, as well as on effective interventions focused on targeted populations.

5.2 Policy context: national and local targets

As already discussed in section 3.2, interventions are chosen and prioritised in the context of national targets and local priorities. The relevant national PSA target for CVD is to:

- substantially reduce mortality rates by 2010 from heart disease and stroke and related diseases by at least 40% in people under 75, with a 40% reduction in the inequalities gap between the fifth of areas with the worst health and deprivation indicators and the population as a whole.

National standards local action (2005-6-2007/8) (DH 2004) requires the following:

- in primary care, update practice-based registers so that patients with CHD and diabetes continue to receive appropriate advice and treatment in line with NSF standards and, by March 2006, ensure practice-based registers and systematic treatment regimes, including appropriate advice on diet, physical activity and smoking, also cover the majority of patients at high risk of CHD, particularly those with hypertension, diabetes and a BMI greater than 30.

In addition, there are requirements for delivery against the National Service Framework for CHD and the specific nGMS performance indicators included as part of the QOF.

These requirements are reflected in local targets. In many areas, the decision has been taken to apply the national inequalities target for CVD to local areas, that is, reducing the gap between the most deprived fifth of areas and the area as a whole by 40 per cent**.** In *Nottingham*, there is a specific target to increase the number of people with existing CHD, with elevated cholesterol, aged over 50 and living in the 15 most deprived wards, who enter a programme of active management, to reduce and maintain cholesterol at a level below 5 mmol/l. *Havering* LAA has a target for the number of people on hypertension registers in practices in the highest deprivation

quintile in the borough with controlled blood pressure (audit standard: 150/90; QOF indicator BP5).

Some areas have specific targets for GP practices. These may address improved performance against QOF indicators (or specify a different level of risk assessment in relation to these indicators); others go beyond the QOF in terms of using practice population registers for predictive case finding. These are discussed in more detail in section 4.4.2.1, below. The latter is of particular interest for proactive case finding, which requires GPs to take action outside the QOF. There is variation in terms of target populations, and in relation to the age at which people are invited for a health check. Before discussing these in more detail, the following section identifies different approaches to identifying target populations.

5.3 Proactive case finding: identifying target populations

Different approaches to identifying populations are discussed separately in sections 4.3.1 to 4.3.4 although, in practice, strategies are likely to draw on a range of approaches.

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5.3.1 Health equity audit

Health equity audit (HEA) is a key tool in pinpointing areas, populations and practices where interventions may be required. HEAs have been regularly carried out since the requirement in the *Priorities and Planning Framework* 2003-6 (DH 2002) to carry out equity audits in order to identify gaps between need and service use, enable a 'gap analysis' and then inform service developments, so that services can planned in ways which narrow the health gap. Health equity audits are also the subject of a NICE 'learning from practice' briefing (2006).

Numerous equity audits related to CHD have been carried out, and since the implementation of nGMS in 2004, it has also been possible to incorporate QOF-related data. CHD equity audits assess the use of secondary care services, such as revascularization and angiography, in relation to need; analyse elective admissions as an indicator of service provision (with mortality rates as an indicator of need); assess primary care services for CHD; and may include an assessment of access to smoking cessation advice and statin prescription in relation to need. They are also being used to identify the under-diagnosis of CHD by practice.

Although an analysis of health equity audits for CHD is not the focus of this exercise, audits can provide the rationale for targeting interventions towards specific wards, GP practices or population groups, and therefore are a key tool for addressing disadvantage. A number of examples are given below to illustrate how equity audits have been used to inform the targeting of disadvantaged areas.

- *Mending Hearts* (Public Health Intelligence Service of the County Durham and Tees Valley Public Health Network, 2005) was the first stage of a HEA of hospital treatment for CHD. Information on the equity gap between provision and need was provided for each of the PCTs. They then developed plans including primary prevention and improved screening to identify patients at risk of heart disease. This included targeting GP practices, as well as designing improved patient flows from early identification of symptoms to diagnostic

tests and, if necessary, secondary care. In *Derwentside*, practices were asked to produce an action plan prioritising patients from the 7 wards identified in the equity audit as having low elective admissions but high emergency admissions. In another of the (former) PCTs, emphasis was also placed on primary causes of CHD, including exercise and mobile gyms (*Dales)*.

- A CHD equity audit carried out by *Hammersmith and Fulham* PCT (2005) showed considerable under-diagnosis of CHD by practices, as determined by QOF data against expected prevalence.
- An analysis of prescribing trends for lipid lowering drugs by ward, part of an audit of CHD carried out by *Brent* tPCT (2005), showed differences (and a widening gap) between wards. In this case, the area with the highest rate of prescribing had the lowest level of deprivation.
- An equity audit carried out by *West of Berkshire* PCT in 2005 found that 'provision of preventive services for CHD (smoking cessation and prescription of statins) does not appear to reflect the increased need of patients from more deprived practices'.
- In *Stockton on Tees*, an audit showed equitable access to hospital treatment services via GP practices, but there were differences in access to elective and day case treatments by patient's ward of residence, with low rates of elective hospital admissions for patients in the most disadvantaged wards. The audit demonstrated that people resident in the some of the most disadvantaged wards were not 'presenting their symptoms to the GP'. The audit was being used by the tPCT to inform targeted work in wards, neighbourhoods and GP practices, as well as through 'community health champions' to raise awareness and including advice and heart checks in community health sessions in Neighbourhood Renewal priority areas.
- In *Rotherham,* equity audits were carried out annually (2004-6), including comparisons between the 20 per cent most deprived areas and the rest of Rotherham. These showed that improvements were also being delivered to the more deprived areas. Each practice is given feedback about how data for CHD compare with other parts of Rotherham.

There are many other examples, but these serve to demonstrate how equity audits inform decisions over where to target, although decisions over the blend of interventions are locally variable.

5.3.2 Practice-based approaches

Practice-based approaches to identifying target populations fall into two main areas: those related to better performance against the QOF and NSF standards; and those which build on practice registers to develop proactive approaches to case finding (see 4.4.2.1).

In relation to the former, there is a range of activities encouraging validated CHD registers, systematic treatment regimes, greater compliance with QOF targets in relation to the measurement of cholesterol and blood pressure for patients on CHD registers, and increases in the proportion of patients reviewed annually. A number of targets also focus on better recording of BMI and the recording of smoking status, as these aspects are less well developed in GP practice registers. These activities are encouraged by PCTs through regular programmes of audit and the targets are

reflected in a number of LAA targets and LDPs. At the same time, in line with standard 4 of the NSF for CHD (that is, that practices should identify all patients at significant risk of CHD, but who have not developed symptoms) there are activities designed to encourage progress in this area. For example**,** *Rochdale* has an LAA target to increase the number of general practice patients aged 50-75 years (smokers, those with hypertension or with cholesterol above 5mmol/l) who have been risk assessed as having a CVD risk of 20% or greater over 10 years and who have been called for an annual review (to include a range of lifestyle advice).

Further examples of PCT priorities are given below, although such activities are widespread.

- *Southwark* is aiming to increase the number of people aged 15-75 on GP registers, recorded as having a BMI of 30+ in the last 15 months. They are supporting early and accurate diagnosis of patients with and at risk of CHD by working with GPs to increase the number of GP practices with a validated at risk CHD register
- *Stoke on Trent* is working to ensure that practice-based registers and systematic treatment regimes also cover the majority of patients at high risk of CHD, particularly those with hypertension, diabetes and BMI over 30.
- *Warrington* has a pilot for identifying at risk populations, works with practices through the QOF to ensure completeness of GP registers and supports the identification of at risk populations. The pilot explores a mechanism for extracting relevant GP data and it is being used to invite high risk patients for screening, although some components of at risk registers are already in place.

Although increasing the number of practices with PCT-validated registers of patients without symptoms of CVD with an absolute risk of CHD events greater than 30% over the next 10 years is a national target (and reflected in SHA LDP requirements), predictive registers are not widely developed or validated.

Application of the CHD prevalence model developed through APHO (as described above, in section 4.1) compared with the numbers on practice CHD registers provides an indication of the gap between those at risk and those on the registers. A range of initiatives is designed to encourage the identification of those at significant risk of CVD, but who have not yet developed symptoms, and to offer them appropriate advice and treatment to reduce their risks.

These developments are being supported in a number of ways. First is through the activities of the cardiac networks; second is through local strategies for preventing CVD; and third is through software development to address some of the problems currently being experienced in developing at risk registers. These are discussed in turn.

5.3.2.1 Cardiac networks

The *Greater Manchester and Cheshire Cardiac Framework* (2006) describes the support available to PCTs for managing the implementation of predictive registers in primary care. They comment that PCT LDPs for 2005-8 include a target for the numbers of GP practices with PCT-validated registers of patients without symptoms of CVD but who have an absolute risk of CHD events greater than 30% over the next

10 years to increase with time. The SHA negotiated a stretch target with PCTs to achieve 100% completion in 2007. This report summarises all PCT plans in the network in relation to predictive registers including: whether any incentive schemes are in existence; the nature of PCT support; processes for validating the register, promoting consistent READ codes and recall systems; and ways for measuring long term outcomes (as of 2006).

Examples of the activity of other cardiac networks in this area are described below.

- The *Birmingham Sandwell and Solihull* Cardiac Network (BSSCN) is developing a network-wide approach to CVD prevention, favouring a systematic approach by practices to identifying those at highest risk, and supported by PCTs, case studies and 'clinical champions'. It is argued that reliance on an opportunistic approach to screening is likely to exacerbate inequalities. In a workshop report (2007), they note that only one of the PCTs in the network had earmarked funds in the LDP to support a PCT-wide CVD assessment and management programme. The report also includes a decision-support tool for practices.
- The *Northern* Cardiac Network has produced a comprehensive toolkit (April 2007) to help GP practices to identify those at high risk of CHD, from GP population registers. It includes GP computer templates, video tutorials and a cardiovascular risk assessor.
- In *Essex*, the Cardiac Network funds practices to search computer systems to find patients at risk and support is available from a primary care project manager. The network funds an extra appointment with the practice nurse, and 6,000 patients have been identified to date.

5.3.2.2 Local strategies

However, prior to the initiatives described above, some areas had already developed an extensive case finding approach. *Stockport* PCT started a total population screening programme in 1989; initially, the PCT population aged between 35 and 60 (the age range was increased to 70 at the request of the Older Peoples' NSF Local Implementation team) received a letter from the PCT inviting them to ring their GP to make an appointment for a heart health check. There was a 5 year recall system for those at low risk and an annual recall if the patient was high risk (greater than 20 per cent) (Bartys et al. 2005). While Stockport has a high statin prescribing rate, the screening programme identified six GP surgeries as having poor outcomes (despite good QOF points), which has led to a Local Enhanced Scheme to encourage proactive case finding (see case study 6).

Case study 6

Title: Stockport PCT Cardiovascular Risk Factor Screening Programme (CVDRFSP)
Target population*: All practices in Stockport participate, and it is therefore available comprehensively to everyone in Stockport. It was originally offered from the age of 35 years to the age of 60, every five or ten years depending on risk levels, however the age range was increased to 70 at the request of the Older Peoples' NSF Local Implementation Team.*
Method: *Every eligible person in the PCT gets a letter from the PCT inviting them to ring their GP to make an appointment for a heart health check.*
Description/background*: The CVDRFSP began covering the Stockport population in 1989, building on a previous men's health blood pressure screening programme. People being*

screened are offered an appointment with a practice nurse (usually) and screened for clinical and lifestyle risk factors. Family history of CVD and ethnicity is also taken into account, as these factors can lead to some people being at higher risk than the rest of the population. Any identified clinical risk factors such as high blood pressure are followed up with appropriate interventions, whether pharmaceutical, behavioural, or both. People are also invited to discuss their lifestyle, and supported to make behaviour changes as appropriate to their situation and their interest in making changes. In some cases, people will be referred to other interventions where available. Approximately 16,000 people are called for screening each year using a call and recall system run on Exeter by Stockport PCT. There is a 5 year recall system for those at low risk, annual recall if patient is high risk (>/=20%).

Practice uptake rates are approx 60% (although there is a large variation from 48% – 87%), equating to approximately 10,000 people being screened per year. The PCT is addressing coding problems for lifestyle factors. The screening programme identified 6 GP surgeries as having poor outcomes (despite good QOF points) which has led to a Local Enhanced Scheme (LES) to encourage proactive case finding. This includes those who did not respond to the PCT letter, those with a family history of premature CHD and stroke, those with BMI greater than 30 and those of South Asian origin. The LES was introduced for 2004-5, allocating a budget to a joint LES covering smoking cessation and the CVD screening programme. Targets were introduced for 4-week quitters in the first year, based on expected numbers of quitters for practice population numbers. It was proposed to introduce differential targets for CVD screening in the LES for 2006-7. (The uptake rate in the past had been higher). The intention is to improve uptake on average and for each practice. To reduce any chance of increasing inequalities it is intended to increase support to 23 practices in disadvantaged areas. Targets will also be based on current uptake levels, working towards a general overall uptake figure e.g. 80% screened of those called (in 2007/08).

Outcomes: *Initial findings are positive, and appear to show that this screening programme has reduced risk factors across the board with the main impact on disadvantaged groups, given that those at highest risk are also those most likely to be disadvantaged. There seems to be a reduction in hospitalization rates for the screened population when other factors are controlled for. Further analysis suggests a positive impact on reducing health inequalities, possibly because the broad coverage picks up people who would not have visited their GP. and offers interventions around lifestyle change to those traditionally less likely to participate.*

There was a high standard of recording of risk scores and risk factors for CVD in the Stockport CVDRF screening programme. A comprehensive database of people's risk factors, using anonymised results, was built up between 1989 and 1999, and this is now being used to research the CVDRFS programme, in collaboration with Salford University Institute of Public Health Research and Policy.

Comments*:*

Central information systems are described as inadequate. The original data on screening included results of screening. The current system does not provide this information, and even uptake rates are questionable. National and local support for information systems has been reduced (for example, the statistical package provided by Exeter to be run on the system is no longer supported). Information on results of screening and subsequent interventions is held at practice level, in a range of systems and is not directly available at PCT level. To continue evaluating the effectiveness of the CVDRFSP, centralized data access to screening records needs to be established.

There are variations in: the risk factor recording, for example, blood pressure is recorded comprehensively whereas there is a relatively low level of data recorded for cholesterol level; recording between men and women, for example, low levels of data are recorded for alcohol consumption in women and people of South Asian origin. Further research is needed to identify which methods of prevention are effective for which risk factors and further work is needed to find effective interventions to reduce risk in the lower risk groups and identify appropriate weight management strategies for primary care. Current uptake needs checking against disadvantaged status. How to increase screening in low uptake practices remains an

issue.
Sources:
Stockport Cardiovascular Risk Factor Screening Programme Fact Sheet
Main conclusions from the longitudinal study of Stockport CVDRFSP data
LES CVD Screening Guidance 2006/07
CVDRFSP update January 2006
Personal communication.
Bartys, SA et al (2005) Inequity in recording of risk in a local population-based screening programme for cardiovascular disease. European Journal of Cardiovascular Prevention & Rehabilitation. 12(1):63-67.

The mapping review identified many current initiatives to develop proactive case finding through GP population registers and a number are described below:

- In *Sandwell,* CVD risk factor data are extracted from some GP electronic records on all patients in the relevant age groups (35-74 years) and excluding those patients already on existing registers. Calculation of a ten-year CVD risk is based on age, gender, smoking status, blood pressure, cholesterol levels and diabetes data. Default values (from the Health Survey for England, based on national averages) were used where data were missing. This assigned a probable CVD risk to all patients. The patients with the highest risk were then invited for an assessment in descending order. Eligible patients were offered appropriate treatment, pharmacological and/or referral to a number of local lifestyle services, for example, stop smoking services, dietician or exercise referral programmes. Initially, the review was undertaken by a dedicated CVD nurse in four practices and two practices were given the ranked list to screen as they felt appropriate. This is a priority in the LDP.
- The *Salford Heart Strategy* (2006) aims to encourage GPs to record BMI, blood pressure, lipids, glucose and abdominal circumference in all those over 45 (and also carry out an equity audit). It also advocates screening of those with risk factors to calculate their ten year CHD risk. Salford PCT will support preventive prescription of statins to those vulnerable to CVD (2007/8) as well as registers to identify people at high risk of CVD. The strategy aimed for GP practices to achieve 80 per cent of CHD QOF points by March 2006 (and 90 per cent of QOF points by March 2007); it also plans structured case finding of those most at risk of CVD, which includes ranking patients aged between 35 and 74 years who are not currently on disease registers and then inviting then for a review.
- In *Sedgefield,* the model proposed is an incentive-based scheme to select patients at risk from all those over 40 who do not currently have heart disease (criteria based on the Framingham Tables, but ensuring the nGMS at-risk group, depending on BMI, smoking status and hypertension, were also identified). The at-risk group would then be invited to attend for a health check once every three years, and added to the risk register. In the process of identifying the population with a 15% risk of CHD over 10 years for this one-off personal health advice, the more serious group at 30% risk would also be identified and referred into treatment programmes.
- *South Birmingham* is developing an identification and screening programme for patients with a greater than 20 per cent risk of developing CVD within the next ten years. Practices will use the Framingham risk assessment tool (with

the risk score uplifted by 1.5 for people of South Asian/Indian sub continent origin. This will be funded through a Local Enhanced Service.

- In *Bromley* PCT, technicians are identifying those at risk with a risk calculator. This is currently being done in a few practices using a JBS2 disc with the JBS tool for assessing primary prevention. The practices will be given a list of patients to evaluate for treatment.
- In *Croydon*, pharmacy advisors advise the PCT IT team on the extraction of data from GP systems, for example, the analysis of MIQUEST data and the development of appropriate MIQUEST queries. They advise on the appropriate coding of patients which allows the practice to identify at risk patients. This strategy initially targets patients with diabetes and hypertension, followed by those who smoke or are overweight.

Support for practices includes facilitators and pharmacists to ensure all are running CVD clinics using disease registers and referring to community-based interventions. Further examples of deployment of the Local Enhanced Services element of the GMS contract to incentivise this work is outlined in section 4.4.2.2.

5.3.2.3 Software development

Software development is key to identifying populations at risk, given current difficulties in accessing high risk patient groups through practice registers. In addition to the toolkit provided by the *Northern* Cardiac Network mentioned above, there are several other approaches. For example, *Central Southern Cardiac Network* launched system software into GP practices, using GP population registers, to help them dredge their systems to find patients at high risk.

The *North West London Cardiac Network* has undertaken a pilot looking at the use of software to identify patients at risk of CVD, see case study 7.

Case study 7

Title: Software development for at risk populations: the Oberoi clinical observations pilot.

Aims: *To explore the potential of Oberoi Clinical Observations – Framingham/CHD/CVD Risk Model software as a tool to produce primary prevention registers in general practice. The purpose of the Oberoi Clinical Observations software is to enable practices to audit their entire practice populations for CHD/CVD risk and subsequently produce primary prevention registers.*

Target population: *The software extracts all patients between the ages of 32 and 74. Modification factors can be added for different ethnic groups. Those with existing CHD risk are filtered out, and default values are entered for patients with missing data and the risk estimated.*

Description: *The North West London Cardiac Network commenced a pilot of the above software in 2007. The software is compatible with both EMIS and Vision and once installed, it extracts the information from the clinical system and identifies which patients are at risk of CVD, using the Framingham and JBS2 algorithms. The information extracted from the clinical system can be exported to Microsoft Excel and then manipulated to enable practices to produce primary prevention registers, which can then be used to assess patients at high risk of CHD/CVD.*

Once the software has identified the relevant patients the key treatment information is

provided on the screen for each patient. Furthermore, during a consultation, the software can be manually adjusted to demonstrate the effect on the risk. The CHD and CVD risks can be saved back onto the clinical system with the appropriate Read Code.
Outcome: *The software has been piloted in nine practices across North West London to identify its suitability for the development of primary prevention registers. The consensus is that the software is 'fit for purpose'. A number of PCTs have subsequently purchased copies for their practices or are looking into the support required to ensure its optimum impact.*
Comments: *Central to the effective use of the software is consideration of financial incentives for practices to develop registers and introduce a call/re-call system for patients at risk of CVD. Local Enhanced Schemes (LES) are being developed as this currently falls outside the QOF. Once the LES are in place, the potential impact on at-risk patients is considerable through both medication and lifestyle change.*
Source: *Interview data*

In *Sandwell*, the PCT has commissioned a software package (through the University of Birmingham) that identifies and ranks the practice population according to their percentage risk. The software package searches GP systems on all risk factors, but if absent it substitutes values obtained from national values (based on the *Health Survey for England*). Risk is calculated on attendance at designated clinics. A PCT-funded nurse manages the assessment process within the individual practice. This model of work is currently being adopted in *Solihull.* The software also contains management protocols for each patient, based on their individual needs/ risk factors identified.

Identifying populations at risk through systematic searching of the practice population register is therefore a major step towards identifying and then targeting at risk groups and is the chosen direction of travel for many areas. However, concerns remain over those who do not regularly visit GPs and other approaches are described in section 4.4.

5.3.3 Ward-based approaches

As already described for smoking cessation services, ward-based approaches can be used to identify target populations. High levels of CHD in specific wards can provide the basis for targeting. While some examples are given below, methods for identifying deprived wards are described in more detail in section 3.3.1.

- In *Manchester,* the Health Inequalities Partnership has conducted an exercise to identify priority wards for focused attention and additional investment. The Partnership selected 5 indicators, of which SMRs for CHD was one. A simple tallying system was used to identify the 10 wards that appeared in the worst 10 for each indicator over time, with an additional focus on an additional ward with particularly high levels of CHD.
- *Nottingham* identified (in its Floor Target Action Plan) the 20% of SOAs with the highest CVD premature mortality rate which needed to be targeted by NHS services and partnership health promotion interventions. They also provided more detailed maps of the target Lower Layer Super Output Areas (LSOAs). The LAA (2006-9) recognises that a focus on the over-50s would offer the greatest short-term impact on life expectancy. Mosaic is being explored as a system to target interventions more effectively (see also section 3.3.1). Data on all admissions for CHD nationally have been assigned to Mosaic types, to determine the national profile of the types of people who are

more likely to have hospital admissions. This information has then been applied to the types of people living in Nottingham in order to identify 'expected' areas of high admissions in Nottingham. For example, in one area, the types of people most likely to be admitted with CHD were 'older people in flats' and 'families on benefit'.

- In *Birmingham,* using the toolkit described in section 3.2.2, one of the CVD - related interventions was audit medication reviews for all patients over 70 years from GP practices in high priority wards.

5.3.4 Analysis of QOF data

As discussed above, target populations can also be identified through a comparison of QOF data with prevalence estimates by PCT for hypertension and CHD. This has been used to target GP populations in deprived areas. For example, in *Leicester* (and implemented from April 07) it is planned to better manage risk factors in CHD, in this case, cholesterol monitoring and management, by focusing on practices where identification and control is low, particularly in priority areas of the City, based on indices of deprivation and poor health, and identifying 'all levers possible to facilitate and incentivise improved practice'. These aspects are further discussed below in section 4.4.2.2.

Despite the amount of activity associated with the development of risk registers in general practice, there are many parallel developments which are less reliant on GP risk registers (or on their translation into targeted activity). Other methods for case finding are described in the following section.

5.4 Proactive case finding through providing accessible services

5.4.1 Community-based proactive case finding

A range of approaches to community-based proactive case finding has been developed in response to higher rates of morbidity and mortality in disadvantaged areas and evidence that GP registers do not reflect all those at risk of CVD. These are discussed in turn. Although there are many community-based lifestyle projects, this mapping review has focused on those which incorporate screening for CVD. Examples of broader initiatives, focusing on lifestyle, are included as part of section 6.

5.4.1.1 Community-based clinics and proactive outreach

Community-based risk assessment usually targets specific groups or areas, taking services into the community to facilitate access and case finding for groups which may not access GPs. The following examples include risk assessment clinics in town centres, a community cardiology facility based in a disadvantaged area, and a range of health checks based in community settings.

- A community-based cardio-metabolic risk assessment clinic, in *Middlesbrough* PCT, was piloted over a six week period in two locations (Life Store and a benefits office) in the centre of Middlesbrough, supported by a media and publicity campaign (see case study 8).

Case study 8

Title: Middlesbrough PCT. Cardio-metabolic risk assessment service.
Aims:

- *to identify adults over 40 years with established but undiagnosed cardiovascular disease or diabetes;*
- *to identify adults who are at significantly increased risk of developing cardiovascular disease or diabetes who have previously not received a risk assessment;*
- *to reduce inequalities in CHD and CVD mortality in Middlesbrough and contribute to an overall increase in life expectancy.*

Target population: *Principal target groups were men aged between 40 and 50 years; harder to reach groups; people living in areas of deprivation in Middlesbrough.*
Method*: Mobile "one stop" clinic to identify those with a 10 year CVD risk of >20%.*
Background/description: *The pilot initiative was a response to the Mending Hearts report, an equity audit carried out in 2005. The age standardised death rates for CHD and circulatory disease in adults under 75 are almost 40% higher in Middlesbrough than the England and Wales averages, but levels of need are not being matched by higher levels of service provision. In response to this, it was proposed to establish a cardio-metabolic risk assessment clinic as a pilot. This pilot project was run from two locations for a six week period: Life Store (PCT premises located in the centre of town within the largest indoor shopping centre, The Mall); Middlesbrough House (Benefits Office). Middlesbrough Council premises were chosen as a second location for clients to be assessed, as Middlesbrough House has the second highest 'footfall' in Middlesbrough. There was a publicity and media campaign (including the help of a local celebrity) and people were invited to phone and make an appointment for a 'free heart check'. Each assessment took approximately 25 minutes. A CVD risk was calculated (JBS2 Risk Assessment Formula) and those identified as being at greater than 20% 10-year CVD risk were referred to their GP for further management, such as cardio-protective primary prevention drug treatment, cardio-protective secondary protective drug treatment; secondary care referral to confirm diagnoses.*
The following were recorded: age; sex; ethnicity; lifestyle history; smoking, physical activity, diet, alcohol; symptom history and past medical history; family history; body mass index & waist circumference; pulse and blood pressure; lipid profile; glucose; microalbuminuria.
Outcomes*: The project was independently evaluated during spring 2007.*
Over a four week period, appointments were fully booked and only two people failed to attend. All postcodes were assigned a lower super-output area code and grouped by deprivation quintiles according to area of residence relative to the Middlesbrough population. The evaluation showed that of the target groups 14 per cent of participants were males aged 40-50; only 1% were of BME origin (BME population of Middlesbrough in 5%) and only 16% were from socially deprived areas, which is not reflective of the proportion of these groups in Middlesbrough. More than 30 per cent were over 60. A majority of participants had no particular health concern promoting their visit but attended through curiosity, 22 per cent had family members with CHD or who had died from CHD. However, of those assessed, 26 % were identified as having a 20% or greater 10-year CHD risk with a further 61% identified as between 10-20% risk. 42 per cent of the men who attended were assessed as above the 20% risk category and just over one third had low HDL (under 1.0). 10 per cent of women were assessed above the 20 per cent risk category.
The pilots successfully achieved the target of assessing 100 individuals, with a very low did not attend (DNA) rate, and identified a high proportion of individuals at significant risk of CVD and where appropriate referrals were made to the patient's GP for further assessment..

Venues in the city centre were regarded as convenient and everyone was highly satisfied with the service they received. Suggestions were made for flexible times and clinics in local community settings. However, the project did not specifically identify people living in the most deprived areas, who are potentially at greatest risk. It identified low numbers of individuals who were current smokers (7%), which is inconsistent with a smoking prevalence in Middlesbrough of 34%.

Comments. *An evaluation notes that improving uptake by BME communities and people from socially deprived areas could be achieved by specifically framed poster information that reflects the population types the PCT wished to target and more extensive advertising campaigns. The evaluation notes that 'without more strenuous attempts to broaden the appeal of the testing programme any roll out actually risks increasing health inequalities rather than the reverse'. The evaluation also stated that GPs should take a more active role in promoting the service and that exclusion criteria should be refined in the further roll out of the programme. The possibility of transferring to the SIGN Guidelines should also be considered. In summary, the project achieved a level of success in the first two aims, although of not 'sufficient scale or duration' to assess the final aim. The evaluation supported the continuation of the service.*

Proposed locations for the roll out of the project include: benefits offices; Post Offices; Lifestore; Middlesbrough Football Stadium; workplaces; stop smoking clinics; weight management clinics; working men's clubs; places of worship; community pharmacies.

Source: *Information drawn from interim report: Middlesbrough PCT cardiovascular disease risk assessment pilot project, 22nd June 2007*

A pilot project questionnaire is available.

Personal communication

Watson P and Shucksmith J (2007) Evaluation of a cardio-metabolic risk assessment service, Middlesbrough Primary Care Trust. University of Teesside.

- Provided by *Middlesbrough* PCT, Life Store opened in the town centre shopping mall in January 2006. It provides health advice and information, signposting and service provision in close liaison with partner organisations as well as health checks in line with the 'Small Change, Big Difference' initiative. An evaluation found that access to services was facilitated for those who might otherwise not attend.
- A project (jointly funded by the PCT and a local regeneration company which is funded through NRF) is currently being developed in *Devonport*, Plymouth, which has the worst morbidity and mortality in the city and widening inequalities. It will include a data collection clerk validating all the CVD registers in the deprived neighbourhood, and a cardiac trained nurse working with practices to ensure that all necessary secondary coronary interventions have been implemented. The nurse will see and interview patients with gaps in their records (for example, not on statins or not complying) and see them in a specific clinic or will see hard to reach patients at home. There is also a cardiology GPWSI available to see these patients. As the deprived neighbourhood has high rates of DNA for elective out-patients, it has been decided to house the extensive community cardiology service of 3 GPWSIs and the heart failure team in premises in the heart of the neighbourhood to facilitate access. Also included is increased local access to obesity and smoking cessation clinics and there is an exercise physiologist specifically designated to implement exercise on prescription.
- In *Hammersmith and Fulham*, an NDC shop provides a weekly Lifestyle Session where cholesterol, blood glucose, blood pressure, BMI and body fat percentage can be checked. There is a health advisor, a registered nurse, a

dietician and an exercise specialist at each session. This facilitates access for local people. This project was shortlisted for the Health Service Journal inequalities award in 2006.

- The Hull Healthy Hearts initiative was launched in *Hull*, in June 2005, with the aim of taking health services out into the community and identifying those at risk of developing coronary heart disease. A portable booth tours shopping centres, workplaces and other community settings and the specially trained nursing team has been offering free, comprehensive coronary risk assessments. Those undergoing the assessment have been given their own personal Heart Heath Plan and directed, if necessary, to a range of health promoting activities and services. In addition, where necessary, people have been referred to their GP for further advice or medication. This initiative is now being further developed through a local enhanced service (see case study 9).
- Have a Heart Paisley (2000-2008) is one of the Scottish Executive's four national health demonstration projects, and it is aimed at those most at risk of developing heart disease and those who have already been diagnosed with heart problems. Over the first few months of 2006, people aged between 45 and 60 who lived in *Paisley* and had a Paisley GP, received an invitation to have a free heart health check, at a choice of venue. The target population was reached through a combination of methods, including direct mail and the local media and areas of high deprivation were specifically targeted. Participants could also take part in a Health Coaching initiative where baseline measurements would be repeated and information gathered on lifestyle. An evaluation of Phase One of the project concluded that '*there is limited evidence that indicates that HaHP has managed to achieve a shift in total CHD risk or in key risk factors or behaviours at a population level, or amongst key targeted sub-groups'*, which could be partly explained by '*use of evidence, intervention intensity, and scope for saturation*' (Blamey et al. 2004). However, later phases appear to have adopted a more targeted approach.

Case study 9

Title: Hull Healthy Hearts
Aims: *To reduce CHD morbidity and mortality by focusing on measuring and reducing total CHD risk in asymptomatic individuals at moderate to high risk of developing CHD and to take health services out into the community to identify those people at risk of developing coronary heart disease.*
Target population: *Originally those aged between 35 and 74 (but amended over time) who have not had a blood pressure or cholesterol check in the last year (or for those who are especially anxious about CHD).*
Method: *A portable medical booth is used to visit workplaces, shopping centres and other community venues in Hull.*
Description/background*: "Hull Healthy Hearts" was established in July 2005, and provides a comprehensive nurse-led cardiovascular risk assessment. The medical booth is staffed by specially trained cardiac nurses who calculate an individual's 10 year total CVD risk based on the following six factors: age; total and HDL cholesterol (measured using an accredited near-patient testing device); blood pressure; diabetic status; smoking status. Risk is also adjusted to take account of family history of premature CHD and South Asian background. There is a two week follow up and further follow up if people consent. Every individual undergoing the assessment receives a Personal Heart Health Plan which provides lifestyle*

advice based on their particular risk factors and details local options for healthy lifestyle activities such as physical exercise opportunities and smoking cessation services. Where indicated, individuals are directed to their GP practice where further tests are required (e.g. further blood pressure testing) or where medication is indicated as a result of being at high risk.
The whole process takes approximately 15-20 minutes and copies of all assessments are added to a central database and also copied to participants' GP practices.

The 'Healthy Hearts' project is expanding as a Local Enhanced Service. The project has so far targeted the more deprived locations within the PCT. However, the LES aims to cover the whole Hull population aged 40-64 who are not already on a CVD- related disease register (estimated to be 75,000 people) over a 3 year period. Funding is in place to do this. It is estimated that 15% of those assessed will have a 10 year CVD risk of 20% or more, i.e. defined as high risk.
The plan is to have practices and pharmacies offering the CVD assessment. In addition, a nurse-led service will continue to operate in the community and will target hard-to-reach groups.
The Local Enhanced Service (LES) is being developed to incorporate:

- *the identification of high risk patients using a Framingham based risk assessment;*
- *the maintenance of practice risk registers;*
- *the on-going intervention in high risk patients identified. Intervention would initially focus on the key modifiable risk factors generating the high risk such as smoking and high blood pressure.*

Outcomes: *To date (May 2007) 1,055 assessments have been undertaken on individuals aged 30-74 (for whom the risk assessment tool is validated). The proportion of males aged 40-49 with a CVD risk of >20% is 14.5% and the proportion of females aged 50-59 at high risk is 9.9%. This indicates that the service is reaching those communities at highest risk of developing CVD.*
Comments: *Some of the key issues that have been highlighted to date include:*

- *the practicalities of follow-up, for example, compliance with advice to go to GP practice for further tests/ treatment initiation;*
- *skill mix issues, that is, which skills are required to offer the assessment;*
- *acceptance by practices of risk assessments and recommendations regarding treatment initiation;*
- *links to other services – e.g. health trainers;*
- *the numbers of people across Hull suitable for the assessment. There are estimated to be approximately 84,000 people in Hull aged 40-75 not on any CVD-related disease registers.*

Experience from the project to date suggests that approximately 15% of those assessed will be at high risk (10 year CVD risk of 20 %+). Annually there would be approximately 950 people requiring on-going intervention.
This nurse-led service recently won second prize in the British Journal of Cardiac Nursing Awards (Primary & Secondary Prevention category).
Financial implications, detailed LES and an implementation plan are available: the LES will be audited and this will give further evaluative information.
Sources:
Eastern Hull PCT (2005) Hull Healthy Hearts Project Framework (version 8)
Hull Teaching Primary Care Professional Executive Committee: Agenda Item: Primary prevention of cardiovascular disease (CVD) – proposed locally enhanced service: May 18th 2007
Questionnaire and additional documents from Hull PCT.

There is also a range of smaller outreach initiatives. For example, *Coventry and Warwickshire* Network supported health visitors in North Warwickshire going into

travellers' sites to carry out health screening. They developed a card for health visitors to record a person's weight, cholesterol, blood sugar, and then health visitors helped them get registered with a GP.

Finally, a UK-wide risk assessment pilot (due to commence in September 2007 in *Manchester* and funded through the BHF) will take advantage of Biobank's prospective epidemiological study which aims to include 500,000 people in the UK aged 40-69, and carry out a detailed follow-up of cause-specific morbidity and mortality. (Biobank targets clients through GP registers, inviting people aged 40-69 to take part in an assessment.) Although Biobank does not give out information, clients will be able to see a BHF nurse to find out their cardiovascular risk, have a health check (blood sugar, cholesterol) and be given advice.

5.4.1.2 Community pharmacies

Community pharmacies are playing an increasing role in the prevention of CVD, although this is less well developed than their involvement in smoking cessation. There are obvious advantages in basing health checks in pharmacies, including high street locations, commercial marketing experience, and long opening hours. A number of PCTs have initiatives in place (or planned) to involve pharmacies. In *North Tyneside*, for example, men over 50 can access a service provided by local pharmacists in disadvantaged areas of North Tyneside. Patients with a CVD risk of over 20 per cent will be referred to the GP for further management.

In *Knowsley* PCT, in 2006, following collaboration with the local pharmaceutical committee, eight pharmacies took part in a pilot of free health checks (men aged 50-65 years who had not had any health check via their GP or practice nurse in the last 12 months). The pharmacy health check involved a 25-30 minute assessment, including cholesterol measurement and smoking status. Lifestyle advice (verbal and written) was provided. It was operated with a combination of pre-booked appointments and drop-ins. The PCT provided equipment as well as a software programme to record details. Pharmacy contractors received £25.00 for each health check carried out to the standard specified in the service level agreement. The total expenditure (including equipment, software and training) was £30,000 and 159 health checks were carried out. The project was funded through Neighbourhood Renewal (further extended in 2006-7) as part of a strategy to reduce health inequalities. An evaluation showed that this service was popular with clients as it was convenient and local. Pharmacists were successful in identifying undiagnosed conditions and signposting other services. A review of the intervention notes:

We believe that the main reason for the success of this project was strong leadership and commitment of all partners to deliver a project to demonstrate community pharmacists' potential to support a reduction in health inequalities in a Borough of relatively high health and social care need.

The service was mainstreamed and just under half the community pharmacies in Knowsley offer free health checks. It has now been extended to women and the age range broadened from 40-75. By the end of February 2007, 440 health checks had been carried out. The PCT has now made a commitment to continue funding the health checks as part of an enhanced community pharmacy service.

A further initiative has been developed in *Birmingham* with Lloyds Pharmacy, which was commissioned by the NHS, as part of the Birmingham Health and Well Being Partnership, to pilot an opportunistic screening service (Heart MOT) for men aged over 40 at risk of heart disease in the most deprived areas and in areas of highest CVD mortality. The pilot began in two pharmacies in 2006, and it is planned to cover almost 30 pharmacies by 2008. The new Heart MOT measures cholesterol, blood pressure, blood glucose and BMI, as well as providing a full lifestyle assessment. The customer will then receive a percentage score of developing heart disease, with a personal action plan and summary of the test results. For high-risk customers a support pack will be supplied. This service integrates the services of fitness staff, healthcare professionals, pharmacists and technicians to provide advice and support. An evaluation will be carried out in September 2007.

5.4.1.3 Sporadic initiatives

There is a wide range of sporadic initiatives designed for case-finding in the community. These include Heart MOTs, PITSTOP initiatives, Healthy Heart Days and Men's MOTs. In some cases, these have been supported by social marketing campaigns (such as the former PITSTOP campaign in *Knowsley,* described below). A number of additional sporadic and one-off interventions related to heart health are summarised in Appendix 8. However, the bulk of such initiatives are concerned with lifestyle changes for preventing CVD, rather than offering screening for cholesterol. Examples included below are specifically focused on interventions which include screening activities.

- The Pitstop Health Check programme, based in *North East Camden*, was one of 22 local authority led 'Communities for Health' pilots. Checks were delivered in six community locations, one of which was a smoking cessation group, and a range of checks was carried out including blood cholesterol. Analysis of the results showed that there were '*many more cases of people at risk of ill health than was initially acknowledged*' (DH 2007).
- More than 1,500 men (50-65) from *Knowsley* had health checks in pubs, clubs, workplaces and pharmacies under the former PITSTOP Men's Health Scheme, carried out throughout 2005. This was a joint initiative by Knowsley PCT and Knowsley MBC. Men were offered health checks in accessible venues, to help them take more control of their own health. A social marketing campaign was adopted which consisted of 300 street interviews, focus groups, pilot heath checks and action research. Eight five per cent of men followed up cited lifestyle changes as a result.
- NHS FiT primary care outreach clinics are being developed to target middle aged men living or working in the *Telford and Wrekin* area. The area has black and minority ethnic communities and recruits men from local factories with a high representation of these groups. They provide regular screening services at venues where men are more likely to attend, such as lunchtime clinics on industrial estates. (This service was relaunched in June 2007.)
- Heart MOTs: a number of PCTs organise free Heart MOTs, often coinciding with the BHF 'Help a Heart' week (3-11 June). For example, *Newham* University Hospital NHS Trust and Newham PCT Healthcare have been providing local residents with Healthy Heart MOTs since 2002. Between 2002 and 2004, 1708 received these health tests in the community at 12 different

events and 23% were subsequently referred to their GPs for follow-up checks Quit, the BHF and Diabetes UK offer Health MOTs at summer melas (community fairs) attended by large numbers of Asian families across the country. Services on offer include a CO check, measurement of blood pressure, cholesterol and diabetes tests and people may be referred to their GP (Fox 2004). Health professionals comment that the level of trust is greater in a less formal environment, allowing for a more honest assessment.

However, many MOTs are typically focused on lifestyle changes and blood pressure monitoring.

5.4.2 Practices and community pharmacies

5.4.2.1 Targeting GP practices

As already discussed, interventions are related to better performance in relation to the QOF, proactive case finding (or both). This section is particularly focused on interventions targeted at GP practices which are not meeting current QOF targets or those located in disadvantaged areas.

In relation to the former, a number of PCTs are focusing their attention on practices below the optimum in areas such as registers, appropriate prescribing, or calling patients for annual reviews. PCTs are providing varying levels of support and facilitation, as well as regular audit and validation of risk registers (*Tower Hamlets, Birmingham, Rochdale, Warrington*). *Southwark* PCT has as one of its LAA targets that all practices in the most deprived wards achieve the maximum QOF points for CHD and hypertension management. Further examples of targeted action related to GP practices are summarised below.

- In *Somerset* PCT, there is a LAA target to increase statin use in GP practices in deprived areas and, in 2007/08, practice prescribing budgets have been adjusted for the level of disease prevalence.
- *Central Southern* has compared use of statins by proxy population figures, then targeted low usage areas.
- Building on the screening programme, described in 4.3.2.2 and case study 6, above, six GP practices in *Stockport* were identified as having poor outcomes (high death rates from CHD, diabetes and stroke), despite having good QOF points (that is, managing cases they are aware of, but are not picking up all those at risk). A local enhanced scheme is in place to encourage them to case find, and it is suggested they search for people who have not had a CVD risk score calculated (for example, those who did not respond to the PCT letter of invitation), those with a family history of premature CHD and stroke (includes those under 35), smokers, those with BMI >30, and those of South Asian origin.
- In her review of good practice Fox (2004) draws attention to the *Ealing* Coronary Risk Prevention Programme. She notes that 30 per cent of the population of Ealing is of Asian origin, the majority of GPs are single handed and it is difficult to achieve standards 3 or 4 of the NSF CHD. In 2001, Ealing hospital set up a collaboration with a nurse-led coronary prevention service based in primary care in *Southall* and then *Hounslow*. It aims to undertake systematic assessment of the CHD risk in all men and women aged 35-75

years from the participating practices. Cholesterol screening is included. The risk prevention service is currently involved in a large scale screening programme to target high risk patients among the patients of 40 local GPs (200 patients per week).

- The City Wide Initiative for Reducing Cardiovascular Disease (CIRC), based in *Sheffield* and now mainstreamed, has been widely publicised (through, for example, *Tackling Health Inequalities: Status Report on the Programme for Action* (DH 2005) and through the DH health inequalities directory). It was set up to maximise impact on overall premature death rates with an emphasis on those with highest need through a systematic and targeted secondary prevention programme in practices with higher CHD prevalence and high risk ethnic minorities. Interventions included:
    - setting up a CIRC 'Task Force' team in each PCT to include a CHD nurse specialist, physical activity specialist, dietician, clinical psychologist, ethnic minorities worker, PCT prescribing adviser and PRIMIS facilitator for clinical IT support;
    - training and mentoring programme for primary care nurses;
    - additional practice nurse clinics;
    - locally agreed protocols and manuals for secondary prevention of CHD and heart failure;
    - electronic templates for CHD clinics;
    - patient information materials;
    - programme for high-risk ethnic minorities.

  The project led to 8,000 more people with CHD identified (87% of the expected number), included in practice registers, and being seen, than at the start of the programme. Between 2000 and 2003, a faster decline in premature death rates from heart disease was observed in the most deprived fifth of the population than in the city as a whole (a 23% decline in the under 75 CVD rate in the most deprived fifth of the population compared to a 16 % decline in the population as a whole). The project was mainstreamed, as planned, into the Sheffield PCTs. Other initiatives which were developed as part of CIRC, and intended to identify previously undiagnosed CHD and diabetes, included screening services in community pharmacies and within local mosques in deprived areas of Sheffield, where people were failing to access services. The team consisted of a nursing consultant, pharmacists, dietician, nutritionist, smoking cessation worker and a community development worker (also an interpreter) (although the project did not provide cholesterol screening). Patient satisfaction surveys were carried out (2004 information).

A project carried out as part of the CIRC in Sheffield, in 2002, in collaboration with the former North Trent CHD Collaborative, provided additional support to a practice with a high proportion of people from black and minority ethnic groups through a PCT-employed black and minority ethnic support worker. As a result of the ethnic profiling, the practice interpreter and link worker support was improved. Also, the use of the local interpreter service was increased dramatically to provide language support to the practice. The project became part of mainstream funding and expanded to provide health promotion within black and minority ethnic communities (see Fox, 2004).

- *Liverpool* has adopted the Sheffield approach to reducing CVD mortality through (a) calculating the expected numbers of people with CHD and comparing it with the QOF; and (b) working with practices with a focus on practices with a big gap between those expected and those on registers, to identify those 'missing'. The aim is that practices will have identified 90 per cent of expected cases and have 85 % on effective secondary prevention.
- *Nottingham* has recruited a heart health facilitator (a short term, externally-funded post) to work with practices in the most deprived areas to address access to primary care, training for practice staff and links to health promotion. Nottingham's Floor Target Action Plan (2006) did not identify problems with prescribing in practices in deprived areas, but considered that there might be issues of compliance.
- *Blyth and Wansbeck*, in Northumberland, are supporting primary care teams to identify people at high risk of CVD and gain agreement on a management plan. This includes 'stretch' targets for smoking cessation advice, the control of high blood pressure and lipid lowering drugs.
- Healthy Heart Workers in Selly Oak, *Birmingham*, have been commissioned by the Birmingham Health and Wellbeing Partnership to work in areas that have low life expectancy, high deprivation rates and high numbers of people from ethnic backgrounds. The healthy heart workers are attached to individual practices and have access to IT links. Their work is focused on helping those men most at risk of developing heart disease. Clients are supported to make lifestyle changes and attend opportunistic screening appointments. Healthy Heart Workers also advise clients of the options available to help them achieve their health goals. This could include information on stop smoking services, opportunities for physical activity and/or signposting to specialist services.
- *Tameside and Glossop* Connect 4 Life (C4L)) programme forms part of the Health Improvement and Inequalities strategy. A pilot health improvement programme was established by a partnership led by the PCT and a private sector agency, involving GPs, two local authorities and the voluntary sector. The pilot targeted people aged 50-64 with 2 or more risk factors for CHD. People meeting the criteria were contacted via their GP, 171 signed up and completed a personal on line health and well being assessment, with the assistance of a health coach, and were supported to set lifestyle goals. Participants received relevant monthly health packs and telephone support and were reassessed after 6 months. A local evaluation was carried out.
- *Warrington* is completing a pilot for extracting relevant GP data and using it to invite high risk patients for screening. This also involves developing an education programme for practices to implement an at risk tool and ensure that identified high risk patients receive regular reviews.
- The aim of 'Keep Well', national pilots for anticipatory care in *Scotland*, is to reduce health inequalities in CVD by the year 2010 by increasing the rate of health improvement among high risk, hard to reach groups living in the most deprived communities. Targeted at communities with the greatest health needs, the first of five Keep Well pilots assessed 45-64 year olds for the risk factors associated with heart disease. Those who may be at risk are identified through local GP registers (involving 34 GP practices) and invited to attend a health check looking at factors such as blood pressure, diabetes and cholesterol, as well as lifestyle issues such as smoking, diet, alcohol and

weight management. Initially focused on GP practices, it is also proposed to take case finding and risk assessment into community centres in the evenings and at weekends. This pilot is a partnership between NHS Lanarkshire and North Lanarkshire Council. The location of the five pilots was decided by using the Scottish Index of Multiple Deprivation and focusing on NHS Board areas with high concentrations of the most deprived 15 per cent. This followed a commitment to provide such services in *Delivering for Health*, the Executive's long-term vision for the NHS. A national evaluation is being carried out.

5.4.2.2 Incentive schemes

This section considers three different incentive schemes: local enhanced services for pharmacies; for GPs; and other PCT support.

Pharmacy Local Enhanced Service

A report of a survey of 272 community pharmacies, carried out between 2004 and 2005 (The Royal Pharmaceutical Society of Great Britain and Webstar Health (2006) commented that *'point of care testing for blood pressure and lipids is increasingly offered in community pharmacies but connectedness with the wider NHS is unclear,'* and that '*community pharmacists identified CHD as an area in which they would like to offer a more clinical service'* (p.8). The Department of Health funded an 18 month pilot (which started in October 2005) on point of care testing in 22 pharmacies in Manchester for patients on practice registers. While this was largely focused on management of long term conditions, it was anticipated that future examples would include case finding.

The mapping review identified a number of incentive schemes to encourage pharmacies to provide opportunistic screening. The *Birmingham* scheme has been described above in section 4.4.1.2; it targets people that may not usually present to health services or seek medical involvement in the early stages of any disease. In *North Tyneside*, there is a project with local pharmacists in selected areas to assess and calculate risk in men over 50 years, and as part of *Hull* Healthy Hearts, a LES has been developed covering both risk assessment and intervention and management of high risk individuals, to ensure coverage of the whole population of Hull.

In *Nottingham***,** 'community heart' nurses team up with Nottingham pharmacies to offer free health checks during Heart Health Week.

GMS Local Enhanced Service

Section 4.3.2 discussed initiatives based on GP practice populations. Many PCTs are now developing local enhanced services as an incentive for GPs to screen for CVD; examples are given below.

- In *Bury* PCT**,** a local enhanced services (LES) contract was agreed (January 2007) with local GPs for the identification, assessment and management of patients at high risk of developing CVD. It covers men (35-80) and women (40-80) who should be offered an assessment of CVD risk (or a clinical assessment for those with existing disease). Payments cover patients with an assessment giving a CVD risk of over 15% for the next ten years that has been assessed in the previous 3 years. They are provided for each patient assessed

in excess of 50 per cent of patients registered with a practice (given that a proportion is already covered through QOF payments). The point is emphasised that a CHD risk score is not equivalent to a CVD risk score and that CVD registers would take longer to complete. The LES also states that: *Practices delivering CVD care management through the CVD Local Enhanced Service must have a named nurse with a CHD module/diploma or equivalent qualification or evidence of competence or continuing professional development to ensure best clinical practice. ...This nurse will lead the development of CVD registers locally with the practical support of health care assistants and assistant practitioners (where available).* This is part of an implementation plan for identifying those at high risk of CVD across Greater Manchester and Cheshire.

- As part of the Healthy Hearts Campaign, *Hull*, a LES has been developed covering 1) risk assessment and 2) intervention and management of high risk individuals, to ensure coverage of the whole population of Hull. The LES is to be offered to local GP practices as well as pharmacies. In addition, a nurse-led service will continue to operate in the community (as already described) and will focus on hard to reach groups. While the project has been targeted at the more deprived locations within the PCT, such as shopping centres, community centres and workplaces employing male manual staff, the LES will encourage universal coverage of those aged 40-64. It is to be offered to local GP practices in order to incentivise practices to invite for assessment all patients on their list in the 40-64 age group who are not already on CVD-related disease registers (see Appendix 8 and case study 9). Evaluative data will be available following the evaluation of the Local Enhanced Service Agreement.
- As part of a programme to achieve an LAA stretch target, GPs in *Wansbeck and Blyth Valley*, Northumberland, have been offered an enhanced contract by Northumberland Care Trust for screening those over the age of 40 for CVD risk, if they also have hypertension, a family history of premature CVD or are current smokers. The payment system for level 2 stop smoking interventions has been changed so that a greater financial reward is given if CVD risk calculation is combined with the stop smoking intervention. Mini templates have been developed for computer systems to facilitate the use of the Joint British Societies' CVD risk calculator. The stretch target involved reducing the death rate in those under 75 by 30 per cent in Wansbeck and Blyth Valley.
- In *South Tyneside*, information collated regarding population at risk of developing CHD is being incorporated into an enhanced service for local GPs, to facilitate further appropriate screening/prevention measures in 2007/08 as necessary.
- In *City and Hackney*, a local enhanced service has been established in primary care, identifying people at risk of CVD who are not on any other disease register. These individuals receive an annual review and are targeted for lifestyle management, especially smoking cessation and anti-obesity services.

Incentive schemes are also in place in *Rochdale, Heywood and Middleton; Wigan* and several PCTs in the *Greater Manchester and Cheshire* Cardiac Network intend to develop them (personal communication) as does *Redbridge PCT* and *South Birmingham.*

<u>Additional PCT funded staff</u>

PCTs have been involved in providing specialist nursing staff to provide support for practices in setting up risk registers and running secondary prevention clinics in specific practices For example, *Northamptonshire* PCT has funding (2007) for a CVD risk facilitator post. The CVD risk facilitator will visit GP practices, setting up primary prevention registers as well as comparing existing registers against expected prevalence, informing practices where more case finding is required.

5.4.3 Peer educators

5.4.3.1 Health trainers

Section 3.4.4 outlined the background to the Health Trainer programme and provided examples of their targeted activities. These activities are relevant to smoking cessation, heart health and reducing mortality rates from CVD, as they adopt a lifestyle approach, typically targeted to the most deprived wards, NRF areas, or particular groups (such as those aged 55-64). There follow examples where there appears to have been a specific focus on heart health, although, in general, a 'healthy lifestyle' approach is adopted.

- *South Birmingham* has identified funding for local people to be recruited as health trainers to work with at risk patients identified from CHD registers, obesity registers and other practice datasets. Health trainers will identify registered patients living in deprived wards who already have identified health risks but are not taking action to reduce those risks. Health trainers will carry out an initial assessment; a lifestyle assessment; assist with decision-making and personal health planning; and will start work in practices that serve the most disadvantaged communities.
- *Nottingham City* has CVD health trainers – local people are trained to provide key messages and support about CVD risk factors to people from the health Floor Target Action Plan target areas and communities.
- *Sandwell PCT* is using health trainers for patients between 15-20% risk as well as trained community development workers from ethnic minority communities to run group sessions with those at risk.

While health trainers form part of strategies to address inequalities and focus on lifestyle activities including smoking, we found fewer examples focused on screening. In *Bolton,* however, the 'hope you're well' campaign is being developed by the PCT and the local council and is being used initially to launch the Health Trainers and CVD Primary Prevention Programme, which aims to encourage those aged 45 and over who may be at high risk of developing CVD in the future to attend their practice for an appointment with a Health Trainer for risk assessment and lifestyle counselling. The campaign includes local media and community fairs and events.

5.4.3.2 Peer education

Examples of peer education programmes related to the prevention of CVD are described below.

Project Dil was a *Leicester-wide* primary care and health promotion programme, which aimed to increase understanding of CHD and improve primary and secondary

prevention of CHD in the South Asian community via interventions in general practices and in the target population. Peer educators were recruited from the community. A training programme for peer education was developed and accredited through the Open College network and forty five peer educators were recruited from across the South Asian Community. This peer education proved successful in Leicester and is now mainstreamed by the PCT.

Khush Dil was a primary care-led, NHS *Lothian*-funded, community health project set up in 2002 to address health inequalities in CHD prevention in South Asians, targeting CVD risk factors through health visitor-led screening, practical support and a range of activities including exercise, smoking cessation and stress management (Mathews 2007). A fundamental premise was to *'create a test-bed for the development of culturally appropriate services that could then be incorporated into the mainstream helping to bridge the current access and inequalities gap'* (Mathews 2004). As part of a wide range of activities, it provided training and employment for South Asian community workers. It included one-to-one cardiac health assessment using health questionnaires designed for Asian patients. It provided a visual image of their individual heart health profile and a pictograph was then used to facilitate goal setting and behaviour change, using motivational interviewing techniques and referral on to project activities. Clinics also operated at various community venues on request – this was considered to work well and joint working with the voluntary sector was a key factor (Fox 2004). The project has been evaluated (Netto et al. 2007; Mathews et al. 2007) and demonstrated an impact as indicated through self report, physical measures and laboratory tests.

Aspects of Khush Dil are to be progressed through the 'Keep Well' initiative mentioned above, with a community worker from Khush Dil employed as an outreach worker for 10½ hours per week to link with 16 practices across the city to support black and minority ethnic groups. Other key aspects highlighted include: exploring the feasibility of increased resources for linkworkers; developing a targeted training programme; and establishing partnership agreements with the voluntary sector.

5.5 Retention/concordance with statin therapy

Interventions designed to improve the performance of GP practices in relation to the QOF (updating practice registers and monitoring and reviewing patients on CHD registers) is one route for improving concordance with statins. There are numerous examples of this and some are described above. These priorities are sometimes also reflected in LAA targets and indicators. As one example, in order to monitor statin treatment, *Somerset* PCT carries out ad hoc internal practice audit and review through the GMS contract and the QOF. Patients are supported in complying with treatment by community matrons where the patient is on their caseload, by the practice nurse, by community pharmacist interventions and through the cardiac rehabilitation team. A Cheshire and Merseyside Cardiac Network Audit of statins provides data in respect of those patients on the CHD register in practices in *West Lancashire* that are not being prescribed statins. This audit was carried out in October 2006. The prescribing volume of statins continues to indicate an upward trend.

5.5.1 Medicine usage reviews and audits

Medication reviews carried out by practice pharmacists, medicines use reviews (MURs) at community pharmacies and DRUMs (Dispensing Review of Use of Medicines (for dispensing doctors) provide opportunities to review concordance with statins; this may also occur as a by product of reviews to identify savings in the prescription of statins. The population receiving statins can be compared against the NICE target, based on estimates of prevalence. Pharmacy patient medication records (PMRs) can act as a useful resource to demonstrate the need for specialised services for particular patient groups, for example, for patients experiencing difficulty with taking their medicines as prescribed.

Pharmacists periodically undertake structured concordance-centred MURs with patients receiving medicines for long term conditions, to establish a picture of their use of medicines, prescribed and non-prescribed. The review is intended to help patients understand their therapy and identify any problems. In order to address local priorities, PCTs may recommend that MURs are targeted at certain patient groups. In *Croydon* PCT**,** the pharmacy team supports GPs in coding CVD risk and diagnosis and this helps in the identification of non concordance and those not at target using QOF data. They encourage medication reviews and repeat prescribing processes to highlight concordance issues. In *Somerset* PCT**,** patients are supported in complying with treatment by community pharmacist interventions and in *Sandwell* PCT, patients have access to a team of community pharmacists allocated to support individual GP practices.

Information gathered from local pharmacy advisors has identified a number of specific audits for statin compliance carried out through community pharmacies. These are discussed below.

5.5.2 Pharmacy-based schemes

Statin audit has been carried out in *Warrington* PCT and *Halton and St Helen's* PCT. In *Warrington,* all community pharmacies in the PCT were requested to audit 30 patients presenting prescriptions for statins. The purpose was to identify whether patients knew why they were taking a statin, how they were taking it and any lifestyle advice they were given at the outset. Information is collected by PCT, pharmacy and practice and information will be fed back to practices and, if necessary, communication practices will be agreed. (An analysis of this audit is in preparation).

Based on this model, *Knowsley* has carried out audits of statin usage in order to improve knowledge of prescribed statins and appropriate lifestyle modifications and to improve concordance with the prescribed therapy. The audit checked that people understood why statins had been prescribed and advice and literature were offered. Training in health promotion aspects is also carried out for staff carrying out audit training. Multidisciplinary audit has also been carried out in *Wolverhampton*.

5.5.3 PCT- based schemes

While most issues of concordance were described by respondents as being addressed at practice level, there were examples of PCTs adopting a more targeted approach.

For example, in *Greater Manchester,* the following interventions have been developed (personal communication):

- prompts for compliance through text messaging (80% of those aged 50-60 own mobile phones and 50% of those aged over 60);
- a planned intervention with mobile phone companies, where mobiles are provided and then texts are sent to remind people to take statins;
- they are reinforcing the message to GPs that if cholesterol levels have not reduced, then there is a lack of compliance (some PCTs also have a statins officer);
- it is possible that compliance with statins will be included in the local incentive scheme.

North and East Devon LPC won a community pharmacy development award in 2004 for their work on improving concordance of statin therapy for obese men, a targeted high risk group. This intervention also involved community dieticians and GPs.

5.6 Examples of what respondents consider works well

The mapping review identified reports of success of particular interventions and strategies, but few formal evaluations (although all NRF and NDC projects are routinely evaluated). One way of establishing whether projects are working well is to track changes in premature mortality rates, although in the shorter term these are more likely to reflect the quality of secondary prevention and equitable access to investigation and treatment services. Other projects may simply be evaluated in terms of monitoring the numbers accessing particular service developments, such as Heart MOTs or other outreach services.

In relation to tracking mortality rates, the *CIRC* initiative in Sheffield, which developed a systematic and targeted approach for practices with high CHD prevalence and high risk populations, and which was mainstreamed after three years, reported that between 2000 and 2003 a faster decline in premature death rate from heart disease was observed in the more deprived fifth of the population than in the city as a whole. The evaluation of the *Sandwell* project, also focused on case finding from GP records, showed that patients in practices visited by the project nurse were twice as likely to be assessed, found eligible for treatment and started on at least one appropriate treatment compared to practices that did not have the project nurse (41% of patients in project nurse practices compared to 13% with no project nurse were eligible and on treatment). As a result of this evaluation, two further dedicated staff are being appointed. A summary of this initiative comments that: 5% were identified as at significant CV risk (15,000); 3% attended for screening (9,000) 2% were medically treated (6,750), 0.5% were referred for lifestyle advice (1,800), 0.2% referred for specialist secondary care opinion (Diabetes and Cardiology) (400)) (Patel, 2007).

Finally, heart health is described as improving faster in *Doncaste*r than it is across England and Wales as a whole, with this success attributed to more people in deprived areas accessing heart investigations, the success of the quit smoking initiative, and the efforts of doctors and nurses to encourage more people to lead a healthier lifestyle. All practices now have at least one nurse who has been trained to BHF standards to

manage the care of patients who have coronary heart disease. The prescribing of cholesterol lowering drugs (statins) has doubled in the last five years.

In terms of outreach, an evaluation of the *Middlesbrough* PCT cardiovascular risk assessment pilot project over six weeks (see case study 8) showed that it successfully achieved the target of assessing 100 individuals; identified a high proportion of individuals at significant risk of CVD and made referrals to patients' GPs for further assessment, where appropriate. However, the project did not specifically identify people living in the most deprived areas who are potentially at greatest risk. It also identified low numbers of individuals who were current smokers (7%), inconsistent with a smoking prevalence in Middlesbrough of 34%.

For Healthy Hearts**,** in *Hull*, 1,055 assessments have been undertaken on individuals aged 30-74 (for whom the risk assessment tool is validated). The proportion of males aged 40-49 with a CVD risk of >20% is 14.5% (95% CI 9.3% - 22.0%) compared to an England average of 2.6% and the proportion of females aged 50-59 at high risk is 9.9% (95% CI 6.0% - 15.9%) compared to an England average of 4.9%. This indicates that the service is reaching those communities at highest risk of developing CVD.

Audit through Local Enhanced Services will allow for further evaluation of these initiatives.

For pharmacy-based initiatives, an evaluation of the pharmacy pilot in *Knowsley* showed that clients liked the convenience and the fact that staff were local. Pharmacists had developed different approaches to arranging the health checks - mostly by arranged appointments although there were some drop-ins. The health check format was felt to have worked and the scheme is being mainstreamed.

There is, therefore, a range of schemes which are considered to have achieved their objectives in reducing the risk of CVD in disadvantaged populations.

6 Combined interventions

This mapping review focuses on smoking cessation and utilisation of statins as routes to drive down premature mortality through targeted interventions. Sections 3 and 4 consider these aspects separately. However, in practice, lifestyle advice, including advice for stopping smoking (and signposting to other services) will typically form part of screening activities and healthy heart checks. Many heart disease prevention programmes targeted at disadvantaged areas are lifestyle-based, focusing on combinations of activities related to exercise, smoking cessation, healthy eating and stress management (but not necessarily on screening for cholesterol). As one example, in *Kingston*, the 'Fit for Life' programme is available to residents who are at risk of developing heart disease over the next 10 years (also targeted to Asian Muslim women). The course provides information on CHD risk factors, healthy eating and the benefits of physical activity in addition to imparting skills for making the necessary lifestyle changes and providing information about the stop smoking services.

This report does not describe in detail the large numbers of community-based projects that are intended to promote healthier lifestyles for disadvantaged groups and in disadvantaged areas, although this is the focus of numerous programmes funded through NRF, NDC, Big Lottery (notably Healthy Living Centres) and local initiatives. For example, Big Lottery funded projects in Wales, Scotland and Northern Ireland (funded as part of the CHD/Cancer/Stroke programme from 2003 onwards) were targeted at reducing the modifiable risks of CHD in disadvantaged areas. Projects included prevention as well as increasing access to diagnosis, treatment and rehabilitation. A number also provided opportunistic/mobile screening services. (For further information on this programme and results of the two year evaluation, see Big Lottery, 2007). *Doncaster's* Healthy Living Project is funded through Big Lottery (2003-8) and consists of twelve schemes aimed at decreasing deprivation and inequalities in health. For example, an Asian women's scheme reaches out to women from black and minority ethnic communities who face multiple disadvantage, and where many are refugees. The services are designed as a direct response to the women's requests.

In the same way, projects funded under the health theme of New Deal for Communities have combined different approaches to address health inequalities. One example is the Healthy Hearts Project in *Walsall*, which was developed in partnership with Walsall PCT, Walsall Metropolitan Borough Council and Groundwork, to address the primary risk factors for coronary heart disease: physical activity, smoking, poor diet; and obesity. As part of the smoking cessation programme, there are quit smoking groups, a smoke free homes initiative and support for pregnant smokers.

A further NDC-funded project in *Leicester,* the Men's Health Programme, Braunstone Community Association, provides advice, guidance and information on men's health with specific reference to coronary heart disease, smoking, obesity, mental health, and cancer. Innovative measures include the incorporation of health messages on beer mats, and the active engagement of the local newspaper and the radio station. (summarised from CRESR 2005).

In the same vein, 'Fit for the Future' in *Barnsley* aims to tackle the causes of CHD, strokes and cancer, and works with a wide range of partners including local

community groups and the general public. One of the areas that 'Fit for the Future' focuses on is lifestyle factors, although the programme also looks at the wider determinants of health. This programme is described as a key element in addressing health inequalities, with activities being focused on the most disadvantaged areas. Finally, in *Birmingham,* Fit 4 Life is an initiative for priority ward areas to support men over 40 in making simple health related lifestyle changes. Fit 4 Life workers opportunistically target men in the local community by visiting public houses, social clubs, places of work and other centres. The workers carry out a range of activities including free health and fitness assessments, motivational support, individual goal setting and signposting to health related services (see case study 10).

Case study 10

Title: Improving Male Life Expectancy (MLE), Fit 4 Life, Birmingham.
Aims: *To support men over 40 in making simple health related lifestyle changes.*
Target population: *Fit 4 Life is an initiative for priority ward areas to support men over 40.*
Method: *Fit 4 Life Workers opportunistically target men in the local community by visiting public houses, social clubs, places of work and other centres.*
Description/background: *The MLE project is delivered on a city-wide basis targeted at improving MLE. It is supported by £2.6 million of NRF funding. An analysis of the causes of death in men considered alongside current initiatives identified the following two key areas for immediate action:*

- *the identification and systematic management of circulatory diseases in primary care, paying particular attention to men aged 40-65 and the most deprived areas of the city (the Birmingham Own Health Project which delivers a targeted care management programme is being extended across Birmingham in 2007/8);*
- *improvements in the targeting and delivery of smoking cessation and tobacco control services; a city-wide call centre has been commissioned with significant investment in publicity and advertising to encourage smokers to access stop smoking services.*

The Fit 4 Life workers carry out a range of health based initiatives, which include:

- *free health and fitness assessments;*
- *motivational support;*
- *individual goal setting;*
- *signposting to health related services.*

The project focuses on raising awareness around key public health messages: the benefits of giving up smoking; healthy eating; physical activity; and weight management. The workers have key relationships with pharmacies involved in a community pharmacy pilot in Birmingham, described above. If a serious health risk is opportunistically identified, the Fit 4 Life worker will refer to a pharmacist who will provide further assessment and make a decision whether the person should attend their GP. A mobile health screening unit is also planned.
The project also works in partnership with general practice to identify patients that would benefit from increased physical activity and motivational support to change their lifestyle or stop smoking. Some practices are proactively contacting their patients in this risk group to participate in the programme.
Source: *Questionnaire*
Birmingham East and North PCT, LDP 2007/08.

Smoking cessation and screening activities form part of broader inequalities strategies across local partnerships and are embedded in broader local area agreements which span the contribution of all local partners to addressing inequalities in health. The focus of this mapping review is not the detail of local health inequalities strategies or how the different components of local programmes designed

to increase life expectancy and reduce inequalities in health are identified, combined or prioritised. Much will depend on local circumstances, on how interventions are balanced across wider determinants of health, lifestyle factors and screening and the performance and range of support for GP practices. In this review, reference has been made to overarching strategies for heart health, tobacco control and addressing health inequalities and the effectiveness of individual interventions will be enhanced by the implementation of broader strategies in which they play a part.

7 Discussion

A mapping review inevitably uncovers a great deal of detail and local variation related to service developments, specific projects and broader strategies designed to narrow the health gap. This report is intended to outline main lines of development, capture local variation and provide illustrative examples, but it is not comprehensive. Its limitations arise from a number of sources. First, as outlined in section 2, response rates from questionnaires were poor, although the quality of information provided was good. Second, the availability of documents on PCT websites was variable and, in some cases, difficult to obtain. Third, the reconfiguration of PCTs following *Commissioning a Patient-Led NHS* (2006) meant that network databases were out of date and some posts remained unfilled. Finally, a range of other local strategies may contain relevant targets and projects. In particular, strategies for older people or focused on men's health may include heart health, including smoking cessation and risk factor monitoring. Limited time precluded a search of such strategies. As is the case for most mapping exercises, this is a snapshot in time, and its content is influenced by those who responded to our requests for information and by the documents that were readily available. However, we consider that our combined approach offers an overview of the range of interventions being adopted, provides a framework in which to consider and assess the range of activities being developed and helps to identify research gaps.

Setting the parameters for a mapping exercise of this kind raises a number of issues, not just because of the amount of material which could potentially be included, but because smoking cessation, in particular, forms part of a wide range of healthy lifestyle initiatives. Conversely, cholesterol screening is often limited to screening programmes. This report does not reflect the range of multi-faceted healthy lifestyle and heart health projects. A further issue is the extent to which mainstream interventions should be included, given that a mainstream activity for one stop smoking service may constitute a new departure for another. Issues concerning the ephemeral nature of short-term projects and the iterative nature of service development further complicate decisions over which interventions to include.

For smoking cessation services there are guides to good practice, an extensive infrastructure and good practice networks. Guides and maps of good practice are available for many of the target groups which have been considered in this mapping review. For example, Crosier's (2001) rapid mapping study on smoking projects and services targeted at people living on low incomes and/or minority ethnic groups, was part of a larger study for the former Health Development Agency to '*identify interventions to decrease tobacco prevalence in disadvantaged groups as well as both barriers and factors that encourage quitting'*. More recently, qualitative data was gathered from PCTs by the Commission for Healthcare Audit and Inspection in order to inform the improvement review on smoking cessation (Healthcare Commission 2007). For the use of statins, however, while the field is developing rapidly, examples of good practice are more difficult to identify and much of the effort of cardiac networks to date has been directed towards acute care and rehabilitation. There is an imbalance across the two topic areas, therefore, in the amount of information available.

We found relatively few service evaluations which would allow comparison of the outcomes of different interventions (or permutations of interventions) designed to target smokers, or those at high risk of CVD. The lack of research on outcomes of community-based approaches to risk factors for CVD has been highlighted elsewhere. For example, in relation to South Asians, Mathews et al. (2007) note that a literature review carried out in 2006 '*failed to uncover any other reports providing comparable data from cardiovascular risk factor prevention projects on South Asians'*. NHS stop smoking services, for example, are largely concerned with monitoring access, and with quit rates. The comment is often made that practitioners have little time to write up or evaluate interventions, although there are many good practice networks which share local information over 'what works'. We believe that the lack of evaluation is partly because much of the relevant activity is considered part of mainstream service provision, rather than a separate initiative, and is therefore less likely to have been written up as a case study.

This review identified a number of similarities and differences between strategies designed to reduce smoking in disadvantaged areas and those designed to prevent CVD through the prescription of statins. One important similarity is the use of equity audits to inform targeting strategies. To some extent, the effectiveness of strategies for narrowing the health gap derives from the ways in which equity audits are carried out and results translated into targeted activities. Equity audits can also draw on new geodemographic tools such as Mosaic. In some PCTs with a high prevalence of CVD, equity audits have demonstrated that statin prescription is higher in more affluent areas than in disadvantaged areas, a trend which serves further to widen the health gap. Drawing on equity audits and on their knowledge of the local population, PCTs target their services in different ways, although the form that this takes (such as the choice of venues for clinics, or the nature of outreach work) will be context-dependent.

A systematic, population-based approach for identifying those at risk of CVD, through GP at-risk registers, is a preferred option. However, the effectiveness of this approach depends partly on the progress being made by GP practices in this area (which appears patchy and hampered by software problems) and partly on an assessment of the extent to which those most at risk are likely to access GPs. There are many examples of practices achieving high QOF points in areas where non-elective admissions and CHD mortality remain high, leading to the development of additional targeted and proactive approaches. This review illustrates a number of different approaches to identifying those at risk from CVD, including proactive case finding across a whole practice population of an area (as has been established for some time in *Stockport*, for example), approaches targeted at practices in disadvantaged areas, and combinations of practice and community-based proactive approaches targeted at specific groups (as in *Hull*). Pharmacies, one stop shops, and roving clinics are among the options for community-based proactive case finding, and examples are given in the main body of this report and in Appendix 8. Such methods are already well established for smoking cessation services and form part of good practice in providing accessible services.

Other common factors include a client-centred approach, where clients are the starting point for developing services. This is evident not just in relation to making services available in convenient places at convenient times, but in the attempts to make

services more relevant and attractive to specific groups. This may be achieved through a better understanding of the characteristics and motivations of a particular client group, through the use of clients as advisers and through peer educators. While a client-centred approach has recently become formalized in the NHS through the health trainer initiative, there are many other examples of peer educators, including initiatives developed through Sure Start. Client-centred approaches are well established in the delivery of NHS stop smoking services, with the advent of drop-ins, flexible venues and opening times, the use of ex-smokers as advisers, and latterly with the introduction of health trainers to provide lifestyle support. Social marketing techniques are increasingly evident in the ways that different groups of smokers are targeted, and are sometimes combined with more sensitive targeting tools, such as Mosaic. However, there is evidence of a similar approach for heart health checks and MOTs, which adopt a range of methods and marketing techniques to reach target communities. The *Middlesbrough* cardio-metabolic risk assessment service, described in section 4.4.1.1, emphasises the importance of expanding services into venues where those at risk are most likely to become aware of them - already a familiar aspect of many smoking cessation services.

Further shared aspects are contractual changes in primary care and the associated incentive schemes (through local enhanced services) for nGMS and nPhS. Greater involvement of pharmacies in targeting specific areas and groups is a key development, not just for proactive case finding (through Heart MOTs and the like) or for NRT voucher systems, but for promoting concordance with statin therapy and providing on-going support for quitters. Pharmacies have the advantages of being accessible, widely dispersed and open for long hours. The local enhanced service element provides an important vehicle through which PCTs can incentivise practices and pharmacies to target disadvantaged groups. Moreover, monitoring the implementation of a local enhanced service will allow uptake to be evaluated and the effectiveness of different kinds of contract to be compared.

There are, however, important differences, between the two topic areas, apart from the fact that NHS stop smoking services are better established. Smoking cessation forms part of promoting healthy lifestyles (and is promoted as such), is often included as part of wider health promotion initiatives and may be combined with exercise or weight loss programmes. While healthy lifestyle programmes may incorporate smoking cessation, physical activity and healthy eating, in various combinations, cholesterol screening is currently not typically part of these activities (although advice on stopping smoking is typically provided as part of screening). Arguably, more integrated approaches could be developed.

The specification for this review identified the importance of proactive case finding, retention and accessibility for specific disadvantaged groups as well as disadvantaged areas. Targeting stop smoking services at disadvantaged groups and areas has been a government priority since *Smoking Kills* (DH 1998), which specified that smoking services should be aimed at all smokers, but especially targeted at the economically disadvantaged, young people and pregnant women. A focus on services for such groups overlaps with, but is clearly not identical to, partnership-wide strategies to narrow the health gap. A focus on reaching targets may lead to targeting groups where the four-week cessation rates are most likely to be achieved, rather than the 'hardest to reach' of hard-to-reach groups. The relationships between targeting disadvantaged

groups, targeting disadvantaged areas, and action to meet inequalities targets are complex; successes may be due to the combination of activities rather than to any activity in isolation. Moreover, as widely discussed in local targeting strategies, different activities are required in relation to 'quick wins', focused on meeting national inequalities targets for 2010, and longer term strategies, with the emphasis on people over 50 as the main route for meeting the 2010 target. In relation to the prevention of CVD, opportunistic approaches which are practice-based or which mainly attract those least in need of them could lead to health inequalities being exacerbated. Moreover, action to reduce smoking in the absence of wider measures to address sources of inequality and poverty, might appear irrelevant to people who are multiply disadvantaged.

Underpinning this review are questions over the extent to which screening and smoking cessation services draw on evidence on the influence of individual, community and health care factors on the use of services, or on effective approaches to community development and other health promotion strategies targeted at disadvantaged groups. As one example, the national evaluation of health trainers (recruited from the local community to provide personal support to individuals from disadvantaged groups) is underway, as is research on the use of social marketing techniques, through the National Centre for Social Marketing (where a good practice database is currently being developed) and elsewhere. The effectiveness of current practice in relation to targeting stop smoking services or cholesterol screening can be assessed, to some extent, in the light of these wider bodies of evidence. In relation to both smoking and CVD prevention, research projects are currently underway which will further inform the topics for this review. For example, a three year study of relapse prevention in NHS stop smoking services (current practice, potential effectiveness and cost effectiveness) (2007-10) has been funded through the NHS Health Technology Assessment Programme and includes the investigation of relapse rates in different socioeconomic, ethnic and age groups (www.hta.ac.uk/project/1617.asp). Further information on interventions to reduce inequalities will also emerge from policy initiatives. For example, the Healthy Communities Collaborative (starting in June 2007 and completing by December 2009) is specifically designed to reduce inequalities related to premature deaths from cancer and CVD, and is based in targeted Spearhead PCTs across England. Finally, any subsequent changes in the QOF to reflect the importance of preventing CVD could influence the balance of activities in this area.

A mapping review illuminates how policy is translated into practice, serves to highlight gaps between policy and its implementation, and provides information about implementation in different local contexts or for different population groups. It also reveals a variety of approaches being adopted in relation to identifying target populations, proactive case finding, access to services and prevention of relapse. While some initiatives are context-dependent, in other cases there may be scope for comparative analysis to identify the costs and benefits of different approaches. At a strategic level, interventions for narrowing the health gap are chosen and prioritized in different ways, as reflected in local area agreements and floor target action plans. There are different methods being developed for identifying and reaching target groups and areas. Financial incentives are being exploited in imaginative ways, bolstered by recent changes in the contracts for community pharmacies and general

medical services. Alongside population-based approaches to screening, there are examples of targeted support and incentives for GP practices in disadvantaged areas.

With a range of different models emerging for flexible outreach and proactive case finding there is a case for research into the costs and benefits of different approaches (such as drop-ins), and assessment of community-based opportunistic screening in relation to the extent to which it addresses inequalities in health, and in comparison with population based approaches. There is also scope for applying to other areas what has been learnt from outreach in smoking cessation services.

Finally, in this review we have considered interventions separately for each of our topic areas. However, in practice, different kinds of approaches are combined within a single topic area and strategies combine interventions in different ways. Furthermore, they are prioritised and their effectiveness is influenced by wider strategies and targets. The effectiveness of interventions may therefore need to be considered in the context of broader local strategies for narrowing the health gap.

References

Adams C, Bauld L, Judge K. (2000) *Leading the Way: Smoking Cessation Services in Health Action Zones.* A report to the Department of Health. University of Glasgow, Glasgow.

ASH Scotland (2005) *A Mapping Exercise and Directory of Services, Sources and Training for Ethnicity, Mental Health and Older Adults*.

Action on Smoking and Health (2006) *Smoking Prevalence and Deprivation, a Comparison.* Available at: http://oldash.org.uk/html/mappingproject/mappingproject.htm or http://www.mapsinternational.co.uk/jc/ash/ash.html

Big Lottery Fund (2007) *Evaluation of 'Reducing the Burden of Coronary Heart Disease, Stroke and Cancer' Programme in Wales, Scotland and Northern Ireland.* Year 2 Report, Big Lottery Fund.

Bartys SA et al. (2005) Inequity in recording of risk in a local population-based screening programme for cardiovascular disease. *European Journal of Cardiovascular Prevention & Rehabilitation.* 12(1):63-67.

Blamey A et al. (2004) *The Independent Evaluation of 'Have a Heart Paisley'*. Final report. University of Glasgow.

Brown C. (2005) *Tobacco and Ethnicity. A literature review.* ASH Scotland.

Carole F. (2005) *Manchester's Smoke Free Homes. 12 months report*. April 04-March 05. Manchester Public Health Development Service.

CRESR (2005) *New Deal for Communities 2001-2005: An Interim Evaluation.* Research Report 17. Sheffield Hallam University.

Coleman T, Pound E, Cheater F. (2001*) National Survey of the New Smoking Service: Implementing the Smoking Kills White Paper*. A Report to the Department of Health.

Crosier A. (2001) *A rapid mapping study of smoking projects targeted at people living on low income and/or minority ethnic groups*. Report to the Health Development Agency.

Crosier A and McNeill A. (2003) *Mapping black and minority ethnic tobacco prevention resources.* Health Development Agency.

Department of Health (1998) *Smoking Kills A White Paper on Tobacco*. Cm 4177.

Department of Health (2003) Tackling Health Inequalities a programme for action. Cm 6374.

Department of Health (2004) *National Targets Local Action Health and Social Care Standards and Planning Framework 2005/6-2007/8.*

Department of Health (2003) *A Vision for Pharmacy in the New NHS.*

Department of Health (2004a) *Choosing Health. Making Healthy Choices Easier*. Cm 6374, London HMSO.

Department of Health (2004b) *National Roll out of Health Trainers*. Press Release, 24 March. Available at: http://www.dh.gov.uk/en/Publicationsandstatistics/Pressreleases/DH_4132076

Department of Health, Yorkshire and the Humber (2007) *Reducing smoking pre-conception, during pregnancy and postpartum: integrating high impact actions into routine healthcare practice.*

Department of Health. (2007) *Communities for Health: Learning from the pilots.* Health Inequalities Unit.

Department of Health (2007) *Vascular programme briefing pack.* Available at:

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_073830

de Gruchy J, Robinson J, Hari I. (2006*) Health Equity Audit. The New Leaf Smoking Cessation System in Nottingham City* Nottingham City Primary Care Trust. Available at: http://www.empho.org.uk/pages/viewResource.aspx?id=9803.

de Gruchy J and Robinson J. (2007) Stop-smoking service benefits from geodemographic profiling. *British Journal of Healthcare Computing and Information Management* 24; 1:29-32.

Fox C. (2004) *Coronary Heart Disease and South Asians*. British Heart Foundation and Department of Health.

Healthcare Commission (2007) *No ifs no buts. Improving services for tobacco control.*

Kirkcaldy A and Robinson J. (2005) *An evaluation of Knowsley PCT's pilot men's health checks.* Health and Community Care Research Unit, University of Liverpool. Available at:
http://www.liv.ac.uk/haccru/reports/An_Evaluation_of_Knowsley_PCTs_Pilot_Mens Health_Checks_Pt1.pdf

Mathews G et al. (2007) Impact of a cardiovascular risk control project for South Asians (Khush Dil) on motivation, behaviour, obesity, blood pressure and lipids. *Journal of Public Health* (published online August 2, 2007).

May S, West R, Hajek, P, McEwen A, McRobbie H. (2006) Randomized controlled trial of a social support ('buddy') intervention for smoking cessation. *Patient Education and Counseling* 64; (1-3): 235-241.

Millett C et al. (2007) Impact of a pay-for-performance incentive on support for smoking cessation and on smoking prevalence among people with diabetes. *Canadian Medical Association Journal* 176: 1705-10.

Muir Gray JA. (2006) *Vascular Disease Control Programme*: Presentation given to the Heart Disease and Stroke Prevention Project Advisory Group on 9th May 2006.

NICE (2006) *Health equity audit - learning from practice briefing.*

Netto G, McCloughan L, and Bhatnagar A. (2007) Effective heart disease prevention: Lessons from a qualitative study of user perspectives in Bangladeshi, Indian and Pakistani communities. *Public Health* 121; 3:177-186.

North East Public Health Observatory (2005) *Life Expectancy in Hartlepool.* Occasional paper No.18.
Available at: http://www.nepho.org.uk/view_file.php?c=1062

Owens C and Springett J. (2006) The Roy Castle Fag Ends Stop Smoking Service: A successful client-led approach to smoking cessation. *Journal of Smoking Cessation* 1;1.

Patel K. (2007) Cardiovascular prevention services. Paper prepared for the Board of the National Heart Forum.

Rickard W. (2007) Resistant and resilient smokers in Southwark. Conference presentation UKNSCC.

Royal Pharmaceutical Society of Great Britain and Webstar Health (2006) *Long term conditions: integrating community pharmacy*.

Straus L, McEwen A and Croker H. (2006) *A report for Islington PCT*. Cancer Research UK Health Behaviour Unit, University College London.

SureStart *Promising Practice*. Available at:
http://www.surestart.gov.uk/surestartservices/healthrelated/healthandfamilysupport/smoking/promisingpractice/

Twigg L, Moon G and Walker S. (2004) *The smoking epidemic in England*. Health Development Agency.
Watson P and Shucksmith J. (2007) Evaluation of a cardio-metabolic risk assessment service. Middlesbrough Primary Care Trust, University of Teesside.

Appendix 1: Contacts and networks

Exploratory interviews

Brief exploratory telephone interviews were carried out with key stakeholders at national and regional levels in order to identify key case studies and contacts. A letter of invitation was sent out in the first instance (Appendix 2). Organisations contacted are listed below.

National organisations

- ASH England
- ASH Wales
- ASH Scotland
- ASH Northern Ireland
- All Wales Smoking Cessation Services
- DH National Support Team
- DH Programme Team
- H.E.A.R.T UK
- National Heart Forum
- NHS Heart Improvement Programme
- National Pharmacy Association
- National Prescribing Centre
- National Social Marketing Centre
- Primary Care Cardiovascular Society
- Roy Castle Lung Foundation
- QUIT
- Tobacco Control Collaborating Centre

Regional contacts

- Regional tobacco policy managers (England) (all ten contacted)
- Cardiac network primary care leads (England) (23/29 contacted)
- Regional public health managers (England 3/9 contacted)
- Regional ASH leads (England) (all contacted)
- Regional Pharmaceutical Adviser (one contacted)

Networks

The following networks were accessed via email and asked to complete a questionnaire.

- *NHS Stop Smoking Service Managers*: a list of questions (Appendix 4) was forwarded to nine regional tobacco policy managers in England, for distribution to their networks of stop smoking service managers. Twenty-six responses were obtained. In the North East region, information was taken instead from a concurrent survey of the twelve services.
- *All Wales Tobacco Forum*: a list of questions was forwarded to members of the All Wales Tobacco Forum, via ASH Wales.
- *Tobacco control coordinators* (Northern Ireland). Tobacco control coordinators in Northern Ireland (4) were contacted via ASH Northern Ireland.

- *Cardiac networks*: a request for information was emailed through the fortnightly bulletin for cardiac networks from the NHS Heart Improvement Programme.
- *Nurse leads for CVD*: a list of questions (Appendix 5) was emailed to the network of CVD nurse leads (approximately 40 members). No replies were received, but three interviews were carried out on a separate basis.
- *PCT CHD leads:* approximately 100 were identified and a questionnaire was forwarded by email (Appendix 6) (15 replies).
- *PCT pharmacy advisers*. A list of questions (Appendix 7) was forwarded through the database held by the National Prescribing Centre (12 replies).

The response rate was poor, although useful material was forwarded with a number of the questionnaires.

Selected case studies identified through these networks, as well as through interviews with national and regional stakeholders, were followed up.

Documentary analysis

We also identified examples of interventions through the archives of the UK National Smoking Cessation Conference (2005-7), the UKPHA conference (2007), National Pharmacy Association Awards, the DH database on health inequalities and Big Lottery projects. We scanned Local Delivery Plans (LDPs) and LAAs for information on targets and interventions related to smoking cessation and screening for cholesterol. We focused on the Spearhead areas (62 PCTs and 70 Local Authorities) listed below. We also carried out less detailed searches on a two thirds sample of remaining PCTs. Information on LDPs was sometimes difficult to access through PCT websites and had to be applied for separately. The level of detail was variable and we therefore searched other documents, if available, including PCT Annual Reports, Tobacco Control or CHD Strategies and Annual Reports of Directors of Public Health. We also consulted a number of Floor Target Action Plans. In general, there was very little information about screening for cholesterol.

Although we specifically asked for any examples of interventions that had been evaluated, very few examples were provided.

List of PCTs and Local Authorities consulted (Spearhead group) (DH 14 September 2006)

Local Authority	**Primary Care Trust**
Barking and Dagenham	Barking & Dagenham
Barnsley	Barnsley
Barrow-in-Furness }	Cumbria
Carlisle }	
Birmingham	{ Birmingham East & North
	{ Heart of Birmingham
	{ South Birmingham
Blackburn with Darwen	Blackburn with Darwen
Blackpool	Blackpool
Blyth Valley }	Northumberland Care Trust
Wansbeck }	
Bolsover	Derbyshire County
Bolton	Bolton
Bradford	Bradford
Burnley }	East Lancashire

Pendle }	
Rossendale }	
Hyndburn }	
Bury	Bury
Chester-le-Street }	
Derwentside }	
Easington }	County Durham
Sedgefield }	
Wear Valley }	
Corby	Northamptonshire County
Coventry	Coventry
Doncaster	Doncaster
Gateshead	Gateshead
Greenwich	Greenwich
Hackney	City and Hackney
Hammersmith and Fulham	Hammersmith & Fulham
Haringey	Haringey
Hartlepool	Hartlepool
Islington	Islington
Kingston upon Hull, City of	Hull Teaching
Knowsley	Knowsley
Lambeth	Lambeth
Leicester	Leicester City
Lewisham	Lewisham
Lincoln	Lincolnshire
Liverpool	Liverpool
Manchester	Manchester
Middlesbrough	Middlesbrough
Newcastle upon Tyne	Newcastle
Newham	Newham
North East Lincolnshire	North East Lincolnshire
North Tyneside	North Tyneside
Nottingham	Nottingham
Nuneaton and Bedworth	Warwickshire
Oldham	Oldham
Preston	Central Lancashire
Redcar and Cleveland	Redcar & Cleveland
Rochdale	Rochdale
Rotherham	Rotherham
Salford	Salford
Sandwell	Sandwell
South Tyneside	South Tyneside
Southwark	Southwark
St Helens }	Halton & St Helens
Halton }	
Stockton-on-Tees	North Tees
Stoke-on-Trent	Stoke on Trent
Sunderland	Sunderland
Tameside	Tameside & Glossop
Tamworth	Staffordshire County
Tower Hamlets	Tower Hamlets
Wakefield	Wakefield
Walsall	Walsall
Warrington	Warrington
Wigan	Ashton, Leigh and Wigan
Wirral	Wirral
Wolverhampton	Wolverhampton

Appendix 2: Letter of invitation

Dear Colleague

A team from the Centre for Public Policy and Health and the School for Applied Social Sciences at Durham University has been commissioned by NICE to carry out a primary research mapping exercise. This mapping exercise is one element of a wider programme of work which NICE is carrying out to inform its public health guidance on interventions that reduce the rates of premature death in disadvantaged areas. The guidance will focus on interventions related to proactive case finding, retention and improving access to services for underserved areas and disadvantaged groups in two key areas: smoking cessation; and the use of statins to prevent or reduce the risk of cardiovascular disease. The scope for this guidance is available on the NICE website: http://guidance.nice.org.uk/page.aspx?o=425069

The mapping exercise is being carried out over a three month period. In this initial phase we are carrying out exploratory interviews with a range of national and regional stakeholders in order to scope the field, identify interventions targeted at disadvantaged groups and areas for smoking cessation and use of statins and locate key networks and contacts at both regional and local levels.

We would very much appreciate a brief telephone conversation with you to discuss these issues. If this is not possible, or if you would prefer to suggest an alternative contact, please just let us know. Unless we hear to the contrary, a member of the research team will follow up this letter shortly to arrange a convenient time.

In the meantime, I should be happy to respond to any queries you may have about this project.

Yours sincerely

L. Marks.

Linda Marks
Senior Research Fellow
Centre for Public Policy and Health

Appendix 3: Interview schedule for regional stakeholders

Notes

1. NICE is developing public health guidance for the NHS on interventions that reduce the rates of death in disadvantaged areas.
2. The guidance will focus on proactive case finding, retention and improving access to services, with particular reference to smoking cessation and the use of statins.
3. In order to inform this guidance we are carrying out a research mapping exercise to identify current interventions related to the above topics.

A. Questions for primary care cardiac network leads

We would like to identify interventions in the area covered by your network related to three areas

- identifying and reaching people at increased risk of developing CHD or with established CHD
- how they are supported
- how access to services is being improved.

1. The first question is concerned with how good practice is collected across the network.

1.1 Is information on interventions related to case finding, retention or access to services (for people at risk of or with established CHD) collected on a systematic basis?

1.2. What is currently the best source of information available on the range of interventions in this network related to proactive case finding, retention and improving access to services?

2. The second question is focused on proactive case finding

2.1 Could you give us examples of interventions across this network related to finding and reaching adults at increased risk of developing, or with established CHD?

Prompts

- Use of GP population registers/other registers?
- Opportunistic screening?
- Proactive case finding (in the community/via health services)?
- Using pharmacists?
- Linking with other services eg /stop smoking services/diabetes/health promotion initiatives?
- Linking with other agencies?

2.2 This NICE guidance is particularly concerned with reducing health inequalities. Are there any interventions specifically targeted at groups at a higher risk, or more generally, at underserved or disadvantaged areas? We include a wide range of groups, including

- Members of some black and minority groups
- Homeless people
- Those on a low income
- Lone parents and poor families
- People on benefits and living in public housing
- People with mental health problems
- People with a learning disability
- Prison population

2.3 Which methods have been used to reach these groups/areas?

2.4 What kinds of approach appear most effective for particular groups?
2.5 Are there any particular interventions in relation to proactive case finding you consider that we should follow up?

- Locally?
- Nationally?
- Contact information?

3. The third question concerns accessibility of services
3.1. Are audits carried out of service use in relation to service need?
3.2 Are there interventions we should be aware of which have improved the accessibility of existing services for those most at risk?

- In this network area?
- Nationally?

3.3 Have any new services been designed to improve the accessibility of services for those at higher risk?
4. The fourth question concerns interventions designed to support those who are receiving services.
4.1 Is information available on cases lost to treatment/non compliance?
4.2 How are patients supported in complying with treatment?
5. The fifth question concerns other initiatives which are relevant to identifying those at high risk of CHD or with established CHD.
5.1 Are there more general initiatives related to improving access or to targeting disadvantaged groups which are relevant for patients at risk from CHD or with established CHD?
5.2 Are other agencies carrying out relevant interventions?
Prompts

- Through local area agreements?
- Voluntary sector initiatives?
- Private sector initiatives?

6. The last question concerns any available documentation on case studies or interventions relevant to the topics we have discussed.
7. Could you recommend other contacts or networks for us to pursue?

Prompt

- PCT CHD leads
- How do we access networks (if mentioned)?

8. Is there anything further you would like to add on this topic?

B. Questions for regional tobacco policy managers
We would like to identify interventions across the region related to three areas

- identifying and reaching people who smoke
- supporting them in giving up smoking
- improving accessibility of services.

1. The first question is concerned with information on stop smoking interventions across the region.
1.1 Is there a regional overview of interventions on smoking cessation? We are interested in

- interventions related to identifying and reaching smokers
- access to existing services and the quality of services, especially in disadvantaged areas
- new services
- supporting people who are giving up smoking
- how and where staff are deployed in relation to underserved areas and disadvantaged groups

1.2 Are evaluations available for the interventions that you have described?

2. The second question is focused on proactive case finding

2.1 Could you give us examples of interventions across the region which are designed to find and reach adult smokers?

Prompts

- Use of GP population registers/other registers?
- Opportunistic screening?
- Proactive case finding (in the community/via health services)?
- Using pharmacists?
- Linking with other services eg diabetes/health promotion initiatives?
- Linking with other agencies?

2.2 This NICE guidance is particularly concerned with reducing health inequalities. Are there any interventions specifically targeted at groups at a higher risk or, more generally, at underserved or disadvantaged areas?

We include a wide range of groups, including

- Members of some black and minority groups
- Homeless people
- Those on a low income
- Lone parents and poor families
- People on benefits and living in public housing
- People with mental health problems
- People with a learning disability
- Prison population

2.3 Which methods have been used?

2.4 What kinds of approach appear most effective for particular specific groups/areas?

2.5 Are there any particular interventions in relation to proactive case finding you consider that we should follow up?

- Locally
- Nationally
- Contact information?

3. The third question concerns accessibility of services

3.1. Are audits carried out of service use in relation to service need?

3.2 Are there interventions we should be aware of which have improved the accessibility of existing services for pregnant women, manual workers, and disadvantaged groups?

- In this region?
- Nationally?

3.3 Have any new services been designed to improve the accessibility of services for those at higher risk?

4. The fourth question concerns interventions designed to support those who are receiving services

4.1 What information is available on people who have started smoking again after accessing services?

4.2 What methods are used to support people to give up smoking?

4.3 How effective are these methods for specific groups?

5. The fifth question concerns other initiatives which are relevant to increasing accessibility to stop smoking services?

5.1 Are there more general health promotion, or other initiatives related to improving access or to targeting disadvantaged groups which are relevant for smokers?

5.2 Are other agencies carrying out relevant interventions?

Prompts

- Through local area agreements?
- Voluntary sector initiatives?
- Private sector initiatives?

6. The last question concerns any available documentation on case studies or interventions relevant to the topics we have discussed.

7. Could you recommend other local contacts or networks for us to pursue?

8. Is there anything further you would like to add on this topic?

Appendix 4: Questionnaire for NHS Stop Smoking Service Managers

1. Proactive case finding

1.1. Could you give us examples of key local interventions designed to find and reach adult smokers?
1.2. Are there any interventions related to the use of GP registers?
1.3. Which outreach methods are used to target specific groups/areas?
1.4. Are pharmacists involved in identifying smokers?
1.5. How are other agencies/initiatives currently involved in reaching adult smokers?

2. Are there audits of service use in relation to service need?

3. Reducing health inequalities and targeting disadvantaged groups and areas

We include a wide range of groups, including

- members of some black and minority ethnic groups
- homeless people
- those on a low income
- lone parents and poor families
- people on benefits and living in public housing
- people with mental health problems
- people with a learning disability
- prison populations

3.1. Are there interventions specifically targeted at groups at higher risk, or at underserved or disadvantaged areas?
3.2. What form do these initiatives take and why were they chosen?
3.3. How are pregnant women being targeted?
3.4. Are there specific interventions designed to make existing services more accessible for specific groups including pregnant women, manual workers and disadvantaged groups?

4. Interventions designed to support those who are receiving or have received services

4.1. Which methods are being used to reduce drop out rates?
4.2 What action do you take to address the problem of four week quitters who later relapse?
4.3. How successful have these methods been?

5. Please could you identify two or three key local initiatives and email us with any evaluations, if available, or brief descriptions?

6. We may follow up selected interventions. Would you be happy to be contacted for more details?

Many thanks for your help in carrying out this mapping exercise.

Appendix 5: Questionnaire for CVD Nurse Leads

1. Proactive case finding

1.1. Could you give us examples of any local interventions designed to find and reach those at risk of CVD, or with established CVD?

1.2. Are GP population registers being used for proactive case finding of those at risk of CVD in your area? If so, how is this being carried out?

1.3. Which outreach methods, if any, are being used to target specific groups/areas?

2. Reducing health inequalities and targeting disadvantaged groups and areas

We include a wide range of disadvantaged groups[1]

2.1. Are there any local interventions targeted at disadvantaged groups in relation to CHD prevention and the utilisation of statins?

2.2. Are there local interventions targeted at disadvantaged areas?

2.3. Could you describe these interventions and why they were chosen?

3. Interventions designed to support those who are receiving or have received services

3.1 Is information available on cases lost to treatment/non compliance for statins?

3.2 How are patients supported in complying with treatment with statins?

3.3. How successful have these methods been?

4. Accessibility of services

4.1 Could you give us examples of how screening services for those at risk of CVD, or services for those with established CVD, have been made more accessible?

5. Please could you identify two or three key initiatives from your local area (or elsewhere), and provide use with contact details or evaluations, if these are available?

We may follow up selected interventions. Would you be happy to be contacted for further details on the issues you have raised?

Many thanks for your help in carrying out this mapping exercise.

[1]Disadvantaged groups include, among others, members of some black and minority ethnic groups; homeless people; those on a low income; lone parents and poor families; people on benefits and living in public housing; people with mental health problems; people with a learning disability; prison populations.

Appendix 6: Questionnaire for PCT CHD Leads

1. ***Proactive case finding***

1.1. Could you give us examples of any local interventions designed to find and reach those at risk of CVD, or with established CVD?

1.2. Are GP population registers being used for proactive case finding of those at risk of CVD in your area? If so, how is this being carried out?

1.3. Which outreach methods, if any, are being used to target specific groups/areas?

2. Reducing health inequalities and targeting disadvantaged groups and areas

We include a wide range of disadvantaged groups[2]

2.1. Are there any local interventions targeted at disadvantaged groups in relation to CHD prevention and the utilisation of statins?

2.2. Are there local interventions targeted at disadvantaged areas?

2.3. Could you describe these interventions, if any, and why they were chosen?

3. Interventions designed to support those who are receiving or have received services

3.1. Is information available on cases lost to treatment/non compliance for statins?

3.2. How are patients supported in complying with treatment with statins?

4. Accessibility of services

4.1. Could you give us examples of how screening services for those at risk of CVD, or services for those with established CVD, have been made more accessible?

5. Please could you identify two or three key initiatives from your local area and provide us with contact details or evaluations, if these are available?

We may follow up selected interventions. Would you be happy to be contacted for further details on the issues you have raised?

Many thanks for your help in carrying out this mapping exercise.

[2]Disadvantaged groups include, among others, members of some black and minority ethnic groups; homeless people; those on a low income; lone parents and poor families; people on benefits and living in public housing; people with mental health problems; people with a learning disability; prison populations.

Appendix 7: Questionnaire for PCT pharmacy advisors

1. Proactive case finding

1.1. Are pharmacy services currently involved in the proactive identification of: (a) smokers; (b) those at risk of CVD?

1.2. Could you give us examples of any local interventions designed to find and reach (a) adult smokers; (b) those at risk of CVD, or with established CVD?

1.3. How are GP population registers being used for proactive case finding of: (a) smokers; (b) those at risk of CVD?

1.4. Which outreach methods, if any, are being used to target specific groups/areas?

2. Reducing health inequalities and targeting disadvantaged groups and areas

We include a wide range of disadvantaged groups[3]

2.1. Are there interventions associated with pharmacy services which are targeted at specific groups in relation to: (a) smoking cessation; (b) CHD prevention and the utilisation of statins?

2.2. Are there interventions targeted at disadvantaged areas?

2.3. What form do these interventions take and why were they chosen?

3. Interventions designed to support those who are receiving or have received services

3.1 Is information available on cases lost to treatment/non compliance for statins?

3.2 How are patients supported in complying with treatment with statins?

3.3. Which methods are being used to reduce drop out rates and address the problem of four week quitters who later relapse?

3.4. How successful have these methods been for: (a) statins; (b) smokers?

4. Accessibility of services

4.1 Could you give us examples of how local pharmacy services have been used to improve the accessibility of: (a) stop smoking services; (b) services for those at risk of CVD?

5. Please could you identify two or three key local initiatives and email us with any evaluations, if available, or brief descriptions?

We may follow up selected interventions. Would you be happy to be contacted for further details?

Many thanks for your help in carrying out this mapping exercise.

[3]Disadvantaged groups include, among others, members of some black and minority ethnic groups; homeless people; those on a low income; lone parents and poor families; people on benefits and living in public housing; people with mental health problems; people with a learning disability; prison populations.