TACKLING SMOKING IN GLASGOW:

FINAL REPORT

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INTRODUCTION

Smoking is Scotland's biggest public health challenge. It is the largest single preventable cause of death and disability in the country. Smoking prevalence in Scotland is higher than in other parts of the UK and the problem is particularly acute in Glasgow. In the Greater Glasgow Health Board area, smoking prevalence is over 33 per cent, rising to 37 per cent in Glasgow city (NHS Greater Glasgow, 2003). It is estimated that one in five people in Glasgow die because of their smoking habit. Smoking is also the leading cause of inequalities in health. It is the single biggest contributor to the gap in healthy life expectancy between the most and least affluent. In some of the most deprived parts of Glasgow, smoking rates are as high as 63 per cent (NHS Health Scotland, 2005).

These high rates of smoking are a significant factor – possibly the single biggest factor – in Glasgow's poor health record when compared with other parts of Scotland, the UK and western Europe. This means that efforts to improve public health in the city must include services and programmes to tackle smoking. These efforts should be informed by past and current best practice and relevant research evidence. The Glasgow Centre for Population Health (GCPH) has an important role to play in bringing together some of this evidence and as part of its programme of work analysing the effects of recent and past policies and interventions it funded this study in partnership with NHS Health Scotland and NHS Greater Glasgow. It took place between July 2004 and September 2005 and represents the first study commissioned by GCPH.

The research involved three main components:

- A scoping study of the Glasgow tobacco strategy
- An evaluation of intensive group-based smoking cessation services
- An exploratory study of pharmacy-based treatment for smokers

This final report outlines findings from each component of the study. Each involved slightly different research methods. Details of methods are therefore covered in each of the main parts of the report rather than in an overall methods section. The report concludes with a section that aims to bring together key findings from different components of the study and examines implications for future research and policy.

GLASGOW TOBACCO STRATEGY

The 1998 UK Tobacco white paper, *Smoking Kills*, put forward a wide range of measures to reduce overall smoking prevalence and improve health (DoH, 1998). It emphasised that policies needed to focus on both prevention and treatment and that no single form of action was likely to be sufficient. The white paper outlined the key elements of a comprehensive tobacco control strategy and was followed by investment – at both UK and devolved levels – in a range of policies and programmes, including the establishment of NHS smoking cessation services across the country.

In Glasgow, the policies outlined in the white paper built on a tradition of tobacco control work in the city, dating back to the Glasgow 2000 project, originally established in 1983. However the new money that became available following the publication of the white paper encouraged agencies to consider the issue of how all the relevant streams of work being undertaken in the city could be brought together in a strategy that would influence current investment decisions and guide future action.

Thus began a five-year development process that lead to the publication of the Glasgow Tobacco Strategy, formally launched in February 2005. It is intended to serve as a framework for action over 5-10 years. It aims to (Glasgow Alliance, 2005, p.16):

> *Promote the health of people living and working in the city of Glasgow by reducing the health impact of tobacco, working particularly in areas of greatest need.*

The strategy sets out key principles and objectives and outlines an initial framework for action. It brings together the wide variety of work being undertaken in the city to tackle smoking, including the smoking treatment services (provided through group and pharmacy-based support) that are described in greater detail later in this report.

As part of our work examining efforts to tackle smoking in Glasgow we set out to describe the origins and content of the strategy and sought to understand the contribution it has and could make to guiding relevant programmes and services in the city. This part of our study is essentially descriptive but aims to serve as a context for the remainder of this report. After explaining our research methods we describe:

- Background to the Strategy
- Strategy Development
- Implementation
- Future Direction

Methods

In order to gain some understanding of the process of strategy development and the different elements involved, methods for this component of our research included documentary review and semi-structured interviews with key stakeholders. We reviewed the strategy itself and were provided with a range of relevant material from professionals involved in one or more aspects of the strategy. This included, for instance, minutes of meetings, and documents describing particular projects and

reports from key agencies involved. In selecting professionals to interview we aimed to speak to those who were involved in the working group that developed the strategy and/or held positions that were relevant to one or more of the key strands of the strategy that are:

- Leadership
- Young People
- Supportive Environments
- Media
- NHS
- Community

Thirteen interviews were completed. In several cases the views of interviewees were used to inform not just this component of our work but also the study of smoking cessation services outlined later in this report. Interviews were conducted by JF, LB & LL between October 2004 and March 2005. From amongst the 13 interviews, eight were transcribed in full. Key points and quotes were recorded in note form for those interviews that were not transcribed. Data analysis was conducted by LB and JF. The researchers read all the transcripts and notes to identify themes. A meeting was then convened to agree principal themes and this section of the report is structured around these issues.

Background

Glasgow has a long history of involvement with tobacco. In the nineteenth and early twentieth century the city was an important centre for the tobacco trade and the manufacture of tobacco products. In common with other parts of the UK, smoking prevalence rose throughout most of the twentieth century. By the 1980s, however, concerns about the health implications of smoking in the city were shared by a number of organisations and the decision was made to try and develop a co-ordinated programme of work to address this. In 1983 a partnership known as the Joint Anti-Smoking Initiative was formed and later renamed Glasgow 2000 in recognition of its overarching aim of achieving a 'smoke free' city by the year 2000. The key partners were the Scottish Health Education Group (later the Health Education Board for Scotland), Glasgow District Council, Strathclyde Regional Council and Greater Glasgow Health Board.

The objectives of Glasgow 2000 were to achieve:

- A reduction in smoking prevalence
- Minimal uptake of smoking by children
- Widespread smoke-free policy in workplaces, public places and transport
- No tobacco promotion
- An accessible public information and advice network

Glasgow 2000 co-ordinated and delivered a wide range of activities including early work on smoking in public places by producing a 'good air guide' listing cafes, bars and restaurants in Glasgow with non-smoking areas. It developed material to discourage people from smoking in their homes and assisted businesses in establishing smoking policies. An anti-smoking programme for children and young people, known as 'Smokebusters' was developed in the late 1980s. Glasgow 2000 also did some work on smoking cessation by monitoring and promoting the availability of local smoking treatment services. The partnership also conducted

some evaluation of anti-smoking projects and programmes and commissioned specific studies of some aspects of tobacco control such as one study examining the economic impact of tobacco on the city. Glasgow was cited by the World Health Organisation as one of the only cities in Europe that was taking a strategic and comprehensive approach to tobacco control at the time. However, resources for the partnership were limited and no formal evaluation of its work programme was ever undertaken.

Following the publication of the UK tobacco White Paper in 1998, new resources for tobacco control and smoking cessation in particular became available. A new organisation, known as Smoking Concerns, was created within NHS Greater Glasgow to continue the work of Glasgow 2000 with a specific focus on developing and managing a wider network of smoking treatment services within the health service. At around the same time the Glasgow Healthy City Partnership formed a Tobacco Working Group with representation from NHS Greater Glasgow (including Smoking Concerns), the City Council, the Glasgow Council for the Voluntary Sector and the Roy Castle Lung Cancer Foundation. One of the first tasks of the group was to begin to develop a Tobacco Strategy for Glasgow.

Strategy Development

The development of the Glasgow Tobacco Strategy began with a programme of consultation with key organisations and individuals. The focus of this was a Tobacco Strategy Development day, held in April 2000, and attended by about 60 representatives from local agencies. Outcomes from the consultation assisted the tobacco working group in putting together a draft strategy that outlined key principles and objectives and included some examples of action to address tobacco in the city. The process of developing the draft was lengthy and involved consultation within the organisations represented on the working group. An agreed version was eventually completed in 2003 and disseminated for comment to a wider range of groups and organisations.

During this process a range of developments in relation to smoking cessation and tobacco control were taking place at national and local level that were to affect the content of the strategy. A further complication arose in the form of new structures for community planning in Scotland, affecting the role of the Glasgow Alliance that had served as coordinating body for city-wide multi-agency developments such as the strategy. The net result was further delay and some confusion regarding the status of the draft document. It was not until February 2005, almost five years after the initial consultation, that the strategy was officially launched.

Strategy Development Challenges

Several of the professionals we interviewed were critical of the length of time it had taken to develop the strategic document and then to launch it. Given the range of developments in tobacco control that occurred between 2000 and 2005, having a strategy in place earlier could have focussed attention on key areas for investment and development. As one interviewee explained:

> *If the strategy had been in place, if we had an up and running action group and if we had more time, [money] could have been allocated in a different way … if we had an action group on that strategy I think we would have gone straight to them said, "You spend the money, this is*

what you need to do", rather than staff that don't really deal with tobacco having to get involved in finding projects.

Others tried to explain the delay and were less concerned that a significant amount of time had passed between the development of the strategy and its publication.

The reason the strategy has taken so long to come together, is because people progress straight to the implementation stage…..And it's been necessary to take advantage of, for example, some of the funding which we've had coming through Healthy City Partnership, specific to tobacco and also opportunities to set up projects, the need to expand the cessation service in the case of Smoking Concerns. So you know, I certainly wouldn't be critical of the delay in terms of the strategy. I think these things are quite inevitable at times, and it's been done for the best reasons.

There's a sense that people want something which is going to work because it's such an important issue. That takes time. I think there's been a careful approach to try and get all the partners on board and get that push and I think that's a good thing. If you develop a strategy very quickly and publish it, it sits on a shelf.

Other than the structural changes that had affected strategy development, interviewees also pointed to problems in relation to the profile of tobacco control compared with smoking cessation in Glasgow. While Smoking Concerns has both a tobacco control and cessation remit, the staff time and resources allocated to wider tobacco issues were (and still are) extremely limited. That meant that strategy development was largely dependent upon the 'goodwill' and allocated time of members of the working group rather than being supported by specific staff. This reflects wider tensions experienced across the UK in recent years in relation to funds for smoking treatment compared with smoking prevention (Bauld et al, 2005).

I still think there's an awful lot of work to be done. One of the things that I've been concerned about is some of the policies which have been followed by the Scottish Exec and by the Health Board, because they've been funded by the Scottish Exec in relation to the cessation. So all of the time when the tobacco strategy was being developed, the staffing, in relation to the tobacco programme, was minimal, absolutely minimal. (Name) was working part time on the tobacco strategy and that was the amount of resources that the Glasgow Health Board were willing to put into this whole project. And it was just ludicrous. If this was the most important health issue for Glasgow City Council, and for the Glasgow Health Board, how did we just manage to get one part time person.

Strategy Objectives

The Glasgow Tobacco Strategy is perhaps most usefully seen as a document that describes three things:

- The extent of the 'tobacco epidemic' in Glasgow, including its role in contributing to inequalities in health
- The general principles and objectives of tobacco control that have been agreed by key agencies and organisations in the city

- Examples of the wide range of activities being undertaken to prevent or treat smoking in relation to key categories such as young people, the NHS and others

What the document is not is a plan for action. Although it has an 'action plan' section, this is an extremely brief part of the overall report and lists projects and activities that by the time of the strategy launch were already well underway.

Instead, the strategy does usefully outline the values, principles and objectives that have and will guide action to address tobacco in Glasgow. The strategic objectives of the strategy are to:

- ensure that lead organisations in the private, public and voluntary sector in Glasgow engage fully with tobacco control.
- undertake a programme of activity specifically targeted at young people aimed at reducing the impact of tobacco.
- encourage and deliver sustainable community led work on tobacco.
- ensure that the Health Service in Glasgow fulfils its exemplar role and fully capitalises on its unique opportunities for effective action against tobacco.
- make smoke free public places the norm and to work towards a situation where all employees are protected from second hand smoke.
- use a variety of media effectively to ensure tobacco issues have due prominence as a public concern.

These objectives make it clear that the strategy extends beyond the traditional health-related elements of tackling smoking to much wider tobacco control measures. The objectives are translated into a series of categories for action in relation to leadership, young people, supportive environments, the media, the NHS and communities.

Implementation

At the time of writing, *formal* implementation of the strategy has not taken place. The original intention following development of the document was to create an implementation and steering group comprised of key stakeholders from all the organisations involved in delivering services and initiatives related to the strategy objectives. However, agreement regarding the membership and specific remit of this group was difficult to achieve and further delays have resulted.

In the meantime, however, it would be inaccurate to argue that the Glasgow Tobacco Strategy has not been implemented in any form. The reality is that the objectives and examples of actions described in the strategy were being pursued by the relevant organisations during the process of its formation and publication. Important developments, such as a commitment from the City Council to invest considerable resources in tobacco control activities as part of the Glasgow joint health improvement programme, have taken place. Now that the document has been published, it serves as a useful focus for developing further activities to address smoking. Many of the professionals we interviewed emphasised the symbolic importance of the strategy to guide current and future actions.

> *We needed to get our strategy house in order, if you know what I mean, in order to be more effective in the projects that we are doing.*

Although perhaps it wasn't and wouldn't seem to be a structured implementation of the strategy, what it has been is about taking opportunities. So where there's a piece of work that's needing progressed and it would seem prudent to link it in to the other tobacco work, we've done that. So its perhaps not a structured implementation and roll out … [but] it's difficult to achieve that.

Actions

All of the key stakeholders we interviewed expressed strong levels of commitment to the strategy in terms of senior management input, resources and policies within their organisations. All could cite examples of specific activities that related to one of the six themes for action. The first, leadership, is described in the strategy as ensuring that key organisations in the city engage fully with tobacco control. Interviewees suggested that achieving agreement regarding the strategy itself was a key element of action to achieve the leadership objective. Some argued that more work needed to be done to engage voluntary and private sector organisations in particular, but that progress was being made.

To convey some sense of the huge range of activities associated with the other five areas for action set out in the strategy, we provide some examples here.

Young People

The strategy aims to undertake a programme of activity specifically targeted at young people. Examples of current activities were cited by several interviewees, primarily in relation to the work of the Glasgow City Council and NHS Greater Glasgow. Two elements of this work include 'protection' measures implemented by the Consumer and Trading Standards Department of the Council and school-based prevention programmes.

Trading Standards Officers have a wide remit and part of their responsibility is to ensure that retailers are aware it is illegal to sell tobacco to children under 16, to ensure that signage relating to this is clear, to set up and carry out test purchasing, and to monitor retail outlets under weights and measures trade descriptions, pricing, consumer credit and safety. A key mechanism for their work, developed in partnership with a range of organisations, is the 'Young Scot Card'. This is an identity card to prove age for purchase, but the motivation for a young person to use the card is that it entitles the holder to special rates off leisure activities such as swimming pools, transport, food items etc. The card has supported the work of trading standards, whose tobacco-related remit is continuing to expand with developments such as their future role in supporting the enforcement of Scotland's ban on smoking in public places.

Another example of work with young people is the range of activities implemented by the City Council education department in relation to smoking in schools. One part of this involves Glasgow's roll out of the national Healthy Schools Scheme that is in its third year and now involves all schools in the city. As part of the initiative teachers are provided with a resource pack and framework tailored to pupils' ages. This includes information, teaching materials and activities about a whole variety of health education issues including tobacco and substance misuse. The aim is to educate young people within the schools so that when they are outside in the community that they have learned about health related issues and can behave in an informed manner. The council also work with Smoking Concerns to deliver tailored programmes to pupils of different ages. At primary school level 184 schools

participate in ‘Smoke Free Me’, a drama-based programme that provides information and advice about smoking. At secondary level a ‘Smoke free class’ scheme is delivered in all schools. Schools are also involved in healthy workplace initiatives and although they don’t directly offer staff smoking cessation support, they do work closely with Smoking Concerns when formulating school smoking policies.

Supportive Environments

The supportive environments element of the strategy aims to make smoke-free public places the norm and to ensure that employees are protected from second-hand smoke. The decision of the Scottish Parliament to adopt legislation prohibiting smoking in all enclosed public spaces from 2006 means that future progress for this element of the strategy should be assured. However, local work to address this issue has been developed over a number of years. One of the most significant examples is the range of activities developed by Scotland’s Health at Work (SHAW), including an occupational health awards scheme for businesses that supports and monitors work place smoking policies as well as other health-related activities in the workplace. Smoking cessation groups are also being developed in workplace settings in Glasgow. Other recent developments in Glasgow contributing to smoke-free environments is the publication of a smoking policy across all parts of NHS Greater Glasgow, that will be implemented prior to the national smoking ban.

Media

The media component of the strategy aims to use a variety of media to ensure tobacco issues have prominence as a public concern. This is perhaps the one area of action where interviewees were less convincing regarding progress that had been made locally to engage the media. While there was general acknowledgement that the prominence of tobacco as an issue at the national level had meant considerable media coverage, it was less clear that there was a developed local strategy for media engagement, or that there were recognisable local ‘champions’ in relation to tobacco and the media. Interviewees cited examples such as regular production of press releases about smoking related issues and events (such as SHAW’s passive smoking awareness raising campaign or the launch of the ‘Breathe’ project for pregnant women co-ordinated by Smoking Concerns). However it was not clear what future plans were regarding media engagement, and this is perhaps one area of the strategy where more structured implementation is needed.

NHS in Glasgow

The health service in Glasgow has invested in a wide range of activities to prevent smoking and treat tobacco dependence. The remainder of this report deals with one specific element of this – smoking cessation services. Smoking Concerns and health promotion services with NHS Greater Glasgow are also engaged in a significant volume of other activities including work with children and young people, pregnant smokers and providing cessation support in secondary care. During the development of the strategy a NHS smoking policy working group was formed with the remit of developing a smoke-free policy for NHS premises across Glasgow. The smoking policy was published earlier this year and will result in all health care facilities becoming smoke free, with a small number of exceptions.

Communities

The strategy also aims to encourage and deliver sustainable community-based work on tobacco. Interviewees described a significant range of community-based activities,

many of which have been in existence for a number of years. A specific issue for Glasgow is the high levels of deprivation (and smoking prevalence) in some parts of the city and community work is in many instances targeted at the most disadvantaged neighbourhoods. Smoking Concerns supports and facilitates a number of community-based projects, as do other staff in the health promotion department of NHS Greater Glasgow. The City Council and other partner organisations, including national bodies such as ASH Scotland (that has funded community-based work in Glasgow) also have an important role to play.

Examples of community work include:

- The Smoke Free Home Zones initiative in East Glasgow, that supports families to reduce or eliminate smoking in their own homes
- The development of local tobacco strategies for specific communities, such as Drumchapel
- Needs-assessment work with ethnic minority groups in south Glasgow
- A buddy project offering befriending support to quit smoking in the Royston area of the city

Thus each element of the Glasgow Tobacco strategy has identifiable actions associated with it. Interviewees acknowledged that progress in relation to some elements of the strategy – such as work in the NHS, and community-based projects – had progressed at a more rapid pace than others.

One issue that is hardly mentioned within the action section of the strategy is addressing tobacco-related inequalities in health. This is surprising given that the introduction to the strategy and at least one of its key principles emphasises the role of smoking in creating and sustaining health inequalities between Glasgow's residents. Under the 'communities' heading one example is provided of 'engaging with social inclusion partnerships [located in the more deprived parts of the city] to develop local, targeted action on tobacco', but this is the only identifiable action with a specific inequalities focus.

Future Direction

Glasgow's tobacco strategy is not unique. Since 2000 a number of cities and regions across the UK have developed similar documents, although other parts of Scotland have been slow to do so. What is perhaps unusual about this strategy is the multi-agency ownership of the document and its associated principles and objectives. It has emerged as the result of extensive consultation and refinement. The result is a useful statement of shared principles and objectives with agreed categories for action. The strategy does not, however, outline any specific future activities or programmes that can be monitored in terms of milestones, targets or timelines for implementation.

Given the extent of the challenge facing Glasgow in relation to tobacco, it is fair to ask if a strategy of this kind is sufficient. This was an issue raised by some interviewees. Is a statement of principles and shared goals enough? Without well-specified activities and associated outcomes, how can progress be measured, particularly in relation to issues such as addressing inequalities in health? Where will the strategy be in five years time? Undoubtedly progress will have been made. However this progress is perhaps more likely to have arisen as a result of national

policy (the Scottish smoking ban, increased resources for cessation services) and ongoing local programmes than as a result of the strategy itself.

What is perhaps most useful about the Glasgow Tobacco Strategy is that is represents a public statement of how important addressing smoking in our city is, and that key local agencies are committed to this goal – now and in the future.

INTENSIVE GROUP SERVICES

Smoking cessation services are a central component of Glasgow's strategy to address tobacco and its health consequences. Since 1999 cessation services have become available within the NHS. In Glasgow, one element of these services is treatment delivered by Local Health Care Co-operatives (LHCCs) and co-ordinated by Smoking Concerns. The model of service provided is based on research evidence regarding what is effective in helping smokers to quit, and primarily involves group support (Raw et al, 1998, West et al, 2000). Smoking Concerns provides funds to each LHCC to deliver quit smoking support groups that are run by facilitators/advisors according to evidence-based guidelines. The LHCCs provide the service on the basis of a service level agreement (SLA) with Smoking Concerns.

Beginning in July 2004, we worked with colleagues at Smoking Concerns to design and conduct an evaluation of the group services. This component of the 'Tackling Smoking in Glasgow' study aimed to address three main research questions:

- How is the group service structured and delivered?
- What are the characteristics of people who access the service?
- How successful is the service in helping people to quit, and what socio-demographic and service factors affect cessation rates?

We used qualitative and quantitative methods to address these questions. First we interviewed a wide range of professionals involved in managing and delivering the service. Findings from these interviews are outlined in the next section of this report. Secondly we collected data from clients accessing the services from July 2004- May 2005. Findings from our analysis of client data follow the interviews section.

INTERVIEWS WITH SERVICE STAFF

As part of the evaluation of intensive group cessation services, the research team conducted interviews with a range of relevant staff across the city. These interviews explored a wide variety of issues. The focus of the interviews was the structure, organisation and effectiveness of group support services provided by LHCCs. Findings examine: the establishment of services; staff roles; promoting services; referral pathways; training; treatment; running groups; targeting; venues; relapse prevention and the future of services.

Methods

The research began with the development of an interview topic guide that drew on previous research on smoking cessation in England (Coleman et al, 2005, Bauld et al, 2005) and took into account particular themes of relevance to the Glasgow service. Interviews were conducted by JF & LL between October and December 2004 with public health practitioners (PHPs), smoking cessation coordinators and administrative staff from each LHCC[1]. Interviews were also conducted with Smoking Concerns staff. A total of 26 interviews were carried out. From amongst these interviews, 18 were selected by the researchers to be transcribed in full. Key points and quotes were recorded in note form for those interviews that were not transcribed Data analysis was conducted by LB, LL and JF. All three researchers first read a sub-sample of transcripts and notes to identify themes and principal issues. This was followed by a meeting to discuss and agree theme definitions. Specific themes were then allocated to each researcher who analysed and coded a subgroup of transcripts (Fitzpatrick and Boulton, 1996). The qualitative analysis software, Atlas-t.i, was used to facilitate a systematic coding of text. At a subsequent meeting, the researchers shared their findings and agreed how to refine the themes and integrate them into a final report. Each researcher then analysed all the transcripts and drafted a summary of findings. This type and sequence of qualitative analysis, known as the 'Framework' approach, is commonly used in applied policy research (Ritchie and Spencer, 1994).

Establishing Services

As part of the UK Tobacco strategy outlined in *Smoking Kills*, a commitment was made to establish the first national network of smoking treatment clinics for addicted smokers, based in the NHS (DH, 1997). Following the initial establishment of services in some areas of England in 1999, the Scottish Executive allocated funds to each Health Board in Scotland to develop NHS smoking treatment services from 2000 onwards. In Glasgow, the Health Board took the decision that a core component of services should be group-based support provided by LHCCs. Services were to be evidence-based and to follow the 'Maudsley' model[2]. Smoking Concerns were to commission these services and to provide funding, guidance, advice and

[1] At least one, and in most cases two staff were interviewed per LHCC. Only one LHCC was excluded (West One) from the staff interview component of the study due to the fact that researchers were not able to arrange interviews during the qualitative data collection period. Data from West One clients are, however, included in the 'Clients and Outcomes' section of this report.

[2] The 'Maudsley' model is a form of structured group cessation support developed at the Maudsley hospital in London. The approach has been rigorously evaluated and replicated and is recognised as the 'gold standard' in treatment for addicted smokers. It combines behavioural support and advice from a trained adviser with the use of appropriate pharmacotherapies such as nicotine replacement therapy.

staff training. Concurrent with the formation of group-based services, the public health pharmacist established a pharmacy-based one-to-one service across Glasgow. This service became known as 'Starting Fresh'. Clients in need of smoking cessation support could access either service through self-referral or following referral from a health professional.

Prior to 2000, interviewees reported that formal help for smokers to quit in most parts of Glasgow was either limited and uncoordinated or non-existent. While many GPs and other health professionals were addressing smoking with their patients, there was very little formal or sustained support available. A small number of LHCCs did offer a service involving individual practice nurses who had received training in one to one counselling support for clients wishing to quit smoking. None of the LHCCs offered group support. Some interviewees reported that the new services were not always coordinated with what was already available. As one public health practitioner explained:

> *I think that the initial thing was to talk to staff and make them aware that the service was coming on board and one of the challenges was trying to integrate that with the existing services. Some of the practice nurses did one to one consultation and were not always convinced of the value. We thought it might have been a dislocation in service so it was about getting people on board.*

Some interviewees felt that consultation with individual LHCCs about the introduction of a model of service that would apply across the GGHB area was limited:

> *But we certainly felt that the service was developed without any involvement of the LHCC in terms of how we could best fit in. We were just told what was going to happen and we had to do it that way.*

Smoking Concerns staff worked with individual LHCC managers to develop a shared sense of how services should be structured and developed. This culminated in the completion of a service level agreement (SLA) between SC and each LHCC. The SLA describes how group-based cessation support should be provided and is updated on a regular basis.

Staff Roles

A number of staff have a role to play in delivering intensive group support services for smokers in Glasgow – Smoking Concerns staff, Public Health Practitioners, smoking cessation coordinators, administrators and advisors.

Smoking Concerns staff are employed by directly by Greater Glasgow NHS Board. Under the terms and conditions of the SLA, SC staff have a wide remit and are responsible for advisor and coordinator training and updates, mentoring, provision of publicity material, data collection and analysis, and monitoring of SLAs with each LHCC.

Public Health Practitioners are employed by individual LHCCs and, along with their other responsibilities, have a remit to address the public health aspects of tobacco control in their locality. This often involves managing or supporting the local group-based cessation service, in addition to trying to ensure that the group services are linked with other tobacco control and health promotion activities within the LHCC and more widely.

Many PHPs were closely involved in the original development of the group-based service in their LHCC. This role involved selecting venues, promoting services to GPs, health professionals and their local communities and establishing the administration of the services.

While some PHPs have remained closely involved with the groups beyond the initial set up phase (adopting a management role in most instances), others now have less to do with the service following the recruitment of coordinators and/or administrators.

> *I suppose a lot of my role initially, or our role initially was going out there, looking at venues, you know, linking in with people, that kind of stuff and as the administrator has developed and progressed on, she's able to take an awful lot more of that on. We would link in with newspaper adverts if that was required and the administrator is now able to do a lot of that work and to liaise with Smoking Concerns.*

Some interviewees expressed a lack of clarity of the role that a PHP should take in terms of the cessation services and to what extent they should be involved at a more strategic level. For example, at the time of the interviews, some but not all PHPs were involved in promoting the services to other health professionals, managing the LHCC smoking cessation staff and attending strategic planning meetings related to the broader subject of tobacco control. As one PHP explained:

> *We seem to have focused really an awful lot on getting cessation up and running and that's probably rightly so in terms of that's where the money went and about the pharmacy service and about the Maudsley service. But to a lot of people it seems that that's all that happens and it's not all that happens. There is other work that goes on. There is [also] the tobacco policy work.*

Smoking Concerns provides funding for LHCCs to employ smoking cessation group administrators, coordinators, and advisors/facilitators. Funding is allocated annually on the basis of a local funding formula based on population and levels of deprivation. Some LHCCs have added to these funds to allow fixed term contracts for staff and to facilitate protected time for service development.

The role of trained facilitator/adviser is fairly clearly defined across LHCCs. They are responsible for delivering smoking cessation treatment – in other words offering behavioural support to smokers in a group format. These individuals have all undergone Maudsley training. Training is, however, not restricted to health professionals and some coordinators and facilitators have also taken on the role of trained advisor. In many cases this has worked well but it may also have contributed to some confusion about 'who does what' in relation to smoking cessation in particular areas.

Interviewees reported that the role of coordinators and administrators varied significantly between LHCCs. This has in part arisen because although the service level agreement sets out expected service outputs and outcomes, it does not cover issues related to staffing. As funding is time-limited and non-recurring, few LHCCs use it to employ new staff. As a result there are differences in role, job description and sometimes salaries between staff offering services in different LHCCs.

In some LHCCs the coordinator is also the administrator responsible for everything related to the smoking cessation groups e.g. local promotion to staff and public,

venue booking, appointments etc. Some of these coordinators and administration staff are also trained facilitators/advisors. In some cases, lack of clarity about roles and remits has lead to confused lines of management:

> *The smoking cessation co-ordinator is just newly into post last week and we just had the meeting. There's three people that she's got down as reporting to, there's the line manager, our general manager of the LHCC, some professional responsibility and issues, to me and a professional responsibility to Smoking Concerns as well.*

Interviewees reported that different roles and responsibilities could lead to tension between LHCC staff with similar job titles but with different job grades and responsibilities and therefore differing remuneration. Smoking Concerns staff recognised that there was a potential lack of clarity about staff roles. As one interviewee acknowledged:

> *Very confusing. It is confusing for us as well …the key contact is a smoking cessation advisor and they will run the groups, but they are also doing the admin. In some areas there will be a smoking cessation advisor but they will have an admin person who will take the referrals.*

She agreed that some clarification of roles or 'key competencies' is probably needed as services develop further:

> *In the guidelines it says who does what but maybe we should just clarify in our minds what we think a coordinator is … some admin people have taken off and become a coordinator, doing the training [and] going from a Grade 3 or 4 up to a Grade 6 …I think it comes back to competencies, they have to be written down because I don't think it is necessarily just a nurse's role.*

Promoting Services

As with any new service, publicity and promotion have been important issues for Smoking Concerns and the LHCCs since funding became available for smoking cessation. Interviewees described service promotion as a significant challenge. Initially there appears to have been some confusion about who should take responsibility for publicising the service and many interviewees commented on a lack of time and resource to do so.

Interviewees reported that a number of different techniques have been used to recruit clients, some more successful than others. For example in one area community events had been very effective and in another local newspaper advertising has proved successful.

> *We have done and we do as much community work as we can. We have got the flyers and the posters and the adverts in the local press. We go out as much as we can to spread the word but…I mean it is the whole thing about … our values and what we think is important is not the same as some people in the area in which we work and sometimes we just can't make the two fit together.*

Once clients have agreed to attend it was another challenge to actually persuade them to turn up for the first session. It was standard practice in several LHCCs to call

patients a number of times in the weeks/days before to remind them to attend. In spite of this effort there could be a large drop out.

> *I think that people will say yes they are interested but when you then phone them up you get the feeling that they are really not that interested. By the time you have phoned them about three or four times – which is probably more than we are supposed to – and then they don't turn up. And you can have twenty people saying that they will come along on the night and two turn up. We have had that happen. They have been phoned twenty-four hours before and they have said that yes they will be coming and yet out of twenty people only two turn up.*

In addition to informing potential clients about the service, Smoking Concerns and LHCC staff also had to promote the service amongst local health professionals. Methods employed to promote the service to professionals varied from attendance at meetings to the distribution of leaflets and letters.

Interviewees described GPs as the main referrers and so promoting services to them was seen as very important but also an ongoing challenge, requiring repeated reminders.

> *Some of them don't seem to take on board the information. On a fairly regular basis, I would send out posters, referrals forms, things like that for information for GPs and then a GP will come back … a practice will come back and say … we don't have any referrals forms, we don't know anything about it.*

Referral Pathways

Smokers can either self refer to the service or be referred by a health professional, most commonly their GP. GPs (or other health professionals) will usually offer brief smoking cessation advice to a smoker and discuss with the patient whether they feel they would like to try and quit. If they do, then the doctor or health professional will either give the Smoking Concerns telephone number to the patient or complete a referral form.

Recent research has suggested that a smoker may be more likely to quit if they have been referred to a smoking cessation clinic by their GP (McEwen et al, 2004). Many clients attending the Glasgow services are referred by their GP but not all GPs were described as supportive. As one interviewee said,

> *There are some GPs who refer regularly and most GPs I would say don't use the service as much as they could.*

In one LHCC, a GP practice had established an automated referral system and this was described as having increased referrals significantly.

> *One practice, on their own initiative, has set up a computerised referral form on their GPASS system, which is the practice that we're getting most referrals from. We think that's part of the key, so that's one area we want to look at and find out how they've done that and can we use that in other GP surgeries and would that make a difference to our referrals, rather than them having to go and find a form, get the form completed*

and send it up. It's all printed out and they just send us the printed copy. See whether that can make a difference.

An additional issue raised by interviewees in relation to GP referrals was the fact that in some cases the group-based service was perceived as less accessible than the pharmacy-based service, Starting Fresh. Some patients are referred to Starting Fresh by their GP because access is perceived as quicker and, in some cases, the GP is more familiar with Starting Fresh than the group service as a result of promotion by drug reps and others. The GP only has to send the patient to their nearest participating pharmacist and the client is likely to be seen immediately. In contrast, it may be some weeks before the LHCC has enough names to begin a new group and therefore individual clients may have to wait to access the group service. As one interviewee described:

When the Starting Fresh pharmacy project came on board and the GPs heard about that, that was a lot easier for them cos they just said, go to the local pharmacy. And I would say that's still the case and that's a problem because they're not actually assessing the person's level of addiction and … what is the most appropriate service for them. So they really are referring just to the local pharmacy.

Training

The training of advisors is organised by Smoking Concerns with a rolling programme of initial training courses and regular updates. Smoking Concerns pays for Maudsley trainers to come to Glasgow and deliver training locally. This enables each LHCC to have a bank of staff they can call on to run smoking cessation groups. Advisors do not have to be health professionals and an increasing number of non-medical coordinators and administrators are undergoing training in group support.

There's a mixture. We've got practice nurses, district nurses, health visitors, some of the newly trained staff are school nurses, public health people. We've got one admin member of staff but she's not actually run a group so far. So anybody within the LHCC who has an interest can take it forward and be put forward for the training.

The quality and frequency of training was generally highly regarded by interviewees. As one coordinator stated:

The bones of it are very good. The training behind it is very good, the support from Smoking Concerns is very good.

However, staff turnover means that there is a constant requirement to train new staff:

We've had a few problems in that quite a few of the girls who were originally trained to be advisors have moved on. So we're now left with a very small pool of staff and we're really at the stage where we really need to have more facilitators trained, so we are relying more and more on bank facilitators, you know, or somebody comes from Smoking Concerns to cover.

Supporting staff to attend update training can also be difficult if they are expected to attend in their own time:

They can't always get away from their main job to go and do that. Or if you've worked all day to go to an evening training for which they're not paid, so they would have to do it out of their own interest. It isn't easy to persuade people to do it and really, should they do it in their own time is another issue because it's something they're only doing twice a year. There's a whole load of issues around that.

Few public health practitioners have been trained as smoking cessation advisers. Training PHPs in smoking cessation was described as 'non-essential' and some PHPs reported that their managers had rejected their request for smoking cessation training on a time and/or cost basis.

Several interviewees suggested that training should be extended to include other staff in the NHS that spend time with patients on a one to one basis, so that they know something about the services and can signpost people into the system more confidently.

I think training's a big thing. I think there could be more training for particularly GP receptionists, people who are the front line of the public, first contact in doing brief intervention, getting the conversation going, knowing where to send them, telling people their options, that type of thing. Because they meet the most people, most often. And also that they know when someone comes in to ask about it, they know where to refer them and I don't think that's too hot at the moment. I think they struggle to think what to do. Also for health visitors and nurses and podiatrists. They have somebody sitting in their chair for at least 20 minutes I'm told and they could do a lot of intervention work while the person's sitting there because one of them told me they do run out of things to say about your feet and the weather.

Some interviewees felt that there were wider training needs:

Other facilitators have also mentioned things like managing a group, how to control, not quite challenging behaviour but a person that talks too much, or the negative person how to deal with that.

Also a bit more updating on what's happening in Glasgow and beyond. Any changes coming with NRT for instance … Clients come into the groups, look up the Internet and find all sorts of miracle things on it, including acupuncture and that type of thing and they ask you about it. But we have no actual facts that we know are correct, just what we've picked up in the media. So a wee update on that type of thing, how to deal with questions from clients. Things like, I think one of the lozenges has a lot of sodium in the content but it's not made clear to us, so it wouldn't suit somebody with kidney problems. So just to make us aware how to best help if a diabetic patient because their eating pattern'll change and their requirements for insulin change, how best to advise them … that type of thing would be helpful.

We're not trained in the best ways to tackle issues from somebody with mental health needs. Also young people and cannabis use and that's been flagged up at various seminars over the last few years. I strongly feel that these are two areas that we work in a cessation field basically there's no training for.

Treatment

The treatment offered by the LHCC services can be either group or, in a very small number of cases, one to one counselling advice from a trained advisor, supported by the prescription and use of either NRT, Bupropion (Zyban) (occasionally both products) or will-power (West et al, 2000). Evidence suggests that group counselling support is more effective than one to one although recent studies in England have suggested that, given the choice, clients often favour one to one (Judge et al, 2005).

In the Greater Glasgow area, patients attending the group counselling support may collect their prescriptions weekly from a pharmacy that is participating in the 'Starting Fresh' scheme. The vast majority of pharmacies in Glasgow are now able to offer this service. NHS Greater Glasgow has a contract with Pfizer for NRT to be dispensed by pharmacists. Prescription collections continue beyond the final group support session (usually about week 7 or 8) until week 12. Clients can choose to have their CO monitored by the pharmacist throughout the treatment period.

> *That's the 12 week programme that they run. If we have somebody come into a group, when they're given their [NRT request form], we'll ask them to go to one of these pharmacies and get their prescription there cos they're set up to take the [NRT request forms].*

Whilst many SC smoking cessation staff saw the link with the Starting Fresh services as an excellent adjunct to their group support, effectively extending the period of support from 7 to 12 weeks, there were a few reported problems. Firstly not all pharmacists participated in the scheme, secondly some pharmacists were unable to cope with demand, and thirdly some pharmacists had contradicted prescription advice given by advisors. Most staff had found that closer liaison with pharmacists had overcome the problems.

> *We've had some issues where the pharmacist or the pharmacies get to their limit very quickly as to the amount of people they can sign up for their Starting Fresh programme. So we have to then try and identify the actual pharmacies that still have places for people if they want to go and do the one to one with the pharmacist rather than the group. We do regularly get a list of which pharmacies are signed up for the programme. It doesn't tell us who are at capacity and who still have places for people to go to, however.*

> *We've had issues with [NRT request forms]. They're [pharmacists] not agreeing with the way the NRT was dispensed. Some pharmacies sending people back to their GP when there shouldn't have been a need to. They were sort of one-off issues and the facilitators at the time who were dealing with it were very good and they actually dealt direct with the pharmacies. I didn't even get involved in it. And the pharmacies, once you got to speak to them, were very helpful back and sorted out the issues.*

Running Groups

The Service Level Agreement introduced by Smoking Concerns stipulates how LHCCs should run smoking cessation groups. This is based on existing evidence and national guidelines (West et al, 2000, NHS Health Scotland, 2004) . Forty people

must be on a waiting list before a group can be run. The expectation is that if forty people express an interest in attending a group then, allowing for drop-out, at least fifteen will be guaranteed to attend the first session.

LHCCs run groups for a period of seven weeks facilitated by two trained Maudsley advisors. The number of groups held per annum depends on the population size and the ability to recruit local people to attend. At the time of the study, the average number of groups per year is six. Some LHCCs offer one-to-one support and/or telephone support in addition to intensive group support as part of a wider package of services.

Interviewees were asked in detail about their experience of managing and facilitating groups. Several issues arose, including:

- Timing of groups
- Numbers attending
- Waiting times
- Need for flexibility

Timing of groups

The SLA between Smoking Concerns and the LHCCs stipulates that group sessions should be available both during the day and in the evening to suit the needs of a range of clients. Some LHCCs work closely with clients to determine specific times that suit them in order to maximise the potential of groups. Others are more dependent on the availability of facilitators and opening hours of venues.

> *When we send out the pack there is a little questionnaire in it that we put in ourselves and it is to ask what suits them daytime, lunchtime or evening and they tick one. What venue … and they pick.*

> *… [we] had to choose one where there were afternoons or evenings, or mornings. We did some focus group work in all the areas and decided that there were two main issues coming up. One wanted the group during the day and one wanted the group during the evening. At the time we did a focus group, there were more evening requests coming from the [area A] end than there were the [Area B] end. So we have kind of followed that pattern in a sense.*

Although evening groups were reported to be the most popular, interviewees described advantages and disadvantages associated with running both day and evening groups. Day groups could exclude working people whilst evening groups could exclude parents with young children and older people. To get around this some LHCCs ran groups at different times in order to suit the majority.

> *Day time's better and then next thing you know, evening has a better turn out. Day time is very popular though, particularly in the winter with elderly, people with children at school and there's quite a few men that attend.*

> *We've used a health centre at night. Most of ours have been evenings. So far, we've found there's been a better response for evenings than daytime. We've had health centre, community centres, several different community centres we've used. Mainly evening groups, a couple of daytime groups. That's it.*

Numbers attending groups

The SLA stipulates that LHCCs should not initiate a group if they cannot recruit at least 40 clients at the outset, which allows for a natural drop-off to about 15 clients. Whilst in some areas there were few reported difficulties in getting the required numbers of clients, in other parts of the city there have been problems in obtaining sufficient numbers.

> *We aim for 15 to 20 but the last group I think 13 came but we ran the group anyway, although we shouldn't have…the service agreement says there should be 15 or more attending*

> *A lot of the time, we probably have slightly smaller numbers than Smoking Concerns would like us to have at initiating a group but because of the way we actually get the clients, the numbers … almost all of them turn up. Here if we've got 20, 18 of them will generally show.*

In areas where client recruitment to groups has been a real problem, alternative forms of support for smokers were being explored. In one LHCC in particular, attempts to obtain the 40 necessary smokers to initiate a group had been largely unsuccessful. Interviewees pointed to a number of possible contributing factors, including the promotion of the Starting Fresh scheme in the area and GP willingness to refer to Starting Fresh rather than considering the group service. Another possible contributor was client preference for one to one support. As a result the number of groups the LHCC was able to run had reduced:

> *In [area X] maybe one group a year, two a year.. because we're not getting the numbers. Now the referral forms are saying … they're offering a choice of groups or one to one and the people are going for one to one… The service that they are choosing is the one to one.*

Waiting times

Some LHCCs have successfully run groups on a consecutive basis and waiting times were not described as an issue. However because of the difficulties in recruiting people in some areas, there have been long gaps between groups. Interviewees described long waiting times as a significant disincentive for smokers. Some people inevitably lose interest and drop off the list when they have to wait for a long period of time.

> *This waiting and waiting…I'm sure a lot of folk don't like that and for us, trying to book a hall and facilitators, to know when you'll get that 15 who'll definitely turn up is difficult. I think just to get the service established, you might have to run at a bit of a loss until word of mouth proves it.*

> *I think one of the reasons that the groups haven't been very successful is to do with numbers and the fact that you can wait a few months before we have enough people to run a group. By that time people will have lost interest. You can't strike while the iron is hot if you have to wait to gather the numbers. I think if we had a higher number of people interested and we could run the groups more often I think it would get things moving on a bit more effectively.*

Need for flexibility

Interviewees were asked about potential barriers to service development and group size was frequently cited as a problem. The fact that the service level agreement stipulated the number of smokers required was perceived as too rigid by interviewees in some LHCCs. Interviewees argued that the SLA did not take into account population size, deprivation levels or specific local circumstances.

> *Smoking Concerns really like us to have forty people before you start a group and a minimum of fifteen turning up at the first session. In this LHCC we have found that is nigh impossible …We have got twenty in each [group] and if you waited any longer people would be waiting three of four months and they would feel that nothing had happened for them.*
>
> *I think from the barrier side, a lot of it is down to … as I say again about territorialism. People will not come out of their areas. We have looked at maybe running groups with even smaller numbers, you know, maybe around 12 because of that. It's maybe one of the issues that we need to look at.*

Interviewees from Smoking Concerns explained that the framework for group numbers had been developed on the basis of the Maudsley guidelines and that issues of cost-effectiveness and consistency across LHCCs were important.

> *They say, in some LHCCs ... well, I don't think we need 15 to 20 people in a group. So why should we have to wait until we've got about 40 names on a waiting list to send out these letters … we could run a group with 10 … the whole point of a larger group is that people don't feel so naked. The whole point of it is it's an evidence based thing … the Maudsley have said … do not run a group unless you've got 40 names and at least be guaranteed 15 of those 40 coming forward. It's been proved in some LHCCs who just say … och, we'll just do our own thing … they've whittled down and they've got 2 facilitators and one person left in the group. Nobody in the Scottish Executive or any government's gonna give out money to anybody to run groups that are not cost-effective.*

Whilst understanding the importance of running groups based on best available evidence, however, many interviewees felt that there should be more scope for adapting the rules to match local circumstances.

> *I think that if they were prepared to be a bit more flexible we have ideas that might help to promote things in a different way. We are not wanting to run services that don't have an evidence base. All that we are wanting to do is to try different ways of raising awareness of the service.*
>
> *Difficult for people on low incomes, low self esteem, poor housing…to motivate themselves to wait maybe 8 weeks, maybe longer if it's the summer… that's difficult …*

The guidelines were also seen to be potentially problematic for specific groups or for certain sectors of the population.

> *We don't really have a good service for shift workers either. There's groups of people we're missing out on but we keep trying.*

Trying to do a group in, say, a rural area then I could have 5 or 6 smokers who're willing to come to a group but that was not by the guidelines. I can't sanction a group, so I then have to do a sort of mini group with them if I can, which can put a bit of a barrier up.

I am bound by the service level agreement with Smoking Concerns. So I deliver the groups by that agreement. This year we've implemented a referral process and a support process for people with poor housing because that's one of the issues here is that I've had nurses who have housebound clients [but] I'm not sanctioned to go out and do house visits [so] that's a target area as it is very difficult for them if they're elderly.

Targeting

NHS smoking cessation services are intended to be accessible to anyone who is motivated to quit smoking. However, *Smoking Kills* and subsequent policy documents in both England and Scotland have made it clear that there are subgroups of the population who are a priority for smoking cessation and wider tobacco control measures (DH, 1997). These include pregnant women, young people (in terms of prevention as well as cessation) and economically disadvantaged smokers. Efforts to help disadvantaged smokers to quit are particularly important as smoking prevalence rates are significantly higher amongst these smokers than the general population.

We asked those professionals providing cessation services in Glasgow's LHCCs about their approach to targeting particular groups of smokers. At the time of our interviews, the majority of those we spoke to reported that their service is not specifically targeting priority groups and was open to all members of their community who want to quit smoking.

I don't target anyone. I just put the adverts out and people respond.

I mean, it's open access and it's really just whoever refers them, so obviously the GP, you know, do a lot of referrals as well. If anybody wants to quit smoking, we will take them. A lot of the groups are very, very mixed in both income, age group, from quite elderly people coming along to young women and men in their 20s, you know. It's very, very mixed.

Despite adhering to the principle that the service should be open to all, however, interviewees were aware of the importance of reaching particular groups. There was a general understanding that smoking in pregnancy was an issue, and some interviewees were aware that there was a specific service for pregnant women in Glasgow, also coordinated by Smoking Concerns. Alternatively interviewees expressed the view that the needs of pregnant women were better addressed by one to one support within ante-natal services rather than groups run by the LHCCs. Others acknowledged that addressing smoking with young people was also important but again this was perceived as an issue for schools or other parts of the health service, rather than the existing LHCC services.

In contrast, interviewees were all aware of health inequalities as an issue and the role of smoking in increasing inequalities. Treating smokers living in deprived areas was described as a priority. Coordinators and facilitators within LHCCs, as well as Smoking Concerns staff, viewed reaching these smokers as extremely important. However, when pressed on this issue it was unclear whether there were specific local

strategies to ensure that the service did reach these groups. There were no specific local targets or guidelines in place to assist local professionals in reaching deprived smokers, and the SLA agreed between Smoking Concerns and the LHCCs did not stipulate that targeting should take place.

One issue that interviewees highlighted was the fact that all or most of their local area could be described as "deprived" and thus they must by default be addressing inequalities.

> *We tend to just wait and see who comes in but the majority of our clients will be from those communities because it's the bigger portion of our area. I think the GPs are…they just want anyone who wants to stop smoking to stop. Perhaps health visitors mention it more and there's a greater incidence of smoking in these areas anyway, so you would expect more to be coming from there.*
>
> *We don't [target] and that's something I've thought about. But it seems to be that our groups in the first place, most of the people, they're perhaps not, em … your social class 5, there's lots of social class 4, and I think they are quite attracted because of the free NRT or reduced rate NRT and we don't seem to have as many middle class people. But then again that's a reflection on the numbers of people that smoke. It tends to be … you know … people of a lower socioeconomic background who are smokers.*
>
> *About eighty five percent of our population fall into depcats six or seven so it is not a case of targeting.*

While interviewees could not point to any specific local targeting strategies, many LHCCs had attempted to recruit more disadvantaged smokers through promoting the service and running groups in venues that were perceived as accessible and acceptable to these communities. There is evidence from other research that providing access to services in socially disadvantaged areas can be very difficult (Bauld et al, 2002, MacIntyre, 2001). However, studies of the effectiveness of English smoking cessation services have found that services can be successful in reaching smokers from disadvantaged communities (Chesterman et al, 2005, Lowey et al, 2004). Approaches such as advertising the services in deprived areas, using community venues such as libraries and community centres and training local people to be smoking advisers were successfully employed (Pound et al, 2005). Similar approaches have been used in Glasgow.

Techniques employed to recruit people living in disadvantaged communities within Glasgow to the service include awareness raising events in local communities and through community groups, and advertising the service in a variety of venues.

> *We have tried to raise awareness within the GP surgeries. We have been round pubs, clubs, bookies. We have advertised in the local press. The administrator will go along to any community groups that are having health event. We have done our best in terms of raising awareness. I suspect that the main problem is to do with the area that we are in that people don't see smoking cessation as being high on their list of priorities in terms of the difficulties that they face.*
>
> *The main thrust of it is blanket coverage but we do also, maybe have stalls or information days within particular community venues and … and*

that would be about targeting, you know, more hard to reach groups and, as I've mentioned, they don't really come out of their area, so that it's certainly something that we have to do.

In LHCCs where the population was perceived as more mixed, emphasis was put on providing services in the deprived part of the LHCC through choice of venue.

… I mean, the one thing I'd say possibly because of having the … the sessions in [a venue in a deprived area] there's more people who live nearby who attend and the surrounding area of here is probably the most deprived bits of [our area]. So that might influence who comes along.

We chose [venue X] and [venue y] because that's where our disadvantaged centres were and we chose them specifically.

Whilst attempts have been made to attract people and recruit them to the service, there have still been difficulties in many areas in getting sufficient numbers of people from disadvantaged communities to attend groups.

The big barrier is what other people have got on in their lives and … and, you know, in areas of deprivation that … for them, smoking's not the priority and that's a big barrier for a huge number of people. We get told that by the facilitators. There was one group that the facilitator will hold their hands up and say they didn't manage particularly well. It was just the members of this group had such huge issues in their lives, you know, when they've got mental health issues and they've got … you know, serious physical health issues within members of their family and alcohol … there are so many social problems and smoking is not high up on their agenda. But the fact that they come along to the group's good, you know, but these are, … these are big, big barriers for a lot of people.

A recent analysis of the client records in Glasgow suggests there may be further work to be done if services are to successfully help disadvantaged smokers to quit. The study (the abstract can be found in Appendix 1) examined client records of a small number of LHCC clients as well as a much larger cohort of pharmacy service clients. Findings suggested that although services were indeed reaching smokers living in deprived areas, the numbers attending from these communities and the short term cessation rates of these smokers were not high enough to begin to address inequalities in health caused by smoking in the city (Chesterman et al, 2005a). It may be that at the time of the analysis, and indeed our interviews, group-based services were still at a relatively early stage of development and in some cases were struggling to attract any smokers, let alone those most in need of cessation support. More developed – and indeed more extensive – services may be required if successful efforts at targeting are to be undertaken.

Venues

In addition to highlighting the importance of selecting appropriate service locations in order to reach deprived smokers, LHCC interviewees also raised a number of other issues in relation to venues for group support.

The rental of venues for running groups is paid for with funds from Smoking Concerns. The cost implications have meant that many groups use health centres, as these incur no extra charges. Whilst many found the use of health centres acceptable, in some areas they were felt not to be the best option.

We chose the health centre initially because the health centre is quite central and quite accessible for people and it's also quite an acceptable venue. We also did attempt to offer the services at other venues and we have got the capacity to do that and we would be happy to do that but the demand for the service was not there.

… the cost implication is my main concern. I tend to use the clinic here because I can get that free. It's also central and most people know the venue and I can use the reception area two evenings a week if I so wish. I use the community centre, which is again, it's quite central and it's known by the majority of people … the other venues they were talking about £15 an hour which, given the budget that we've got from Smoking Concerns to provide this and the limitations that I've got from the LHCC which doesn't have a lot of money to supplement my post etc it's just not feasible. So those are the preferred venues and the ones that we use just now.

We hire halls from the Council. The health centres don't really have a suitable room and we only have one health centre. The rest are just small GP surgeries in our LHCC so it's easier to hire a hall.

The availability of public transport and transport links were also regarded as important factors in venue selection.

So we normally choose a venue if it's close to major transport links and it's not closed essentially to a section of the community.

We set the group up according to where our referrals have come from. So if all our referrals are coming from [area X] which is what happens a lot of the time, we try and set the group in [area X] because a lot of these people will not have their own transport. Quite a lot of elderly people. They will not get a bus down to the other end of the south side in an evening.

In terms of selecting venues in disadvantaged areas criteria such as access, acceptability to the local community, territoriality, and safety and security were regarded as significant. The local context and types of acceptable venue to the community, as well as recognition of pre-existing community development activity, are important factors in determining where and how groups should be run.

Some places have used church halls which some people have felt were targeting religious organisations. Some were held in community venues where others felt that if you didn't belong to that organisation, then you weren't welcome. So we've tried to hold one in a library which is fairly central and a health centre. Generally we chose those two places because our LHCC is quite large and these are in the largest population centres for our disadvantaged communities.

We try to get venues that people knew, that were instantly recognisable like the local sports centre that everybody knows where X sports centre is because it's right in the park…so regardless of the GP you would maybe feel more comfortable because there were other reasons that you would be going there.

Areas where there was little history of active community activity were seen to be at a disadvantage in not having the same opportunities for networking and acceptance by the local community.

> *We haven't got all these community groups that we can say … this is where we'll come and run a group. Because we just don't have a Healthy Living centre or the community centres that we do have are used for other things and couldn't really be used for smoking cessation. There is a community centre that she did try in [area X] but, apart from anything, they were coming into the building and everybody was smoking in it or people were standing at the door for a cigarette, they weren't smoking inside. So right away it's off-putting and that can be a barrier where you haven't got the same partners to work with and we haven't got people out there who are saying, come and do a group with this, or come and do this, that or the next thing. So we've got to do it all ourselves.*

Furthermore, local boundaries and territoriality are major issues in many communities in Glasgow.

> *People from [area X] will not come down to [area Y]…generally speaking they won't, they can't envisage moving from that area. They just don't do that.*

> *We do use other community halls, so that it is much more localised as well but, again, for us it's getting the numbers to be able to do that, you know, for a particular local area. We do have a lot of territorialism, and it's really difficult to get people to come outwith their area.*

Safety and security were also an important consideration.

> *There's been some venues in the past we've used even in the other LHCC and it's a wee bit … it's in a dark area and it's a bit dodgy, there's always crowds hanging about. People … older people especially … won't come to that. It's bad enough getting older people to come out at night but if they're going to be walking into an area that's not the safest environment, they'll no come.*

Relapse Prevention

Research suggests that up to 75 per cent of smokers will relapse within one year, even after a successful quit attempt supported by cessation services (Judge et al, 2005). There is, however, very little evidence to assist services in developing effective relapse prevention strategies and Glasgow's group services are not currently funded to provide any structured relapse prevention. Following the initial 7 weeks of group support, smokers can continue to collect their NRT and can have their CO levels monitored for an additional 5 weeks by a pharmacist.

Despite the existence of the pharmacy service, some LHCC interviewees felt that this level of support was not enough and that the group service should have the capacity to offer relapse prevention.

> *… I think there has to be more money and training put into helping people avoid relapse. There's no point getting people through the door, into a programme, if you don't have a safety net there for them if they relapse. I'm not saying that everybody's going to pick up the phone, but if it is*

there … Seeing the same person, having a chat, having a link there … I think relapse prevention has to be looked into. I would say that should be next stage plan.

Interviewees reported that some clients were returning to groups for a second time indicating that they had not been successful in their earlier attempt to quit yet still required support. Under the SLA clients may return for another quit attempt after 6 months.

Unfortunately we're in the situation now where we do have people coming back for a second time but it means that the group was successful at some point for them, that they want to come back to a group and not go to one with Fresh Start [pharmacy service] and that they feel able to approach us again and have another go.

When services were first established in LHCCs there were early efforts to offer some relapse prevention support but the success of these varied:

There's been some groups where they've met for a few weeks afterwards, maybe once a month, just to see how they're doing. Maybe somebody from one group will come into the next group towards the end to tell them look, I'm still a non smoker, you can do this. So we do that sometimes, eh, but it's not an automatic thing. initially when we first set up the groups, they did have a format in place where they encouraged people to meet again but that's not the way they're running them anymore. So it tends to not happen so much any more.

There is supposed to be a follow-up group a month after that and then I think three months after that. We have never succeeded in running those because people haven't turned up. We have had the month one and the staff have turned up and I think one person turned up and the next time nobody turned up.

In other areas interviewees reported demand for more ongoing group support beyond the seven week period. Some LHCCs offered this service on an informal ad hoc basis. This relied on the goodwill of staff to attend in their own time and without pay.

We're finding out now that after the 7 weeks, people still want to meet for another 2 or 3 weeks after it. They just feel … well, we've only quit for 5 weeks, we really need a bit more support. Some of our nursing staff have been meeting with them in their own time after work because we can't pay them to go and do that. Just out of the goodness of their hearts, they're actually going to meet people and follow them up which isn't really ideal. I mean, these are people that are already working a full week, to go and do that in their own time. It's not something that's sustainable really.

A buddy system operates in some areas.

The other thing we encourage them to take up is the buddy system which has been quite good in our groups. The past two groups we've done, they've ended up going to clubs together, in fact, the past three or four groups. The swimming classes all started from about 6 from one of the afternoon groups started going to a swimming group together.

The need for more resource and training for relapse prevention was identified by many interviewees.

> *What we may need to do is to target lots of people who have quit to come back and talk … and support each other and we're looking at the possibility of having a drop in session facilitated by a Maudsley facilitator, on a weekly or a monthly or an hour in a community centre or something like that. We do telephone support now but I haven't received any formal training but I do it anyway because anyone can offer support.*

> *… we don't have that flexibility. It's about not trusting your staff I would say, it's about not recognising that they can make decisions on things like that. It's not deviating hugely from the Maudsley model but it's about seeing your area and what maybe works for your area but at the moment we're not allowed to do that.*

Future of Services

Although intensive group support cessation services have now existed within the Greater Glasgow area for several years, they are still at an early stage in their development. It is not until relatively recently that the majority of LHCCs have been able to run groups and at the time of our interviews the service was still treating relatively small numbers of smokers – less than 1,000 per year. In part this is due to the time and effort required to appoint staff, train advisers and promote services. It is also due to the relatively small amount of funding available for the services in the city. NHS Greater Glasgow has also invested significantly in the pharmacy service and wider tobacco control activities, leaving a relatively small pot of money available to resource intensive group support.

The level of resource available for smoking cessation in the Greater Glasgow area is increasing, however. In Scotland as a whole funding for smoking cessation services rose from £3 million in 2004/05 to £7 million in 2005/06, with further increases promised in the future. This means that NHS Greater Glasgow is currently expanding its smoking cessation provision, although the extent to which this expansion will benefit the group-based services remains unclear. In the concluding part of our interviews, we were interested in learning more about local professionals' opinions regarding priorities for future development. We asked them to reflect on the current position of services and how provision could be improved.

Three main themes emerged. First, interviewees were largely positive regarding what their local service had achieved thus far and optimistic about scope for further development. Secondly, they emphasised the need for more resources if services were to expand, particularly in the context of impending structural changes within the NHS. Finally, they had very clear views about a role for services in addressing the needs of particular groups of smokers in the future.

> *Overall, interviewees were extremely positive about the progress that had been made in their LHCC in developing intensive cessation services. They were also positive about the coordinating role adopted by Smoking Concerns and the foundations this had established for further development.*

> *I think it is a very good service, the feedback, report figures are good. The local GPs are proactive and we've got good linkage, good*

communication with the pharmacies and a steady uptake of clients. I think we have covered a lot of clientele but we need to reach more.

The training is very good, the support from Smoking Concerns is very good. I think what we have needed all along, however, is more time and more resources. Now I think that should be becoming more available, and the service will blossom. I think it will continue to grow.

Other interviewees acknowledged that service uptake had been good in some parts of their LHCC and not others, and that more needed to be done to improve consistency:

It is good in some areas. We know that in other areas it is not so good. Even the public health practitioners have asked us to do a bit of work in some areas. But some of it we just haven't been able to get round to because we don't have the capacity at the moment, but we've not forgotten about it …

Not surprisingly a recurrent theme was the need for more resources to fund local services. Often this was expressed in terms of the need for better staffing levels in order to more effectively promote the services and attract clients, as well as facilitate groups and offer one-to-one provision when needed. Some LHCC staff also expressed concern about the balance of resource between Smoking Concerns and local services:

There is a central function that needs to remain but more of it should be devolved. At the moment it seems like the tobacco money goes to Smoking Concerns yet we are supposed to be providing the service, a wide ranging service and how is that sustainable. Give us the job to do but give us more money to do it with.

Pressure on staff time and resources could become more acute with the shift from LHCCs to Community Health Partnerships (CHPs) in Glasgow. The move to CHPs involves changing current LHCC boundaries and will inevitably result in some merger of services. Some interviewees, particularly public health practitioners, were concerned about the implications of this shift:

We are in a position now where we are moving from an LHCC to a CHP. We have put together a document that says things can't go on the way they are unless we plan to under achieve and under perform in the tobacco issues arena because we are doing it on a shoestring without the necessary knowledge, skills and administrative back up that we should have. We're going to have an area that will increase by 50 per cent and a population that's going to increase by 50 per cent. To cover [this] we will need a full time coordinator or administrator at least.

Other concerns about the move to CHPs involved the possibility that individuals with relevant skills will change jobs or that there will be competing demands on the time of professionals currently involved in managing or delivering cessation services.

On the basis that there will be an expansion of the intensive group service, however, interviewees fairly consistently pointed to the need to reach a wider group of smokers and to adapt the service to meet the needs of particular sub-groups. There was a feeling that the intensive group service should be able to support those with more

complex needs, but that further development and expansion was required to make that possible.

> *I do feel happy with where we've come from in terms of getting a smoking cessation coordinator in place and having these groups running all the time, but I do feel, who knows whether we are getting the 'right' type of people just now. Maybe we are getting the most motivated who might stop on their own, but I think it is a good starting block because it is only through someone coming in the door to a service that they'll be able to share it with other people and it will be that dripping tap effect. Through time lots of people will know about the service.*

The need to tailor services to address the needs of older people, ethnic minorities and other groups was raised by a number of interviewees. In some LHCCs work had been undertaken to support members of these groups but in most cases this was described as the 'next step' for services.

> *Future development in this area, we want to target the elderly as well as the young. I've got an amazing number of older people who want to stop smoking, a lot of them for financial reasons. So I think the elderly need to be looked at. We also need to look at people who are housebound who can't come to groups, can't come to one to ones. All that is something we have to look at in the future.*

> *There are housebound clients, mental health clients, youth clients, there are a range of clients with social issues who are hard to target and I feel we could be doing more … if I had more resources here.*

> *Unfortunately we've not had any people from the black and ethnic minority community joining our groups to date … there are some cultural issues and some barriers there that we need to look at.*

Interviewees also returned to the issue of reaching smokers living in disadvantaged areas and some of the challenges inherent in encouraging these smokers to access services.

> *I think it is incredibly difficult to attract some smokers … What we as health professionals may see as a priority, for example smoking cessation and breastfeeding, are not seen as priorities by people within our communities. Their needs don't fit with ours so there is a real conflict there. I do think that in order to try and work within a community even to raise awareness of smoking within that community or try and get them to see it as a higher priority it means that things have to be very locally focussed. We have to stay locally focussed.*

> *We need some sort of structure about how we would do this [reach disadvantaged smokers]. At the moment it is a kind of grey area. We need to think about this, when we are a Community Health Partnership we need to think about targeting. We really need to sit down and say how can we do this.*

Conclusion

The enthusiasm and commitment of those coordinating, managing and delivering intensive group cessation services in Glasgow emerged very clearly during our

interviews. There is obviously scope for the services to expand and develop in the future. This section has sought to highlight some issues in relation to how the service is structured, staffed and delivered. There is work to be done in improving the consistency and effectiveness of interventions and interviewees have pointed to some of the challenges that need to be addressed in helping more smokers to quit. The next section of this report outlines findings from our analysis of client and service data.

CLIENTS AND OUTCOMES

In addition to exploring the delivery of group support services in Glasgow through interviews with staff, we analysed data from smokers accessing the service during a ten month period from July 2004. As part of the service level agreement between Smoking Concerns and LHCCs delivering the service, routine data about all clients were already collected. However this data was fairly limited and we developed a more detailed form with colleagues from Smoking Concerns and in consultation with smoking cessation advisers from LHCCs. This extended client monitoring form was based on data collected as part of the extended minimum dataset used in the English national evaluation of smoking treatment services (McNeill et al, 2005). It also drew on key questions from the national minimum dataset for Scotland that was being developed by Partnership Action for Tobacco and Health (PATH – part of ASHScotland) at around the same time the research was commissioned.

This component of our study outlines findings from the analysis of client records between July 2004 and May 2005. We begin by describing the methods used and then outline the results from this part of our research. This is followed by a discussion of key findings.

METHODS

Data were collected from clients attending smoking treatment services delivered by fourteen LHCCs across Glasgow. Following agreement with Smoking Concerns regarding the content of the monitoring form, meetings were held with smoking cessation advisers and coordinators and public health practitioners from the LHCCs to introduce the research and explain the content of the extended monitoring form. Following this meeting, Smoking Concerns staff provided support to each LHCC by attending the first or first few meetings of each new smoking treatment group initiated during the study period to encourage completion of the forms and deal with any concerns regarding content or client consent. Data from the forms were then entered onto a database by an administrative assistant at Smoking Concerns and made available in an anonymised form to the research team for analysis.

Treatment regimens

Each LHCC offered intensive group support to clients. In a very small number of cases (5 people) one to one sessions with smoking advisers were provided rather than group support. Smokers attended a group facilitated by a trained smoking cessation advisor for seven sessions at weekly intervals. The quit date corresponded to week 3. The 4 week smoking status was given at week 7 (4 weeks after the quit date was set). Smokers were also encouraged to use NRT or bupropion to assist their quit attempt. The vast majority of smokers used NRT, provided through one of the pharmacies in Glasgow participating in the Starting Fresh scheme.

Data

All intensive group smoking treatment services collected data about each smoker who was in contact with the service and set a quit date. This included personal details, ethnicity, referral source, education, employment and household circumstances, smoking history, smoking status and some details of the intervention

received at four week follow up. Data were collected with quit dates set between July 2004 and May 2005.

Data supplied to the research team were kept anonymous, while including information about the deprivation category of users' place of residence, which was derived from postcodes. In order to avoid a breach of confidentiality postcodes were not provided directly to the research team, since in some circumstances these could allow the identification of individual users.

Table 1: Sample of records

Sample	Number of records
Number of records between July 2004 and May 2005	689
Number of records excluding those with no consent given	545[1]
Sample for analysis: number of records excluding those with no quit date recorded	448[2]

Notes:
1. Include 20 cases with missing postcodes (and hence missing deprivation deciles).
2. Include 17 cases with missing postcodes (and hence missing deprivation deciles).

The initial sample of 689 records represents the total number of records with quit dates between July 2004 and May 2005. Excluding users who gave no consent reduced the number of cases to 545. When cases with no quit date recorded are excluded, the number of cases reduces to 448. These cases with no quit date had smoking outcomes which did not differ significantly from the remainder of the group. Variables were only included in the analysis if the proportion of missing values was under three per cent. This meant that, for these included variables, the proportion of cases with large numbers of missing values was very low, so it was not felt necessary to exclude such cases. Thus, out of 33 key variables in the 448 cases, 288 cases (64.3 per cent) had only 0 or 1 missing values, a further 89 cases (19.9 per cent) had 2 missing values and only 16 cases (3.6 per cent) had between 5 and 9 missing values, with only 7 cases (1.6 per cent) having 10 or more missing values.

Measures

Personal and service characteristics
From the routinely collected data a wide range of descriptive indicators was available, shown in Table 3. Socio-economic status was defined by scoring one for each of the following six criteria that applied: education finished by 16; single parenthood; rented housing; unemployed or permanently sick or disabled; whether eligible for free prescriptions and aged under 60; resident in the most disadvantaged lowest Scottish deprivation decile. Due to small numbers, the two highest scores were combined. Then, for convenience, one was added to the score, giving a range of values from 1-6, the highest value indicating greater disadvantage.

Outcomes
On week 7 of the group meetings, which equates to 4 weeks post follow up, users were asked if they had smoked in the last 2 weeks to determine their quit status. When this was not possible the advisor contacted them by telephone up to 6 weeks post quit date. If the advisor failed to contact them after 3 attempts the users were classified as lost to follow up. A user was counted as having successfully quit smoking at the 4 week follow up if they had not smoked at all in the previous two weeks (not even a puff). When users reported having quit, CO-validation was

conducted wherever possible on the basis that abstinence assumes a CO reading of less than 10ppm.

Smoking status could then be classified into four possible outcomes: 'CO-validated quitters– CO reading of 1 - 9'; 'self-reported quit without validation'; 'non-quitters'; and 'lost to follow up'. As there were only 12 smokers who were self-reported quitters, one primary outcome was derived for the purposes of this analysis: 'whether user was a CO-validated quitter with a CO reading of 1 - 9'.

Predictors used in modelling
Each characteristic listed in Table 3 was used to provide a pool of predictor variables, provided the proportion of missing values was less than 3 per cent and the variable was not dominated by one value. This meant excluding 3 variables, each with over 5 per cent of values missing, together with a further 7 variables which were dominated by one value. When a variable was included in computing the socio-economic status score, it was excluded as a separate predictor. 'Where client heard of service' was excluded because it was related to referral source, already included. Those variables excluded from the predictor pool are flagged in Table 2. Age is treated as a continuous variable. Socio-economic status was expressed in terms of two dummy variables; a score of 1 and a score of 4 or more. Weeks NRT and weeks bupropion were reduced simply to whether the client was treated with NRT, and whether with bupropion. All categorical variables are recoded as a number of (n-1) dummy (two value) variables. Missing values for age were assigned the nearest integer to the mean value. Missing values for remaining (dummy) variables were assigned the most frequent value (normally 0). In view of the very small proportion of missing values, this is unlikely to bias the models.

Statistical Methods

First, bivariate relationships were examined for the dependent variable and the socio-demographic and dependency factors associated with users and the characteristics of services. Frequency distributions were used to describe the sample of 448 and the mean values of each of the cessation rates associated with each factor were calculated. Significance tests for these mean values were of three types depending on the variable. In the case of dummy (two value) variables, a chi square test with continuity correction was applied. For continuous variables, a one-way analysis of variance was used. When a (quasi-) continuous variable has been categorised, a one-way analysis of variance on the original (quasi-) continuous variable was applied. Secondly, a multivariate approach to the relationship between the dependent variable and case characteristics was adopted. The relationships between CO validated cessation rate and personal/service characteristics were investigated using logistic regression analysis. Statistically significant variables were identified using forward stepwise logistic regression after being entered in two blocks: personal characteristics; type of intervention (including referral type) and LHCC. The analysis was repeated entering all variables simultaneously and then using backward stepwise logistic regression analysis, to assess whether the model could be improved.

Table 2: Smoking status at four weeks after quit date

Smoking status	N	%
CO-validated quitter – CO reading of 1-10	199	44.4
Unvalidated quitter	12	2.7
Smoker	75	16.7
Lost to follow-up	162	36.2
Total	448	100.0

Results

Table 2 shows the smoking status of service clients at four-week follow-up. Just under half of the sample (44 per cent) were CO validated quitters, rising to 47 per cent when self-reported quitters (12 people) were included. A small proportion of clients – 17 per cent – were recorded as smoking at four weeks, with a much larger group (36 per cent) lost to follow-up.

A wide range of client and service characteristics was associated with cessation at the bi-variate level. Results are shown in Table 3.

Table 3a: Frequencies of characteristics of smokers and CO-validated 4 week cessation rates: basic characteristics

Characteristic	Valid values		4 – week cessation rate (%) (significance level, P)
	N	% of valid values	CO-validated: score of 10 or under
Gender			
Male	139	31.0	53.2
Female	309	69.0	40.5
Total	**448**	**100.0**	**44.4**
			(P=.016)
Age			
21 – 30	19	4.3	36.8
31 – 40	70	15.8	41.4
41 – 50	37	30.9	46.7
51 – 60	97	21.8	42.3
61 – 70	108	24.3	46.3
71 - 80	13	2.9	61.5
Total	**444**	**100.0**	**44.8**
			(P=.367)
Deprivation decile			
(a) Scottish			
1	173	40.1	39.3
2	68	15.8	39.7
3	24	5.6	58.3
4	29	6.7	37.9
5	13	3.0	38.5
6	26	6.0	53.9
7	4	0.9	75.0
8	8	1.9	0.0
9	22	5.1	54.6
10	64	14.8	56.3
Total	**431**	**100.0**	**44.1**
			(P=.023)
(b) Glasgow			
1	46	10.7	43.5
2	52	12.1	38.5
3	62	14.4	32.3
4	47	10.9	40.4
5	53	12.3	49.1
6	34	7.9	44.1
7	35	8.1	42.9
8	37	8.6	51.4
9	35	8.1	54.3
10	30	7.0	56.7
Total	**431**	**100.0**	**44.1**
			(P=.020)

Table 3a: Frequencies of characteristics of smokers and CO-validated 4 week cessation rates: basic characteristics (cont'd)

Characteristic	Valid values		4 – week cessation rate (%) (significance level, P)
	N	% of valid values	CO-validated: score of 10 or under
Deprivation quintile (continued)			
(a) Scottish			
1	241	55.9	39.4
2	53	12.3	47.2
3	39	9.0	48.7
4	12	2.8	25.0
5	86	20.0	55.8
Total	**431**	**100.0**	**44.1** (P=.023)
(b) Glasgow			
1	98	22.7	40.8
2	109	25.3	35.8
3	87	20.2	47.1
4	72	16.7	47.2
5	65	15.1	55.4
Total	**431**	**100.0**	**44.1** (P=.020)
Age finished full-time education			
10 – 15	178	42.8	42.1
16	153	36.8	41.8
17 – 20	54	13.0	57.4
21 and over	31	7.5	51.6
Total	**416**	**100.0**	**44.7** (P=.090)
Employment status			
In paid employment	196	45.8	48.0
Full-time student	3	0.7	0.0
Homemaker/full-time parent or carer	22	5.1	31.8
Retired	95	22.2	47.4
Permanently sick or disabled	69	16.1	33.3
Unemployed	25	5.8	44.0
Other	18	4.2	66.7
Total	**428**	**100.0**	**44.9** (P=.059)[1]
Housing status			
Owner occupier: owned outright	71	16.1	56.3
Owner occupier: buying on a mortgage	166	37.7	50.6
Renting	191	43.4	36.7
Other	12	2.7	25.0
Total	**440**	**100.0**	**44.8** (P=.004)[1]

Notes:
1. Chi-square test.

Table 3a: Frequencies of characteristics of smokers and CO-validated 4 week cessation rates: basic characteristics (cont'd)

Characteristic	Valid values		4 – week cessation rate (%) (significance level, P)
	N	% of valid values	CO-validated: score of 10 or under
Number of adults aged 16 or over (including self) in household			
1	130	29.7	41.5
2	200	5.8	46.5
3	73	16.7	49.3
4	28	6.4	46.4
5 or over	6	1.4	16.7
Total	**437**	**100.0**	**45.1** (P=.951)
Number of children in household			
0	301	69.2	45.5
1	74	17.0	33.8
2	46	10.6	60.9
3 or more	14	3.2	42.9
Total	**435**	**100.0**	**45.1** (P=.532)
Lives with spouse/partner			
Yes	236	53.6	47.9
No	204	46.4	41.2
Total	**440**	**100.0**	**44.8** (P=.189)
Anyone to support client to quit smoking?			
Yes	326	76.9	43.3
No	98	23.1	46.9
Total	**424**	**100.0**	**44.1** (P=.597)
Ethnic group			
White – Scottish	420	93.8	43.8
White – Other British	28	6.2	53.6
Total	**448**	**100.0**	**44.4** (P=.418)
Eligible for free prescriptions			
Yes	268	61.3	42.9
No	169	38.7	48.5
Total	**437**	**100.0**	**45.1** (P=.294)
Entitled to income support			
Yes	115	27.1	36.5
No	310	72.9	47.7
Total	**425**	**100.0**	**44.7** (P=.050)

Table 3a: Frequencies of characteristics of smokers and CO-validated 4 week cessation rates: basic characteristics (cont'd)

Characteristic	Valid values		4 – week cessation rate (%) (significance level, P)
	N	% of valid values	CO-validated: score of 10 or under
Socio-economic group score (based on whether full-time education finished by age 16, single parent, rented accommodation, unemployed or permanently sick/disabled, entitled to free prescriptions, in most deprived deprivation decile).			
1 Least deprived	48	11.0	68.8
2	125	28.5	47.2
3	79	18.0	50.6
4	95	21.7	35.8
5	54	12.3	31.5
6 Most deprived	37	8.4	37.8
Total	**438**	**100.0**	**45.0** (P<.001)
LHCC			
NE1	37	8.3	54.1 (P=.290)
NE3	22	4.9	40.9 (P=.905)
NE4	41	9.2	34.2 (P=.221)
NE5	8	1.8	25.0 (P=.449)
NE6	17	3.8	11.8 (P=.012)
S1	39	8.7	35.9 (P=.341)
S2	38	8.5	47.4 (P=.832)
S3	29	6.5	44.8 (P=1.000)
S4	38	8.5	42.1 (P=.897)
S5	31	6.9	35.5 (P=.395)
W1	43	9.6	69.8 (P=.001)
W2	29	6.5	34.5 (P=.357)
W3	51	11.4	54.9 (P=.147)
W5	13	2.9	46.2 (P=1.000)
Workplace	12	2.7	50.0 (P=.920)
Total	**448**	**100.0**	**44.4**

Table 3b: Frequencies of characteristics of smokers and CO-validated 4 week cessation rates: smoking history

Characteristic	Valid values		4 – week cessation rate (%) (significance level, P)
	N	% of valid values	CO-validated: score of 10 or under
Years smoking			
1 – 10	9	2.3	33.3
11 – 20	339	84.8	44.3
21 – 30	39	9.8	48.7
31 – 40	13	3.0	50.0
41 – 50	1	0.3	100.0
Total	**400**	**100.0**	**44.8** (P=.105)
Cigarettes smoked daily			
10 or under	36	8.1	61.1
11 – 20	217	48.8	46.5
21 – 30	134	30.1	44.0
31 and over	58	13.0	24.1
Total	**445**	**100.0**	**44.0** (P=.001)
Time elapsed between waking and first cigarette			
Within 5 minutes	199	45.3	34.7
6 – 30 minutes	184	41.9	51.1
31 – 60 minutes	35	8.0	48.6
More than 60 minutes	21	4.8	71.4
Total	**439**	**100.0**	**44.4** (P<.001)
How easy is it to go a whole day without smoking?			
Very easy	6	1.4	66.7
Fairly easy	35	8.0	45.7
Fairly difficult	177	40.5	48.6
Very difficult	219	50.1	39.3
Total	**437**	**100.0**	**43.9** (P=.060)
Determination to quit			
Not at all determined	1	0.2	0.0
Quite determined	60	13.8	35.0
Very determined	189	43.3	47.1
Extremely determined	186	42.7	44.1
Total	**436**	**100.0**	**44.0** (P=.381)
Number of previous quit attempts in past year			
0	127	28.6	38.6
1	155	34.9	45.8
2,3	122	27.5	48.4
4 or more	40	9.0	42.5
Total	**444**	**100.0**	**44.1** (P=.272)

Table 3b: Frequencies of characteristics of smokers and CO-validated 4 week cessation rates: smoking history (cont'd)

Characteristic	Valid values		4 – week cessation rate (%) (significance level, P)
	N	% of valid values	CO-validated: score of 10 or under
Age when quitted smoking			
21 – 30	19	4.3	36.8
31 – 40	70	15.8	41.4
41 – 50	37	30.9	46.7
51 – 60	97	21.8	42.3
61 – 70	108	24.3	46.3
71 – 80	13	2.9	61.5
Total	**444**	**100.0**	**44.8** (P=.367)
Do you smoke mainly for pleasure or to help you cope?			
Mainly for pleasure	115	26.2	53.0
About equally	98	22.3	32.7
Mainly to cope	226	51.5	44.3
Total	**439**	**100.0**	**44.0** (P=.011)
Does anyone with you smoke?			
Yes	136	31.0	41.9
No/does not apply to me	303	69.0	44.9
Total	**439**	**100.0**	**44.0** (P=.634)
Health in last 12 months			
Good	138	31.6	48.6
Fairly good	171	39.1	50.9
Not good	138	29.3	31.3
Total	**437**	**100.0**	**44.4** (P=.005)
Heart disease			
Yes	39	8.8	33.3
No	402	91.2	45.3
Total	**441**	**100.0**	**44.2** (P=.210)
Stroke			
Yes	10	2.3	40.0
No	430	97.7	44.4
Total	**440**	**100.0**	**44.3** (P=1.000)

Table 3c: Frequencies of characteristics of smokers and CO-validated 4 week cessation rates: smoking intervention

Characteristic	Valid values		4 – week cessation rate (%) (significance level, P)
	N	% of valid values	CO-validated: score of 10 or under
Referral source			
Self-referral	208	47.7	40.4 (P=.068)
GP	139	31.9	48.2 (P=.445)
Practice nurse	58	13.3	50.0 (P=.516)
Dentist/dental staff	3	0.7	33.3 (P=1.000)
Pharmacist	3	0.7	33.3 (P=1.000)
Consultant	3	0.7	33.3 (P=1.000)
Midwife	1	0.2	0.0 (P=1.000)
NHS24			0.0 (P=1.000)
NHS smokers helpline; e.g. smokeline	9	2.1	66.7 (P=.332)
Other	11	2.5	72.7 (P=.121)
Total	**436**	**100.0**	**45.2**
Where client heard of service			
Friend/relative	112	25.5	46.4 (P=.681)
Newspaper/magazine	16	3.6	18.8 (P=.066)
Poster/billboard	54	12.3	42.6 (P=.899)
Car sticker	1	0.2	100.0 (P=.909)
Website/internet	7	1.6	42.9 (P=1.000)
Radio	2	0.5	100.0 (P=.381)
Poster/card	6	1.4	50.0 (P=1.000)
GP/nurse/surgery/health centre	148	33.6	42.6 (P=.671)
Other	94	21.4	47.9
Total	**440**	**100.0**	**44.3**

Table 3c: Frequencies of characteristics of smokers and CO-validated 4 week cessation rates: smoking intervention (cont'd)

Characteristic	Valid values		4 – week cessation rate (%) (significance level, P)
	N	% of valid values	CO-validated: score of 10 or under
Group support			
Yes	434	99.5	43.8
No	2	0.5	50.0
Total	**436**	**100.0**	**43.8** (P=1.000)
One-to-one support			
Yes	5	1.1	60.0
No	431	98.9	43.6
Total	**436**	**100.0**	**43.8** (P=.779)
Pharmacy scheme			
Yes	430	99.5	44.0
No	2	0.5	0.0
Total	**432**	**100.0**	**43.8** (P=.592)
Buddy scheme			
Yes	3	0.7	66.7
No	445	99.3	44.3
Total	**448**	**100.0**	**44.4** (P=.845)
Other support			
Hypnosis	1	0.2	100.0 (P=1.000)
Laser treatment	1	0.2	0.0 (P=1.000)
Midwife	1	0.2	0.0 (P=1.000)
Self	1	0.2	0.0 (P=1.000)
Self and smokeline	1	0.2	0.0 (P=1.000)
No other support	443	98.9	44.9 (P=.119)
Total	**448**	**100.0**	**44.4**

Table 3c: Frequencies of characteristics of smokers and CO-validated 4 week cessation rates: smoking intervention (cont'd)

Characteristic	Valid values		4 – week cessation rate (%) (significance level, P[1])
	N	% of valid values	CO-validated: score of 10 or under
Weeks NRT used since quit date			
0	21	4.7	42.9
1	5	1.1	0.0
2	47	10.5	0.0
3	62	13.8	1.6
4	48	10.7	4.2
5	87	19.4	47.1
6	142	31.7	80.3
7	36	8.0	88.9
Total	**448**	**100.0**	**44.4** (P<.001)[2]
Weeks bupropion used since quit date			
0	433	96.7	44.3
2	4	0.9	25.0
3	2	0.4	0.0
4	2	0.4	0.0
5	3	0.7	100.0
6	3	0.7	66.7
7	1	0.2	100.0
Total	**441**	**100.0**	**44.4** (P=.272)[2]

Notes:
1. Significance level, P, refers to a chi-square test unless otherwise stated.
2. Significance level, P, refers to a one-way analysis of variance.

Table 3 shows the relationship between client and service characteristics and cessation outcomes at bi-variate level. Beginning with basic characteristics, women were less likely to be successful in their attempts to quit (41 per cent) than men (53 per cent) although they made up over two thirds of clients accessing services. Older smokers were, on average, more likely to quit than younger clients although these results were not statistically significant.

The extent to which clients were living in more or less disadvantaged areas was also associated with cessation. Table 3 shows a breakdown of cessation rates by Scottish and Glasgow deprivation decile and quintile. These are drawn from the Index of multiple deprivation (IMD), a composite measure of area deprivation, based upon various scales related to factors such as income, employment, health, education and housing (DETR 2000). All 1222 electoral wards in Scotland were listed in rank order of their total IMD scores. Wards were then categorised into 10 groups of deprivation deciles numbered 1 (high deprivation) to 10 (low deprivation) with equal numbers in each group, (the Scottish deprivation decile). Because such a high proportion of the 144 wards in the Greater Glasgow area are very deprived (deprivation category 1), it was decided to create a second deprivation decile, (the Glasgow deprivation decile) computed by listing in rank order just those wards located in Glasgow. These measures of area deprivation show two things. First, the high concentration of clients who live in the most deprived areas. The majority of smokers accessing services (56 per cent) were living in areas classified as amongst the 20% most deprived wards in Scotland. These smokers were less likely to quit (39 per cent) than those living in the

most affluent areas (56 per cent). This was also the case with the Glasgow deciles, where smokers living in the most deprived 10% of areas in the city were less likely to quit (43 per cent) than those in more affluent areas (57 per cent).

A number of other client characteristics were associated with successful cessation. For instance, those who were in employment (48 per cent) or retired (47 per cent) were more likely to quit than those who were unemployed (44 per cent) or permanently sick or disabled (33 per cent). Likewise owner-occupiers (56 per cent) were more successful in quitting than those who were tenants (37 per cent). Whether or not a client was on income support was associated with cessation, with those receiving this benefit having higher CO validated quit rates (48 per cent) than those not eligible (36 per cent). Similarly, more disadvantaged socio-economic groups had lower cessation rates than more affluent smokers, with the quit rate varying from 69 per cent for group one (most affluent) to 38 per cent for group 6 (least affluent).

Clients received services delivered by fourteen LHCCs in Glasgow and four week quit rates varied between areas at the bi-variate level. NE1 LHCC and W1 LHCC havd higher quit rates than others, whereas NE6 LHCC had a cessation rate of just 12 per cent (although this area treated very few smokers during the study period).

Smoking history and behaviour also affected quit rates. Those smoking 10 or fewer cigarettes per day were much more likely to quit (61 per cent) than those smoking 31 or more (24 per cent). Those who normally began smoking within five minutes of waking were less likely to quit. Several indicators of health status are included in Table 3 and self-reported health in particular was associated with cessation. Clients who defined their health as ‘not good’ were less likely to quit (31 per cent) than those who defined their health as ‘good’ (49 per cent) or ‘fairly good’ (51 per cent).

Elements of the service received by smokers also affected outcomes. The vast majority of clients accessed the service through self-referral or were referred by their GP or practice nurse. Those who were referred by their practice nurse or GP were more likely to quit, although results were not statistically significant. Those who used NRT for six weeks or more were more likely to quit, as were those who used bupropion for a longer period, although only 15 clients used this pharmacotherapy.

Table 4: Multivariate Analysis of 4 week Outcomes

	B	Sig.[1]	Odds ratio
Personal characteristics			
Female	-0.581	.012	0.560
Socio-economic group score 1 (least deprived)	0.737	.034	2.091
Smoking history			
Smokes first cigarette within 5 minutes of waking	-0.410	.057	0.663
Smokes 31 or more cigarettes daily	-0.902	.009	0.406
At least one attempt to quit smoking in previous year	0.460	.050	1.585
Self-reported health poor	-0.582	.014	0.559
Not at all/quite determined to quit smoking	-0.638	.038	0.528
LHCC			
NE6[2]	-1.794	.006	.166
W1	0.885	.016	2.424
W3	0.649	.043	1.915
Sample size		**448**	

Notes:
1. Significance of change in –2 log likelihood.
2. There were only 17 cases in the NE6 LHCC.

Multivariate Analysis

Results from multivariate analysis are presented in Table 4. A small number of factors were significantly associated with cessation. Women, with an odds ratio of 0.56, were less likely to quit than men. More affluent smokers were more likely to quit (OR. 2.1). Factors related to smoking history were also associated with successful cessation in the short term. Two indicators of heavier dependence – whether the first cigarette was smoked within 5 minutes of waking, and when the number of cigarettes smoked per day was 31 of more – were associated with lower odds of quitting (OR 0.66 and 0.41 respectively). Smokers who had attempted to quit at least once in the past year were more likely to succeed. In contrast, those who had lower levels of motivation, defined as ‘not at all determined’ or ‘quite determined’ to quit had lower odds of success. Smokers who defined their own health as poor were less likely to quit (OR 0.56). Finally, four week quit rates did vary depending on which part of the service delivered treatment. Smokers who accessed services in two LHCCs in western Glasgow had a higher chance of success, whereas those treated by an LHCC in the north of the city had lower odds of quitting.

Discussion

Intensive group support services in Glasgow are successfully helping smokers to quit. Results suggest that just under half of clients accessing services and setting a quit date will have stopped smoking at four weeks. We know from previous research that it is possible to estimate the number of quitters a service will achieve at one year based on CO validated four week quit rates (Stapleton, 1993, Judge et al, 2005).

Between two-thirds and three-quarters of four-week CO validated quitters will relapse by one year. Using the figure of smokers accessing the service during a ten month period as a baseline, we can estimate the number of smokers that are likely to access the service in a twelve month period - 827. With a 44 per cent CO validated four-week quit rate between 90 and 120 of these clients will be non-smokers at one year.

These findings can be directly compared with a recent study of treatment services in two areas of England (Judge et al, 2004). Four week CO validated quit rates in the English study were slightly higher (53 per cent) but the two studies differ in terms of the characteristics of both clients and services. Some useful comparisons can, however, be made, and these may help to further explain the nature of the client group accessing intensive group support in Glasgow and which factors can affect outcomes. We discuss key findings in relation to socio-demographic characteristics, smoking behaviour and service characteristics.

Socio-demographic characteristics

The majority of clients accessing intensive group support services in Glasgow are living in deprived circumstances. Two-thirds of smokers who participated in this study are living in the poorest 40% of wards in Scotland, with just one in five living in the most affluent 20% of areas in the country. Less than half of study participants were employed, most had low levels of education and a significant proportion were entitled to income support. A growing number of studies are examining the relationship between socio-economic status and smoking cessation and they all point to one consistent finding – that poorer smokers are less likely to quit. This study further supports this finding with lower cessation rates apparent across a range of socio-economic indicators.

Findings in relation to other client characteristics are also consistent with other studies. Although women are more likely to access treatment services, they are less likely to be successful in their quit attempts and our results suggest this also applies to intensive group support clients in Glasgow. Interestingly, while older smokers were more successful in quitting in this study, age did not appear as a predictor in our multi-variate analysis. Health status can also affect cessation outcomes, and this study supports previous research that suggests that smokers who define their own health as ‘poor’ in the past twelve months are less likely to quit.

Smoking Behaviour

Cessation outcomes can also be affected by the smoking behaviour of clients, including their smoking history and their level of addiction. In the CO validated model shown in Table 4, more heavily dependent smokers, defined as those who smoke within five minutes of waking and those that smoke 31 or more cigarettes per day – were less likely to quit. Descriptive results also indicate that a range of other factors related to smoking behaviour can influence whether or not a client quits, including years of smoking and previous quit attempts.

Some indicators of smoking behaviour point to differences between Glasgow respondents and those participating in the English study that help to shed some light on the nature of the client group accessing intensive group services in Glasgow. While the proportion of clients in both studies who could be defined as ‘heavy’ smokers (21 or more cigarettes per day) was similar, a higher proportion of the Glasgow sample (45 per cent) smoked a cigarette within five minutes of waking than those in the English study (34 per cent). A slightly higher proportion of the Glasgow

sample had attempted to quit in the past year (61 per cent) than in England (55 per cent). In addition, a far higher proportion of Glasgow clients, when asked whether they smoked 'mainly for pleasure', 'mainly to cope' or 'about equally', responded that they smoked 'mainly to cope' (51 per cent) when compared with the English client group (21 per cent). These indicators of dependence, when combined with findings relating to socio-economic status, suggest that services in Glasgow are treating a group of smokers with complex needs who may require particularly intensive support to quit.

Service Characteristics

Intensive group support services in Glasgow are delivered by LHCCs following a service-level agreement with Smoking Concerns that stipulates how group treatment should be managed and delivered. This is based on the Maudsley model of smoking cessation. This means that the type of treatment provided to smokers in this study was fairly consistent and as a result we did not examine the same variety of service characteristics as those covered by the English national evaluation. We did examine some elements of the intervention such as source of referral and receipt of NRT and bupropion and findings were broadly consistent with the English study. The one element that differed significantly was information regarding the location of treatment, in terms of which LHCC delivered group services attended by the smoker. Results from our multivariate analysis suggest that smokers receiving treatment delivered by two LHCCs in particular were more likely to quit at four weeks: W1 and W3. Descriptive results highlight the variation in quit rates between LHCCs although some treated relatively small numbers of smokers during the study period. What this suggests is that the manner in which local groups are organised and possibly factors such as the quality of facilitation can affect outcomes, even when a similar model of service is being delivered. This presents challenges for those coordinating and commissioning services in terms of quality control, training and support.

Conclusion

This study confirms results from the available literature, including a recent evaluation of services in England, that smoking treatment services in Glasgow – consisting of intensive group support plus access to appropriate pharmacotherapies – can help smokers to quit. Outcomes are however influenced by a wide range of factors, in particular the socio-economic status of smokers and their smoking history, as well as some elements of the service they receive. A key finding from this study is that intensive group support services in Glasgow are serving a largely deprived client group, many of whom are heavily addicted and have made several attempts to quit before accessing services. In order to improve cessation rates further it may be necessary to examine differences between LHCC groups in terms of facilitation and the support they are providing. It may also be necessary for service providers to more closely examine the characteristics of smokers accessing their service to identify those who may need more intensive support, particularly during the initial weeks of group intervention. We explore other issues relating to service efficacy in the overall conclusion to this report.

PHARMACY SERVICE

In addition to group-based interventions, smokers in the city can access help to quit through the Glasgow pharmacy stop smoking project, Starting Fresh. This involves a network of accredited community pharmacies across Greater Glasgow providing one-to-one support to smokers and supplying NRT. Starting Fresh began in 2003 following an initial pilot project and rapidly grew to include the vast majority of pharmacies in Glasgow. As of September 2005 there were 180 pharmacies participating in the scheme, representing 81 per cent of all pharmacies in the city.

Starting Fresh is managed by the Public Health Pharmacist and supported on a day to day basis by the project officer, both based in Greater Glasgow NHS Board. The service has a client database and some internal monitoring and evaluation of the scheme has taken place.

The aim of this exploratory study of Starting Fresh was to examine issues related to the development and delivery of the service and to begin to look at client outcomes through secondary analysis of the client database. The study had four specific objectives, to:

- explore pharmacists' views of the nature of treatment they are able to offer smokers through the Starting Fresh programme.
- examine current arrangements for monitoring Starting Fresh clients in a sample of pharmacies, and to explore their capacity to collect more detailed data.
- conduct secondary analysis of the existing database of smoking cessation clients (from 'Starting Fresh' and LHCC groups) to examine issues of service reach and effectiveness.
- explore the extent to which a more comprehensive, longer-term evaluation of the service would be possible.

Findings are divided into two sections. First we describe the qualitative component of the study. Secondly we outline findings from our analysis of client records. The overall conclusion to this report discusses key issues emerging from both strands of work and considers options for future research.

INTERVIEWS WITH PHARMACISTS

This section presents findings from our interviews with pharmacists participating in the Starting Fresh service. After outlining the research methods used, the findings describe: the background of the service; training; recruitment; service operation; and, monitoring arrangements. We conclude with a discussion of some issues and challenges facing Starting Fresh.

Methods

This was a qualitative study based on interviews with community pharmacists and other pharmacy staff working throughout Greater Glasgow. Greater Glasgow NHS Board provided up-to-date data of all participating pharmacies.

A sampling frame was devised to include pharmacies located in a mix of more affluent and deprived areas (based on Glasgow deprivation decile scores), with varying throughput (based on client monitoring data) and to cover the 15 LHCCs in Greater Glasgow. Using this information a series of matrixes were developed and the researcher randomly selected 27 pharmacies from each. Pharmacists in all 27 were initially contacted by letter and then a follow-up phone call. Of the original sample five declined for reasons including lack of time and having no regular pharmacist in the shop. Those that declined were replaced, where possible, with pharmacists meeting the same criteria. The final sample comprised 26 pharmacists or supervisors. In the final sample all LHCCs are represented; Ten are from corporate chains (Boots, Moss or Lloyds), 14 from independent pharmacies and two were based in health centres. A further joint interview was undertaken with the Starting Fresh Project Officer and Public Health Pharmacist from GGNHSB. This was to provide information on the context, background and setting up of Starting Fresh.

An interview topic guide was developed that drew on previous research on smoking cessation and took into account particular themes of relevance to the Glasgow service. Interviews covered the following topics: development of the service locally; training issues; recruitment and factors affecting take-up; how treatment is delivered; links with Intensive Group Support services and other local strategies; current arrangements for monitoring; views on collecting more detailed data.

Interviews were conducted by LL between April and July 2005. All interviews, except two, were conducted at the pharmacists' workplace. Interviews varied in length ranging from 15 minutes to over one hour. The majority of interviews were tape-recorded. Sixteen interviews were selected by the researcher to be transcribed in full. The remaining interviews were listened to in full by the researcher, notes were made and where relevant verbatim talk recorded. Data analysis was conducted by LL and LB. Researchers read a sub-sample of transcripts to identify themes and principal issues. At a subsequent meeting, the researchers shared their findings and agreed how to refine the themes and integrate them into a final report. The researcher then analysed all the transcripts and drafted a summary of findings. As with our analysis of interviews with professionals involved in group-based services, this qualitative analysis followed the 'framework' approach, commonly used in applied policy research (Ritchie and Spencer, 1994).

Background

Starting Fresh is a network of accredited community pharmacies across Greater Glasgow. Its aim is to offer an easily accessible, cost-effective smoking cessation service by means of weekly behavioural support and access to NRT. Starting Fresh commenced operation in June 2003. Prior to this a small pilot was undertaken that involved 43 pharmacies (January – March 2000 then extended funding until May 2002). The pilot explored the role of the pharmacist in giving out the NRT as the pilot took place before NRT became available on prescription. The evaluation of the pilot proved to be successful and on this basis Starting Fresh was rolled out across Glasgow. At this point it also coincided with NRT becoming available on prescription from community pharmacies and the role of community pharmacy shifting in the direction of greater involvement with public health initiatives.

Starting Fresh involves the provision of only one form and brand of NRT. This is because a decision was taken to invite tenders from NRT suppliers to try and negotiate access to the product at reduced cost to the NHS Board. Following the tendering process, the successful bidder for the provision of NRT patches was Pfizer/Pharmacia that supply Nicorette patches. GGNHSB receive a discount on Nicorette 16-hour patches that are available in three strengths. Pharmacy fees are covered by the discount from Pfizer for the supply of Nicorette products, and the cost of the NRT is met by the primary care division of the Board.

When the project was launched in June 2003 96 pharmacists initially participated. Involvement in Starting Fresh has gradually increased and has occurred at different stages. In September 2005 there were 180 (out of 217 in the GGNHSB area) participating pharmacies. New pharmacists are recruited to the project through two main methods. Firstly, in order to become accredited the pharmacist must have attended a GGNHSB training course. A rolling programme of training occurs at different points throughout the year and all pharmacists (and other pharmacy staff) are invited to attend. Secondly, trained pharmacists may move to other pharmacies, where the project does not exist, and they are able to get it started in their new venue.

All participating pharmacies receive a fee for their involvement with the service. Since May 2004 fees have risen from £20 per client to £30 per client for full completion of the 12-week programme. For every client who expresses an interest (so-called week zero) but fails to return to join the programme a fee of five pounds can be claimed. There are varying rates for different stages of client involvement. Between weeks one and four a pharmacist can claim for £14. The rate is £10 for weeks 5-8 and £6 for weeks 9-12. All pharmacists are supplied with the relevant forms for recording monitoring information about clients and for making claims for payment. Project monitoring is an essential part of the service in order for pharmacists to claim their payment, and also so that the service can be evaluated.

Training

One requirement of participation in Starting Fresh is that pharmacists must have attended a GGHNSB recognised training event and completion of an authorised NRT training programme. There is very little available research in pharmacy-based smoking cessation. However, the small number of studies that do exist suggest that community pharmacists, with brief intervention training, can provide support which doubles the quit rate of smokers using NRT compared to those who obtain it from

untrained pharmacists (Maguire et al, 2001, Sinclair et al, 1998). GGNHSB run a rolling programme of Starting Fresh training for pharmacists and staff throughout the year. Pharmacists and assistants can also successfully complete the Scottish Centre for Post Qualification Pharmaceutical Education (SCPPE) Smoking Cessation distance learning pack. An online training programme is available for pharmacy assistants. Completion of smoking cessation training programmes approved by pharmacy companies such as Boots are also recognised.

Data provided by the GGNHSB (August 2005) indicate that 426 staff have been through the training programme, of which 217 are pharmacists. The vast majority of pharmacists that were interviewed had been trained (in one pharmacy a locum was awaiting training). However the level and consistency of training varied for other members of staff. In some pharmacies all staff had undergone training whereas in others only a minority of staff had been trained or were waiting to attend the training.

> *We've got quite a well trained up team, quite a lot of dispensers that have attended the starting fresh training as well so we've got quite a lot of staff that can actually see people.*
>
> *Three of the staff have been on the training. I've been on the training and one of the girls has not officially been on the training but I'm quite happy for her to go on it.*
>
> *They're not trained to the Starting Fresh….definition of being trained. There's just me.*

Some pharmacists have taken advantage of several training opportunities around smoking cessation and tobacco control issues, whereas others have attended minimal training.

> *I've been on seminars, yes. There, there was one that was done at the Grosvenor a few years ago …getting ready for the smoking cessation project coming on board, I've been to various talks with the various people who are involved with Nicorette …and so on.*
>
> *I trained on the Health Board course. I did the SCPPE distance learning course and I've been back and I tried another Health Board course for assistants.*

Nicorette also provide ad hoc training for pharmacies that want to embark on Staring Fresh at times when no other training programme is available. This involves a Nicorette representative delivering the training within pharmacies. One interviewee raised the issue that Nicorette training did not deal with some of the practicalities of running Starting Fresh, such as paperwork and monitoring.

> *Well, we actually did it a different way. Em, we couldn't, for some reason we missed out on all the training days at the, wherever it was… We did it through a representative from Nicorette coming out with his wee laptop and he went through it all. He came out on two separate occasions.*
>
> *When you're starting, the rep from Nicorette will come to your shop and train the staff in the pharmacy.*

Even when training was available, some interviewees pointed out that it was difficult to afford the time to attend.

We had an issue that three of us went to the last training one and there was one member of staff who'd liked to have gone but we couldn't actually release them at that time.

The problem is getting staff away, I know they can do it by distance learning but it's just, it's a time issue.

Staff who treated Starting Fresh clients, but who had not attended any formal training, were in some cases given guidance by trained staff (usually the pharmacist). This was referred to as "cascading" the training. Interpretation of this differed between pharmacies with some getting more input than others.

Just never had the training… I got trained by the pharmacist.

To start with they let me read through the Starting Fresh pack and they basically told me what the point of it was saying all the administrative stuff that you've got to, got to be done and then I observed them counselling and going through all the stuff…then after that I was fine to do it on my own.

Not the Saturday people, no…The two Saturday people have just read some of the pack and I showed them how to use the machine.

Some interviewees, especially those working for corporate chains, talked about the current state of community pharmacy in that some independent pharmacies have been, or are in the process of being, taken over by corporate chains. This had implications in terms of staff training and the delivery of Starting Fresh. With this restructuring taking place some reported incidences of high staff turnover and trained staff moving to other pharmacies. This meant that some pharmacies were being left with few or no trained staff. Conversely, other pharmacies were acquiring staff that were trained.

Until a couple of weeks ago we had all staff that had been on the courses and been trained but they've left so now it's really just me for the last couple of weeks…before that we had mainly counter assistants doing it.

I've got, in fact I have two girls, em, I've trained and at the moment I've only got one girl whose trained now because the other one has left.

Recruiting Clients

Promotion and publicity are important elements of Starting Fresh. In order to attract clients to the service, publicity materials with the Starting Fresh logo are provided that includes a window sticker, posters and leaflets. There is also a Starting Fresh pack that all clients and potential clients can take away. The majority of pharmacies displayed Starting Fresh materials in their premises; a minority did not.

There's a big yellow poster up on the window. It's actually just been taken off we decided there was too many posters in the window and so it's been taken out, we might still have one inside the shop. I can't remember. Em, big big yellow one that they supply.

Well, it's advertised up in the Health Centre and we've, we do have a poster that's up in, it's actually fallen off the wall but it's up in here.

Some pharmacies created their own window displays or displays in the shop. In one pharmacy there was a stand with a display publicising Starting Fresh and Nicorette products.

Apart from what the NHS does through advertising in the media and, surgeries, etc, etc, health centres, we took it on ourselves, when the smoking cessation programme came on to take one of the leaflets and have it blown up to a poster… So we had that made up, did the window display ourselves and that was a huge success

A further issue is the position regarding pharmacists working for corporate chains that have their own brand image and logo. Some reported not being able to advertise Starting Fresh.

Well, we would do posters but Lloyds won't let us put up the posters…There, there may be a board, there may be a place where you could put a board or something but you certainly can't put it in the window or anything like that to highlight that you offer the service.

They're not very, they're not very willing when it comes to things like that. You see all the leaflets we get sent in from the Health Board, like that, we're not allowed to display them.

However, others reported there being room for negotiation in this area.

I've talked to my area manager about it and although officially, we're not supposed to display stuff, my feeling is that's to stop us displaying any kind of spurious stuff. My take on it is that, obviously that's a service that's beneficial to us and our patients, so, I would be able to justify the advertising… I think that there's a degree of flexibility in the system.

A minority reported that there was little incentive to publicise the service.

It tends to be the doctors surgeries that refer them to us but we don't have anything up in the windows cause I really don't, it's not that big an incentive for me...I don't mind doing it but it's not a service that I'd like to publicise in the windows or anything.

Whilst the majority of interviewees reported using publicity materials to advertise the service, a key recruitment route was reported to be via the GP/nurse or health centres advising people to attend. This tended to be in conjunction with other methods.

A lot of folk have been passed on to it by their doctors, we've got signs up and things round at the Possilpark Health Centre just round the corner. The other folk will be referred to it by ourselves or it will be family and friends who go on it.

Yes, certainly, there's posters and leaflets in the surgeries, and the doctors are aware of the project and the practice nurses as well. They've

got posters in the windows… initially a lot of it was through the GP but I think a lot of it is now word of mouth since people started doing it.

Many reported using opportunistic methods to recruit people to the service. This included mentioning the service to people using the pharmacy for enquiring about or buying NRT products, or people with smoking-related symptoms.

Some people just come in and ask to buy patches, you know, come in and look and buy patches and we tell'em about the service.

A lot of the time it's actually through word of mouth from us, we offer diabetes and blood pressure testing as well. When they come in, one of the questions that we ask is do you smoke. So, the girls have got into the routine now of asking, we offer this smoking cessation programme and if you're interested, I can make an appointment.

People using the LHCC intensive group support service and those who are on the Breathe project (pregnancy project) can also access Starting Fresh. Issues about these routes are discussed later in this report.

Service Operation

This section covers the following themes: week zero; privacy/space; counselling and support; prescription of Nicorette; carbon monoxide testing; capacity issues; relapse prevention and support; and, links with other services.

A Starting Fresh protocol is available and distributed to all participating pharmacies. This contains all the information required for the correct running of the programme in accordance with the guidelines. Whilst potential clients can be recruited to the project through a variety of methods the onus is on individuals to go into a participating pharmacy and express a willingness to join the programme or to indicate that they have been sent by another route. Routes of referral (direct, via GP/nurse or group/pregnancy project/secondary care) are documented on the monitoring form that all pharmacists are required to complete and send back to the Project Officer at GGNHSB.

For each client the programme runs for a period of twelve weeks for successful completion. The guidance states that the pharmacist must see the client at week one but after this other pharmacy staff can see clients to deliver support. Each week the client is supplied with NRT, either at prescription charge or free if they are excluded from charges. Nicorette 16 hour patch should be prescribed, in accordance with the contractual arrangements. However, where the client does not find the product suitable from past experience, or the product is unsuitable for other reasons, then another NRT product can be supplied. In addition either the pharmacist or assistant provides support based on brief intervention negotiation techniques. Carbon monoxide levels in the clients' blood should be monitored using a Smokealyser on weeks 5, 7 and 12.

Week zero

Since its inception there have been some changes as the service responded to changes and demands set upon it. One recent change was the introduction of week zero in April 2005. Prior to the introduction of week zero clients could join the

programme on their first visit. This meant they could go into a participating pharmacy and sign up for the programme at the so-called week one. On this occasion clients would see the pharmacist who would assess their motivation for quitting and address any questions about the programme. They would also set a quit date and receive their first prescription for the appropriate NRT product.

With the introduction of week zero pharmacists do not sign clients on to the programme at this first visit. They can discuss any issues with the pharmacist and receive the Starting Fresh information pack. It is suggested to them that if they are ready to stop smoking then they should return to the pharmacy five to seven days later. If a client returns after week zero then the second visit is constituted as week one and at this point the client embarks on the programme, sets a quit date and is prescribed the appropriate NRT product.

Week zero was introduced as the service found that many people were joining the programme prematurely, possibly without being highly motivated to quit, and consequently not sustaining it. On the whole interviewees could see the benefits of the introduction of week zero in that it was an indication of people's motivation and led to more people returning and thereby sustaining the programme.

> *Before if they were very keen then we'd sign them up there and then that day and the pharmacist would speak to them and kind of assess how motivated they were and get them to decide on an actual quit date… What we found was … an awful lot of people were coming in just the one day and we weren't seeing them again after that, and I was a bit suspicious that once or twice anyway that I'm aware of, I think folk were doing it just rather than buying the patches…so now we've tightened up on that and most of the time we get people to decide on a day and get them to come back.*

> *The introduction of week zero is a better scheme that both myself and the pharmacists across the road finds quite beneficial 'cause it's sort of, it means you're not forcing the patches on to someone. If they come in and say, well I'm thinking about stopping smoking, you're not like here's patches just come back every week.*

However, some interviewees reported negative client feedback.

> *I think I've had slightly better success rates since that's happened but the other, the negative is that some people have obviously given up, say the day before, smoking and they think I'm going in tomorrow to the Abbey Chemist so they haven't smoked since the day before, they come in here and I say to them I'm not giving you the patches for a week and they say, I'm ready to give up.*

> *We are getting negative feedback from the customers, they do not like it as much because, the day before or for whatever reason they decided today's the day, which was the whole point of the zero, week zero but, em, some people, they maybe didn't understand why they wanted to give up now, you're saying, go away and keep smoking for a week.*

Privacy/space

A basic requirement of Starting Fresh is that a private counselling area is available. At the time of the interviews, not all pharmacies had such a space. Many of the interviewees reported their pharmacy being in the process of a refit or changing their layout. As part of the Community and Primary Care premises modernisation programme, funded by the Scottish Executive, a number of model health promoting pharmacies have been established. This has involved the refurbishment of premises with the installation of discrete consultation areas and in some cases treatment and consultation rooms to improve privacy and confidentiality.

Approximately half the shops visited had a private counselling area; either an area sectioned off or a private room. The others had a separate area at the counter or a hatch where counselling and support could be given.

> *We use this for our sort of head lice and our other confidential, morning after pill come here and so on and we have a room upstairs if it needs to be more private than that.*

A minority had no obvious counselling area (apart from the shop counter).

> *We don't have a special counselling area…it's just at the counter basically.*
>
> *It could do with being more private … It's not completely screened off and you're, you're just at the end of the counter so people can hear what you're discussing.*
>
> *Most people are comfortable doing it at the counter. We obviously keep our voice down because you're taking personal details. We are re-designing the dispensary though for consultation areas and we will use that for those purposes.*

Many interviewees reported that privacy was not a concern for most clients, comparing smoking cessation support to other services that might be regarded as more confidential (e.g. emergency contraception; specific health queries). Some pharmacies offered people the choice of the counter or a private area. It was reported that many clients were happy to talk at the counter even when a private area was available.

> *I actually find that most smokers don't worry too much about the privacy. Sometimes if you're talking to them over the counter they're not really that worried about it and there's not any difference from selling nicotine replacement therapy over the counter but we do, obviously, have a good private area if people are wanting to discuss, in depth.*
>
> *People don't seem to have any problem discussing it. It's amazing the number of times we're talking to a patient about it which shows that it isn't confidential because other customers will then get involved and they all encourage each other.*

Most pharmacies have a separate area for methadone administration. Only in a very small number of cases did interviewees report this area being used for the delivery of Starting Fresh. However, some felt that the perceived connection with methadone was sometimes a barrier to people accessing the service.

We have the methadone area but we don't take the smoking people in there…sometimes they prove reluctant to come around because they see it's being used as a methadone area. So, it puts a stigma to it.

Another problem is the public have a misconception that that's a methadone area, but it's a health promotion counselling area.

Counselling and support

A key feature of the pharmacy service is the counselling and support that people receive based on brief intervention methods. Most interviewees reported a degree of flexibility in the way that this was delivered. One reported that clients were offered support on three occasions that also coincided with their carbon monoxide reading, and at other times they just collected their NRT. Others reported spending time with clients every week of the programme. The amount and duration of counselling often varied depending on how busy the pharmacy was and the clients' requirements.

They only make appointment for the first week when we do a carbon monoxide reading. The second week, we assume that they are, you know, trying to give up, so we just give out the patches. Third week the same, fourth week the same, fifth week we re-see them in here.

It's counselling, support and encouragement. So, most people will be in for maybe five minutes and we tend to do that every week, there's only so much you can cover though.

It might just be thirty seconds…Or it could be longer if there is an issue.

Prescription of Nicorette

The terms of Starting Fresh mean that a single NRT product – the Nicorette sixteen-hour patch available in three strengths – is offered to clients. In exceptional circumstances, as previously outlined, another NRT product can be supplied. The majority of pharmacists were happy to prescribe Nicorette. However, some were raised issues around the "unfairness" of not having a choice. This was said in the context of GPs and the LHCC groups being able to offer a range of other products without this same restriction.

The only way it could be improved would be if you had an option of more than just the Nicorette patches because if I, occasionally I have to give somebody the twenty-four hour patches, I have to get permission. If I have to give other than patches, I have to get special permission.

The GP can give them gum, lozenges, etc, etc. that's the difference, that's the advantage. So, if somebody does come in and genuinely wants to give up and I say, and even if they don't want the patches, I'll say, just go to your GP. He will write your lozenges, or whatever.

Carbon monoxide testing

Carbon monoxide (CO) readings should be taken at regular intervals for monitoring purposes as well as to motivate clients. The Starting Fresh guidance states that CO readings should be taken on weeks 1, 5, 7 and 12. A smokealyser machine is supplied to each participating pharmacy for this purpose.

The majority of interviewees reported that that they tried to adhere to this guidance. There were variations as to how and when pharmacists used the smokealyser; some used it for motivational purposes and others to check that clients were truthful about their smoking habits.

> *We take a carbon monoxide reading. I think there's only three times that the programme requires you to do it. Patients tend to quite like it every week though 'cause it's, you know, it starts to come down quickly and it's quite good motivation for them so we tend to do it most weeks.*

> *I'll generally do it if they've had a bad week. One week they've had a bad reading then I'll take the reading from them then and the week after so that they can at least they can see the difference and they are doing themselves some good.*

Some interviewees reported difficulties in using the machine properly, which has implications in terms of the monitoring of the service.

> *I don't like that machine, I don't think it works… Em, you're supposed to do it in the fifth week but I've never got the thing to work.*

> *Well, it takes forever to heat up and I don't know if we've been given a faulty one or not… And it is quite confusing.*

Capacity

The capacity of pharmacies to take on Starting Fresh clients varied. No upper limit is stipulated and pharmacists can sign up as many people as they can deal with.

> *At the moment we've got forty-eight people….probably about seven or eight [in a typical day].*

> *Currently I think we've only got about two people… Sometimes we have a lot of people but, eh, no I think it's just two at the moment.*

Some reported no problems in signing up people wanting to join the programme.

> *Some places have capped it now but I haven't because it doesn't actually take any longer than somebody coming in to buy NRT over the counter. A customer comes up to the counter to buy Nicquitin and that I'd spend time with them anyway. So I don't think it takes more time.*

Others reported difficulties in meeting the demands of clients. Some felt they had to turn people away, or tell them to try another participating pharmacy, if they were too busy or felt they could not cope with demand.

> *It varies from between about two or three and then to about forty at times but when it gets to the numbers where I can't cope I just say go somewhere else 'cause I really can't cope.*

> *I've got enough in my system, with all the other initiatives I'm running, I do twenty people a week, I do say to them, no, I'm full, go to another chemist running the programme, every chemist in Glasgow, more or less is running it.*

Relapse prevention/support

National Institute for Clinical Excellence (NICE) guidance, which is incorporated in the Starting Fresh proposal, states that if a client relapses they must should a six-month break from their last supply of NRT. There is, however, flexibility for particular clients, for instance if a person has a compelling reason such as a family bereavement. The majority of interviewees reported that if a client left the programme before the final session then there was no system for follow-up, mainly because of time and resource issues.

> *I mean I've heard of some shops that phone and stuff and we tend not to bother… but I mean, equally, I would say it's the patient's choice. If they decide not to come back then [that's their choice].*

> *We don't have time to do that. It's basically they come in here and if they don't turn up or whatever that's it, it's not only just time, we don't have the facilities to start chasing them up.*

In a minority of instances informal systems were in place such as telephoning clients and speaking to them in the pharmacy when they are there for other reasons.

> *I phone them up just to say, hey, hi how are you getting on, by the way, you know you are on a programme and, what happened did you go back to smoking or have you stopped smoking altogether. They will then tell you what they want to tell you and you say fine that's, very few people give up on the first attempt. Don't beat yourself up.*

> *We've got the contact telephone number and every month when [name] looks through she'll basically check everybody's file and she'll be able to see if they've not been in for a couple of weeks then she'll follow them up. She'll just phone them.*

Links with Other Services

Clients attending the group-based services may collect their prescriptions weekly from a pharmacy that is participating in Starting Fresh. For group clients prescription collections continue beyond the final group support session (usually about week 7 or 8) until week 12. This means that theoretically group members can have five additional weeks support at the pharmacy where they collect their NRT. Clients can also choose to have their CO monitored by the pharmacist throughout the treatment period.

Generally interviewees had low levels of awareness of the LHCC groups although there were some notable exceptions. Some were aware that the groups existed but had little idea as to how they connected with the pharmacy service. The reason for this may be that few people attending groups have actually used the pharmacies that participated in this study.

> *Eh, now who are they? [of the intensive group support services].*

> *I'm aware of the groups but I don't know how they work.*

> *Well, I have no links but occasionally somebody comes in… Occasionally we get a sort of referral letter for them and that's really as much as it goes. I've had no formal conversation with them.*

A minority had higher levels of awareness. Two interviewees discussed how they had talked to clients about the different options available for people wanting to stop smoking. In a very small number of cases they had suggested that they join a group.

> *Some of them they go to the group, they go to the group weekly and they come to us for the NRT. We get a referral from them, the girl that runs the group...there's been a couple of times where people have had issues where they're really struggling so we've got her number if we feel we need to phone her or if we've got somebody who's coming along and they feel that they're really struggling with it, we'll give them their phone number and they can go along and speak and join a group. Because some people will come here and just do it through us but if they're really finding it difficult then we say well there's a group that you can join.*

Those who saw group clients talked about this relationship.

> *We don't really tend to have any contact with the groups at all. It's quite, it's quite difficult when they're coming in from the group because you don't know what they've already been told, you don't want to repeat a lot of the stuff*

> *For a while they were getting both, getting the product from us and then going back to the group. They're not any, they don't take any less time than the other people, actually. They're just as keen to talk about it even though they're in the group*

One interviewee raised the issue of being paid less for seeing group clients when she felt there was little difference in terms of the time taken between those attending groups and Starting Fresh.

> *We're having to write prescriptions for these people, we get less money for seeing the group people in the first seven weeks but we're still having to write prescriptions so we still have to get information about them and get to know them.*

Awareness of the specialist project for pregnant smokers in Glasgow, called 'breathe', was also low amongst interviewees. A minority knew about the service or had had referrals from it.

> *I think I've only had, em, I've only had one kind of referral on a group support service and that was just last week for a pregnant woman but that's the only one that I've ever seen.*

> *Maybe only about ten percent or fifteen percent [referred from groups]. Again, I'm guessing but it's not a huge amount and we do get referrals from the pregnancy project as well. Probably a bit more from them actually.*

Monitoring

Pharmacists have a requirement to collect monitoring data from all clients using the service. The purposes of the monitoring forms are twofold: firstly to ensure that pharmacists are paid correctly and secondly as part of the evaluation of the service.

A standard form is supplied that is completed by the pharmacist. At week zero/one patient details are collected. Every week the pharmacist records the clients' smoking status and at various periods throughout the programme a CO reading is taken. Over time pharmacists have been required to collect more data from clients to meet the needs of the service.

Monitoring forms are sent back to the project officer when a client has either completed four weeks or defaulted from the programme. The pharmacist can only receive payment on receipt of a form thus it is an incentive to send the forms in.

Generally, pharmacists were able to cope with the monitoring procedures and were aware of the purpose of monitoring clients.

> *You have a basic protocol to follow, various information, personal information, a phone number, post code is essential. Phone number is essential because I think the Health Board themselves do a follow-up. I don't know, I think it is up to three, six months afterwards to see what status they are.*

When asked about their capacity to collect more detailed data most interviewees gave a negative response. This was because of the extra time this would incur as well as the feeling that it was requiring too much of the client. Most felt that current monitoring systems were adequate.

> *We already collect quite a bit, the forms keep changing so it keeps getting added to but you have to be careful you're not overloading people. It can take up quite a bit of time especially when it's busy.*

> *I don't want to collect more data, I don't think I could. I don't think there's a need to. We do collect quite a lot.*

> *I could say it's inadequate and we could be more aggressive but we don't have the time for that.*

Some reported a degree of confusion regarding changes to the form and were unclear which form they should be using. Other issues in relation to the monitoring requirements included a lack of integrated systems around patient information systems leading to duplication of information, and the desire by some for it to become electronic.

Issues and challenges

In addition to exploring how Starting Fresh is delivered and monitored, this exploratory study also sought to examine the extent to which the service was successful in treating smokers, and results from this analysis are presented in the next section of our report. Before turning to this, however, we discuss two issues that merit further investigation and represent challenges for the service. These relate to tackling inequalities in health caused by smoking, and pharmacists' views regarding service effectiveness.

Tackling inequalities

Starting Fresh is a universal service that is available to all people who are motivated to quit and are registered with a GP in the Greater Glasgow Health Board area. It

does not have the explicit aim of reducing smoking-related inequalities. However, the white paper Smoking Kills and subsequent policy documents in both England and Scotland have made it clear that there are subgroups of the population who are a priority for smoking cessation and wider tobacco control measures (DoH, 1998, ASHScotland and NHS Health Scotland, 2004). These include pregnant women, young people (in terms of prevention as well as cessation) and economically disadvantaged smokers.

Whilst there are no specific inequalities strategies in place, it has been reported by project managers that the service aims to reach smokers living in areas with high social deprivation. Monitoring data from the service shows that over two thirds of all clients using Starting Fresh live in these areas. This reflects, at least in part, overall levels of deprivation in Glasgow. As one interviewee explained:

> *Pharmacists are well placed to tackle inequalities in health by doing things in local communities. 65% of pharmacies in Greater Glasgow are in depcat areas 5, 6 or 7. In terms of the pharmacists themselves taking things forward in inequalities they have to link in to things from the health board like our projects…we try to get the pharmacists in depcats 5, 6 and 7 more involved than the others.*

Starting Fresh is also viewed as part of a wider strategic approach to helping people in Glasgow have access to stop smoking services. At management level it attempts to be an integrated service that makes connections with LHCC group services, GPs and the Breathe project for pregnant women. However, findings from interviews suggest that the majority of those delivering Starting Fresh regard it as a stand-alone service that does not make regular connections with other services or local strategies. This highlights a mismatch regarding how it is viewed strategically and how it actually operates.

Many interviewees were aware of the social and economic factors and wider determinants that account for high smoking rates in some areas, and that can also make stopping smoking more difficult for some people. In terms of targeting specific groups, however, pharmacists feel they can do little apart from publicise the service and make it accessible to all.

The majority of interviewees were sympathetic with people's attempts to quit and understood how this could be very difficult, especially within the context of socio-economic deprivation. However, few appeared to understand why the service was free (for those exempt from prescription charges) and how this might link to attempts to support less advantaged smokers to quit. A range of views were expressed from interviewees doubting its cost-effectiveness to mistrusting clients' motives for accessing the service, to comments about the "something for nothing" mentality.

> *I think you need to make it accessible and open but I think if you give something free to people they don't appreciate it. I don't think you should ever give out wee freebies. I don't think you should have free prescriptions.*

> *From the relative lack of success we have seen I sometimes wonder if it, people who smoke have obviously got an expensive habit and if you're giving them free patches, I don't think you're overly encouraging them to stop. The thing that always staggers me is people say patches are seventeen pounds a week but they are happy to spend thirty-five pounds in cigarettes.*

Or do they hear you get free patches and they sell them in the pub. I'm sure they've got they're High Street value. I've had people, when they were getting them on prescription and they were getting four and six weeks at a time from the GP, they were actually bringing them back to me and saying they wanted a refund, and I would say, oh no, you've got your proof of receipt there? I don't see that there will be any doubt that they'll maybe be able to sell them. They're seventeen pounds and they'll retail for one or two in a pub or something

When anything's free they just jump on the bandwagon, it doesn't matter what it is if it's toothbrushes or anything… .it's this mentality of something for nothing.

A further issue raised was around certain types of people wanting to access the service, particularly drug users and homeless people. Some interviewees questioned whether the service should be open to everybody, or if some should be denied access. They felt there should be more guidance about entitlement.

I have also a wee bit of an issue in that some of my methadone and needle exchange, and some of the people in the homeless hostels want to join this system as well. You have to make it inclusive for everybody but my issue is, if you've got a drug addiction problem are you really going to be able to give up cigarettes. Are we wasting our money there. Is there a policy or a protocol for [this]

Placing the service in a broader inequalities framework, another issue currently not addressed by the service is the need to attract people from minority ethnic groups. Whilst most interviewees did not report this as an issue, one pharmacist working in an area with a large Asian population discussed the need to provide information in languages other than English.

Our prescriptions, I would say are, nearly sixty percent Asians but our smoking is less than one percent and Asians smoke just as much. So, whether we're not targeting them in the right way. Whether we need to do posters in other languages and stick them in the Asian shops in the area. Whether we need to go to Asian cultural centres, whether we need to go Asian schools.

Given the potential of Starting Fresh to reach thousands of smokers in Glasgow every year, results from this exploratory study suggest that further thought needs to be given to how the service can contribute to addressing inequalities caused by smoking. Part of this may be about clearer information and guidance for those delivering the service, who may be unaware of the wider policy framework in which Starting Fresh is operating. Our research did not explore this issue in detail and we believe it should be examined in any further study.

Effectiveness

Another issue that deserves closer investigation is that of service effectiveness. The next section of our report outlines findings from an analysis of client records for the service that suggests an overall quit rate of around 20% at four weeks. In our interviews with pharmacists we discovered that many were sceptical of the extent to which the service was supporting smokers to quit and whether changes needed to be made to increase cessation rates.

Interviewees described success rates in their pharmacy.

> *I would say less than 5%…maybe they do give up but I don't think they come in for the full 12 weeks, I would rarely see someone who's been through the full 12 weeks but that doesn't mean that they've not given up. A lot of people go through the first 8 weeks and then it drops down…I don't know if they actually go off it, I think they may have given up then and they feel it's unnecessary to come back.*
>
> *They usually make the first two weeks and then it is after that they don't come in… Very few [will sustain the programme for its duration]. That's what a nightmare it is. I certainly haven't had a lot. One or two [successes].*
>
> *How effective it is, it's rubbish. I mean it's not, I mean, I've got, sixteen there and I don't think one of them will complete it to the full twelve weeks.*

Others questioned the impact of the service or their pharmacy's contribution to overall success rates.

> *Every person that's involved with it really does try but when you see six or seven patients who haven't even come back for a second week and you think to yourself, you know. If somebody could maybe come and convince me that getting one person in ten to quit, that's worthwhile and, and if that is worthwhile then that's fine but I don't know if it is or not.*
>
> *Well, I would like to see how many complete it after three months and don't ever smoke again. I think if you follow them up in six months or a year you'll find that a lot of them are back smoking.*
>
> *The main thing is that people have been smoking for so long in this area and a lot are not in the right frame of mind…it's free and they haven't really thought about it properly, they just try it and it doesn't work.*

These comments from interviewees suggest that some pharmacists are operating in relative isolation when treating smokers, without access to information regarding the overall impact of the service or relevant evidence about the 'cycle' of quit attempts that is often necessary to achieve cessation in the longer term. Some clearly express frustration and scepticism regarding the capacity of the service to produce quitters. This suggests an additional area for further investigation as well as one that could be addressed by those managing Starting Fresh through further service development and training.

Conclusion

Starting Fresh is one of a growing number of public health interventions delivered by community pharmacists. With the introduction of the new pharmacy contract in April 2006 delivery of services with a public health focus will become increasingly important. This exploratory study suggests that pharmacists are generally positive about their capacity to deliver the service and viewed smoking treatment as an appropriate extension of their professional role. This positive response, combined with evidence about the high proportion of pharmacies in Glasgow that are now participating in the scheme, suggests that Starting Fresh will continue to develop and has the capacity to offer treatment and support to large numbers of smokers in the future. Interviews with pharmacists have, however, highlighted a number of issues that will need to be addressed if the service is to be as successful as possible. We revisit some of these issues in the overall conclusion to this report.

ANALYSIS OF CLIENT DATABASE

In order to begin to examine the outcomes achieved by the pharmacy-based service, we conducted some initial analysis of the service's existing client database for 2004. Basic information is collected by the pharmacist or pharmacy staff regarding each client that accesses the service. This information is then sent back to the management team for Starting Fresh at the NHS Board, where it is entered onto a client database. Because our research involved a limited exploratory study at this stage, we did not have the opportunity to work with the service to collect more detailed data regarding clients or the treatment received. Instead, we were provided with access to the client database (after personal identifiers had been removed) and the findings described here are a product of our analysis of these records.

METHODS

Smoking cessation services were provided by 167 participating pharmacies in Greater Glasgow during 2004. Smokers were seen by pharmacists or pharmacy assistants for five sessions at weekly intervals, with the quit date corresponding to week 1 and the 4 week smoking status given at week 5. NRT, in the form of the Nicorette 16 hour patch (available in three strengths) was provided to smokers throughout the treatment period. Those smokers who remained in the programme beyond week 5 could continue receiving support up to week 12.

Data and measures

The initial sample of 13035 records represents the total number of records for service users with quit dates in 2004. Table 1 shows the number of records available during the study period, after eliminating cases with incomplete postcodes (so no deprivation decile), no age at quit, and unrecorded gender. The initial sample was reduced to 11297 after excluding cases with incomplete postcodes. Although the mean values for the excluded cases were significantly different from those that remained, the actual difference was small. For example, the mean age after excluding these cases (63.1) was only 0.5 years older than in the original group (62.6). Similarly, while removal of cases with missing age (leaving 11137 cases) and unknown gender (leaving 11126 cases), led to the excluded groups being significantly different from the groups which remained, the actual difference in group mean values was negligible.

Despite attempts to collect data about the smoking behaviour and employment status of users, responses were very poor. As a result, the only variables for which there were not a high proportion of missing values in the original sample overall were Scottish and Glasgow deprivation decile, gender, age, eligibility for free prescriptions and smoking status at four weeks. Due to the way in which the reduced sample was selected (Table 1) all missing values in this small group of variables had been eliminated.

Data supplied to the research team were kept anonymous, while including information about the deprivation category of users' place of residence, which was derived from postcodes. In order to avoid a breach of confidentiality postcodes were not provided directly to the research team, since in some circumstances these could allow the identification of individual users.

Table 1: Selecting a sample for analysis

Sample selected[1]	Sample size N=	Mean value (significance level,p[2]) Age[3]	% female[4]	CO-validated cessation rate[4,5]
All cases setting a quit date in 2004	13035	43.7	62.6	19.8
Cases setting a quit date in 2004 with a valid deprivation decile	11297	43.9 (<.001)	63.1 (.006)	20.2 (.008)
Cases setting a quit date in 2004 with a valid deprivation decile and valid age at quit	11137	44.0 (<.001)	63.1 (.013)	20.2 (.014)
Cases setting a quit date in 2004 with a valid deprivation decile, valid age at quit and valid gender	11126	44.0 (<.001)	63.1 (.013)	20.2 (.012)

Notes:

1. The effect on the sample of removing successively cases with missing values for (a) deprivation decile (b) age at quit (c) gender is shown, together with mean values at each stage for the key variables age, gender and CO-validated cessation rate.
2. Significance level is for differences between the group with valid values on that particular row and the group with missing values.
3. Significance level p corresponds to a one-way analysis of variance.
4. Significance level p corresponds to a chi-square test with continuity correction.
5. Cases with a CO monitor reading of 0-10 are regarded as CO-validated.

Outcomes

A user was counted as having successfully quit smoking at the 4-week follow up if they had not smoked at all since two weeks after the quit date. If users could still not be contacted they were classed as lost to follow up. When users reported having quit, they were encouraged to have this CO-validated on the basis that abstinence assumes a CO reading of 10ppm or less. Because very few cases had a CO reading of 10, this definition is close to that generally accepted of 9ppm or less.

Smoking status could then be classified into four possible outcomes: ‘CO-validated quitters – CO reading of 10 or less’; ‘self-reported quit without validation; ‘non-quitters’; and ‘lost to follow up’. For the purposes of the analysis, two outcomes were derived from this: ‘whether user was a self-reported quitter (including cases who were CO-validated)’ and ‘whether user was a CO-validated quitter with a CO reading of 1 - 10’. Each outcome is reported separately, as recommended by the Society for Research on Nicotine and Tobacco (SRNT) subcommittee on biochemical verification.

Predictors used in modelling

The limited amount of information available about users was used as a source of predictor variables. Deprivation decile was transformed into deprivation quintile, and then used to compute four dummy (two value) variables: quintile 1 (high need), quintile 2, quintile 3 and quintile 4. Age at quit date was used to compute five dummy variables based on the age ranges 15 – 30, 31 – 40, 41 – 50, 51 – 60 and 61 – 70. Note that the number of dummy variables derived from both deprivation quintile and age, which are used in the modelling, is one less than the total number of dummy variables. Each dummy takes on the values 0 (No) and 1 (Yes). Separate models were run using firstly the Scottish deprivation quintile (Table 5) and then the Glasgow deprivation quintile (Table 6). These predictors were used to obtain separate models for CO-validated quit and unvalidated self-report quit.

Statistical Methods

First, in examining how the sample for analysis was derived, the effect of successively removing cases from the sample in Table 1 has been demonstrated using both changes in mean values of age, gender and CO-validated cessation rate, and the statistical significance of differences between the removed cases and those remaining. The significance of differences in age was measured using a one-way analysis of variance, while differences in gender distribution and CO-validated cessation rate made use of a chi square test with continuity correction.

Bivariate relationships were examined between each of the two dependent variables (self-report quit and CO-validated quit – score 10 or under) and the personal characteristics of deprivation quintile, age category and gender in Tables 2 to 4. In addition, relationships were derived when deprivation and age category were broken down by 'whether no smoke cases' and 'gender', and results for the Scottish and Glasgow deprivation quintile were presented separately. Frequency distributions were used to describe the sample of 11126 cases. The mean values of each of the cessation rates associated with each factor were calculated. Significance tests for these mean values were of three types depending on the variable. In the case of dummy (two value) variables, a chi square test with continuity correction was applied. When a (quasi-) continuous variable has been categorised, a one-way analysis of variance on the original (quasi-) continuous variable was applied. When a (quasi-) continuous variable has been categorised and broken down by two dummy variables (scheme and gender), a two-way analysis of variance on the original (quasi-) continuous variable was applied.

Next, a multivariate approach to the relationship between each of the two dependent variables (CO-validated quit – score 10 or under; unvalidated self-report quit, including CO-validated quit) and case characteristics was adopted. The relationships between CO validated or unvalidated self-report cessation rate and personal/service characteristics were investigated using logistic regression analysis, with 'whether CO-validated quit at four weeks – score 10 or under' and 'whether unvalidated self-report quit at four weeks' as dependent variables. This amounted to modelling CO-validated or unvalidated smoking status against deprivation quintile, after controlling for age and gender. Statistically significant variables were identified using forward stepwise logistic regression. The analysis was repeated entering all variables simultaneously and then using backward stepwise logistic regression analysis, to assess whether the model could be improved. Separate models were presented using firstly Scottish deprivation decile and secondly Glasgow deprivation decile.

RESULTS

Table 2 shows that 27.8 of self report cases, and 20.2 per cent of those that were CO-validated, were successful quitters at four week follow up. Table 2 also shows the differences in cessation rates by Scottish deprivation quintile, and separately for men and women by quintile.

Table 2: Frequency distribution of Scottish deprivation quintile including for each category self-report and CO-validated 4 week cessation rates

Characteristic	Valid values		4-week cessation rate (%) (Sig. Level, p)[1]	
	N	% of valid values	Self-report	CO-validated
Scottish deprivation quintile				
1 Relatively disadvantaged	6892	61.9	25.0	18.8
2	1843	16.6	29.3	21.3
3	850	7.6	30.2	21.8
4	355	3.2	33.2	27.3
5 Relatively advantaged	1186	10.7	38.5	23.3
Total	**11126**	**100.0**	**27.8** ($p<.001$)[2]	**20.2** ($p<.001$)[2]
Male:				
1 Relatively disadvantaged	2439	59.3	25.8	19.8
2	695	16.9	31.2	22.5
3	332	8.1	34.6	26.8
4	139	3.4	33.1	27.3
5 Relatively advantaged	505	12.3	38.6	24.2
Total	**4110**	**100.0**	**29.2**	**21.6**
Female:				
1 Relatively disadvantaged	4453	63.5	24.6	18.2
2	1148	16.4	28.1	20.6
3	518	7.4	27.4	18.5
4	216	3.1	33.3	27.3
5 Relatively advantaged	681	9.7	38.3	22.6
Total	**7016**	**100.0**	**27.0** ($p_a<.001$)[3] ($p_b<.001$)[3]	**19.3** ($p_a<.001$)[3] ($p_b<.001$)[3]

Notes:

1. Significance level, p, refers to one-way analysis of variance unless otherwise stated.
2. Significance level, p, refers to one-way analysis of variance of deprivation decile by smoking outcome.
3. Significance levels pa, pb refer to a two-way analysis of variance of deprivation decile broken down by 4 week cessation rate and gender.

Table 2 highlights the fact that about 60 per cent of all cases live in the most disadvantaged fifth of neighbourhoods in Scotland, and cessation rates are clearly associated with levels of deprivation. For both men and women the self-report cessation rates increases from about 25 per cent in the most disadvantaged quintile to about 38 per cent in the most advantaged quintile. The gradient is still apparent, although less marked, and statistically significant for CO-validated cessation.

Table 3: Frequency distribution of Glasgow deprivation quintile including for each category self-report and CO-validated 4 week cessation rates

Characteristic	Valid values		4-week cessation rate (%) (Sig. Level, p)[1]	
	N	% of valid values	Self-report	CO-validated
Glasgow Deprivation quintile				
1 Relatively disadvantaged	3393	30.5	23.1	17.7
2	2936	26.4	26.2	19.0
3	2310	20.8	30.0	22.2
4	1610	14.5	31.2	22.4
5 Relatively advantaged	877	7.9	39.9	24.4
Total	**11126**	**100.0**	**27.8** (p<.001)[2]	**20.2** (p<.001)[2]
Male:				
1 Relatively disadvantaged	1140	27.7	23.9	18.8
2	1091	26.5	26.0	19.3
3	868	21.1	31.9	23.7
4	621	15.1	34.8	26.7
5 Relatively advantaged	390	9.5	39.0	23.6
Total	**4110**	**100.0**	**29.2**	**21.6**
Female:				
1 Relatively disadvantaged	2253	32.1	22.6	17.2
2	1845	26.3	26.2	18.8
3	1442	20.6	28.8	21.2
4	989	14.1	29.0	19.7
5 Relatively advantaged	487	6.9	40.7	25.1
Total	**7016**	**100.0**	**27.0** (p_a<.001)[3] (p_b<.001)[3]	**19.3** (p_a<.001)[3] (p_b<.001)[3]

Notes:
1. Significance level, p, refers to one-way analysis of variance unless otherwise stated.
2. Significance level, p, refers to one-way analysis of variance of deprivation decile by smoking outcome.
3. Significance levels pa, pb refer to a two-way analysis of variance of deprivation decile broken down by 4 week cessation rate and gender.

Table 3 provides similar information to that shown in Table 2, but it uses a Glasgow specific set of deprivation categories. This table provides compelling evidence that users are being drawn from the most disadvantaged parts of the Glasgow population, with 57 per cent residing in the bottom two-fifths of deprived neighbourhoods. Once again, clear gradients in success rates between levels of deprivation can be seen. Self report and CO-validated cessation rates rise from 23.1/17.7 per cent in the most disadvantaged quintile to 39.9/24.4 per cent in the most advantaged group. Broadly similar patterns are again observed for both men and women.

Table 4: Frequency distributions of age and gender of smokers including for each range self-report and CO-validated 4 week cessation rates

Characteristic	Valid values		4-week cessation rate (%) (Sig. Level, p)[1]	
	N	% of valid values	Self-report	CO-validated
Age category at quit date				
Aged 15 - 30	1952	17.5	20.3	15.1
Aged 31 – 40	2971	26.7	24.4	17.9
Aged 41 – 50	2772	24.9	27.5	19.6
Aged 51 – 60	1902	17.1	33.1	23.8
Aged 61 – 70	1179	10.6	38.8	28.6
Aged 71 -	350	3.1	36.6	24.0
Total	**11126**	**100.0**	**27.8** (p<.001)[2]	**20.2** (p<.001)[2]
Male:				
Aged 15 - 30	757	18.4	21.4	15.7
Aged 31 – 40	1112	27.1	24.5	18.1
Aged 41 – 50	963	23.4	31.7	23.4
Aged 51 – 60	717	17.4	32.6	24.6
Aged 61 – 70	440	10.7	41.1	30.7
Aged 71 -	121	2.9	38.8	27.3
Total	**4110**	**100.0**	**29.2**	**21.6**
Female:				
Aged 15 - 30	1195	17.0	19.6	14.7
Aged 31 – 40	1859	26.5	24.3	17.8
Aged 41 – 50	1809	25.8	25.2	17.6
Aged 51 – 60	1185	16.9	33.3	23.4
Aged 61 – 70	739	10.5	37.4	27.3
Aged 71 -	229	3.3	35.4	22.3
Total	**7016**	**100.0**	**27.0** (p_a<.001)[3] (p_b=.230)[3]	**19.3** (p_a<.001)[3] (p_b=.557)[3]
Gender				
Male	4110	36.9	29.2	21.6
Female	7016	63.1	27.0	19.3
Total	**11126**	**100.0**	**27.8** (p=.012)[4]	**20.2** (p=.004)[4]
Eligible for free prescriptions and aged under 60				
Yes	5815	52.3	21.4	15.3
No	5310	47.7	34.9	25.5
Total	11125[5]	100.0	27.8 (p=<.001)	20.2 (p=<.001)

Notes:

1. Significance level, p, refers to a one-way analysis of variance unless otherwise stated.
2. Significance level, p, refers to a one-way analysis of variance on the (quasi-) continuous variable before it is categorised.
3. Significance levels pa, pb refer to a two-way analysis of variance of age (before it is categorised) broken down by 4 week cessation rate and gender.
4. Significance level, p, refers to a chi-square test with continuity correction.

Table 4 provides information about cessation rates by age category for all users and for men and women separately. Broadly speaking, the results confirm what is known from other studies; older users tend to have higher quit rates. Table 4 also shows tests of statistical significance for differences in cessation rates between men and

women, and confirms that women have slightly lower rates. Finally, Table 4 also provides information about the differences in cessation rates between those users eligible for free prescriptions and under the age of 60 (a rough proxy for living on benefits) and all others. On this basis, those users who are most disadvantaged are substantially less likely to quit smoking in the short term (21.4 per cent self report and 15.3 per cent CO-validated) than others (34.9 and 25.5 per cent respectively for self-report and CO-validated).

Table 5: Logistic regression models for unvalidated self-report quit and CO-validated quit in terms of Scottish deprivation quintile[1] and eligibility for free prescriptions, controlling for age[2] and gender[3]

	Model 1: unvalidated self-report quit			Model 2: CO-validated quit: reading 1-10=quit		
	B	**Sig.[4]**	**Odds ratio**	**B**	**Sig.[4]**	**Odds ratio**
Scottish deprivation quintile	-.421	<.001	0.66			
quintile 1 (high need)						
quintile 2	-.252	.001	0.78			
quintile 3	-.257	.005	0.77			
quintile 4				.327	.009	1.39
Eligible for free prescriptions and aged under 60[5]	-.520	<.001	0.59	-.552	<.001	0.58
Age at quit						
15 - 30	-.608	<.001	.55	-.488	<.001	0.61
31 - 40	-.352	<.001	.70	-.269	<.001	0.76
41 - 50	-.220	<.001	.80	-.189	.003	0.83

Notes:

1. Dummy (2 value) variables for each of the first four deprivation quintiles were included in the pool of predictor variables.
2. Dummy (2 value) variables for each of the first five age ranges were included in the pool of predictor variables.
3. Gender was forced out of the model by eligibility for free prescriptions.
4. Significance of change in –2 log likelihood. Only terms significant at the 5 per cent level were allowed to enter.
5. Clients aged 60 or over are eligible for free prescriptions anyway.

Table 5 shows the results of multivariate logistic regression models for two cessation outcomes – self-report and CO-validated cessation at four weeks. The findings confirm some but not all of the patterns shown in Tables 2-4, with deprivation category, age and being under the age of 60 and eligible for free prescriptions all being statistically significantly associated with cessation. However, there are no significant differences in cessation rates between men and women after adjusting for other factors. Living in the most disadvantaged areas, being younger and "living on benefits", are all statistically significantly associated with lower levels of success. For example, users in the most disadvantaged quintile are only 66 per cent as likely (OR = 0.66) to self-report cessation as those in the most advantaged group (the reference category). A very similar pattern of results is shown in table 6, which uses the Glasgow specific rather than the whole of Scotland deprivation categories.

Table 6: Logistic regression models for unvalidated self-report quit and CO-validated quit in terms of Glasgow deprivation quintile[1] and eligibility for free prescriptions, controlling for age[2] and gender[3]

	Model 1: unvalidated self-report quit			Model 2: CO-validated quit: reading 1-10=quit		
	B	Sig.[4]	Odds ratio	B	Sig.[4]	Odds ratio
Glasgow deprivation quintile						
quintile 1 (high need)	-.607	<.001	0.55	-.195	.001	0.82
quintile 2	-.468	<.001	0.63	-.144	.015	0.87
quintile 3	-.314	<.001	0.73			
quintile 4	-.312	<.001	0.73			
Eligible for free prescriptions and aged under 60[5]	-.508	<.001	0.60	-.524	<.001	0.59
Age at quit						
15 - 30	-.617	<.001	0.54	-.499	<.001	0.61
31 - 40	-.353	<.001	0.70	-.273	<.001	0.76
41 - 50	-.226	<.001	0.80	-.195	.002	0.82

Notes:

1. Dummy (2 value) variables for each of the first four deprivation quintiles were included in the pool of predictor variables.
2. Dummy (2 value) variables for each of the first five age ranges were included in the pool of predictor variables.
3. Gender was forced out of the model by eligibility for free prescriptions.
4. Significance of change in –2 log likelihood. Only terms significant at the 5 per cent level were allowed to enter.

DISCUSSION

Although the amount of data collected about users of pharmacy services is rather limited, as compared to that available for the group support services, some very interesting, important and challenging results are evident.

The first point to note is that cessation rates for the pharmacy services are lower than those reported for the intensive group service in Glasgow or for services in general in England. Short-term cessation rates of 20-30 per cent are what might be expected of a relatively "brief" intervention. These kind of cessation rates produce relatively small numbers of quitters in the longer term. We know from previous research that it is possible to estimate the number of quitters a service will achieve at one year based on CO validated four week quit rates (Stapleton, 1993, Judge et al, 2005). Between two-thirds and three-quarters of four-week CO validated quitters will relapse by one year. Using the figure of 13,035 smokers (the total number of smokers setting a quit date in 2004) as a baseline, we can estimate that between 645 and 860 of these clients will be non-smokers at one year.

It is important, however, not to judge the success of the pharmacy service on these kinds of estimates. What is needed to make more comprehensive judgements about outcomes is more information about relative costs, models of service delivery and comparative client characteristics. Even though cessation rates appear to be quite

low they could prove to be very cost-effective. This is an issue that requires further research.

In the absence of good data to inform questions of cost-effectiveness, what can be said for certain is that the pharmacy services have succeeded in providing a high volume of services. What is also significant, given the importance of reducing health inequalities, is that service users are to be found disproportionately in the most disadvantaged neighbourhoods. A separate study undertaken for NHS Health Scotland has shown that services are distributed between deprivation categories roughly in proportion to smoking prevalence rates in those areas (Chesterman et al, 2005: see abstract in Appendix 1).

The other findings worth noting are that the relationship between age and cessation is broadly consistent with that found in other studies, whereas the bivariate relationship between gender and cessation that is reported in Table 3 and commonly found in many other studies is not confirmed in the multivariate analysis after adjustment for age and disadvantage.

Overall, the impression gained from these findings is that the pharmacy services have done what appears to be a good job in providing support to smokers across Glasgow and in particular in reaching smokers living in the most deprived areas. But it is almost certain that these services are not contributing to reducing inequalities in smoking because cessation rates are lower in the most disadvantaged neighbourhoods. To rectify this either more intensive support achieving higher cessation rates has to be offered to the most disadvantaged smokers or services need to be targeted – even more than they are already – towards smokers in the most deprived areas. We offer some further thoughts regarding potential avenues for improving outcomes in the conclusion to this report.

CONCLUSION

Tackling smoking in Glasgow is crucial if the health of the people of the city is to be improved. This study has attempted to evaluate key elements of current work to address smoking. What has emerged from the different strands of research included in this project are findings that have implications for policy and practice now and in the future.

Before highlighting key findings it is important, however, to say something about the limitations of this research. First, this project, despite its title, has looked in detail at only one component of efforts to tackle smoking – treatment services. Although the report begins with a description of the Tobacco Strategy and provides some critical assessment of the process of developing the strategy and its contents, it is not about tobacco control. We have not examined the wide range of prevention activities taking place in the city nor programmes that contribute to controlling the supply or availability of tobacco, for instance. Our focus has been the current delivery of treatment for smokers and outcomes related to this treatment.

Secondly, we did not involve service users in our study. Although we collected and analysed information relating to the characteristics of clients and the treatment they received, the research team did not have any direct contact with smokers. This means that we do not have any information about what clients themselves think of the services available to help them quit. There are a variety of reasons why we never explored this issue in more detail. The fact that we did not speak to smokers is not unusual – it represents a current gap in the emerging literature on NHS treatment services (McNeill et al, 2005). Examining the views of service clients is an important issue for future research if services are to continue to improve and develop.

Thirdly, this study is limited to short term cessation outcomes. The timing of this study meant that we were only able to collect data relating to four- week outcomes but this is not ideal. Although we can estimate 52 week quit rates from four-week rates based on findings from other studies, estimates are no replacement for the opportunity to properly collect and analyse information over the longer term. We believe this is also an issue for future research.

Looking beyond these study limitations, however, a number of important themes emerge from this study. These include the:

- Relationship between interventions and outcomes
- Challenge of addressing inequalities
- Role of NRT
- Relationship between services

Interventions and Outcomes

This study has examined short term (four week) outcomes for clients receiving support to quit from two different forms of treatment – group support plus NRT/bupropion and one to one support plus NRT in a pharmacy setting. Our findings are similar to those from a wide range of studies suggesting that both forms of intervention are effective in helping smokers to quit.

However, these two treatment models are different and they are achieving different outcomes. The way this study was designed and funded means that we did not specifically set out to compare these two models of service. Some general comparative statements can be made but these should be treated with caution.

Our findings are consistent with a range of other research that suggests that intensive group services are more effective in supporting smokers to quit that briefer one-to-one interventions of the kind delivered by the pharmacy service. CO validated four-week cessation rates for those attending groups were 44 per cent (rising to 47 per cent when self-report cases were included) compared with 20 per cent (rising to 28 percent with self-report) for the pharmacy service. This suggests that, on average, for smokers in Glasgow that are motivated to quit, they are more likely to be successful if they access the group services delivered by LHCCs than if they attend a local pharmacy that is participating in the Starting Fresh scheme.

However, there are some caveats that need to be considered in relation to this comparison. One of the most important is that, for smokers accessing Starting Fresh in 2004, the quit date was recorded as their first visit to the pharmacy and receipt of NRT, whereas for those attending groups the quit date is from week 3. Initial drop out rates from services can be significant and for this and other reasons Starting Fresh has recently introduced a 'Week 0'. This means that clients expressing an interest in quitting are encouraged to return to the pharmacy one week following their initial visit to formally commence their quit attempt. This change may eliminate some less motivated smokers from the list of service recipients and may, therefore, contribute to higher quit rates in the future.

The second caveat that needs to be considered in relation to any comparison of the two models of service is the current absence of any cost-effectiveness information. This study did not set out to examine issues of cost but it is an important question for future research. Although we do know from the literature that smoking treatment services are, in general, cost-effective, we do not know what the relative costs are of the pharmacy vs. group support services in Glasgow.

Thirdly, any comparison of outcomes should consider the overall impact of services in terms of the number of smokers treated and potential contribution to improving population health. The number of smokers accessing group support services in Glasgow is currently small, compared with the very extensive reach of the pharmacy services. Our estimates, outlined earlier in this report, would suggest that the group services, at current levels of throughput, could achieve between 90 and 120 quitters at one year, and Starting Fresh would realise 645-860 quitters at one year, based on the data analysed in this report.

Finally, it is likely that different models of service will achieve different outcomes depending on the characteristics of smokers who access services. Intensive group support will work well for some smokers but may not be as appealing to others. Likewise the relatively brief advice provided in pharmacies may not be sufficient to help some, particularly more heavily addicted, smokers to quit. We return to this issue in considering the relationship between services below.

Addressing Inequalities

One of the primary reasons why the health of Glasgow's residents is so poor is the extent of socio-economic disadvantage in the city. Compared with other parts of Scotland, much of Glasgow could be described as deprived. Within the city itself

there are also marked inequalities in health between different neighbourhoods. These inequalities are mirrored in stark differences in smoking rates between areas. The qualitative components of our work suggest that professionals involved in managing and delivering smoking cessation and tobacco control programmes in Glasgow are all too well aware of the challenge involved in addressing inequalities in health. However, in relation to smoking treatment services specifically, there is very little evidence to suggest that there are strategies or specific actions in place to target disadvantaged smokers. Efforts to target appear to be limited to attempts to locate and promote services in deprived communities. This is important, but it may not be enough given what we know about the barriers to successful quitting experienced by poorer smokers, even after they have accessed services.

In a separate but related study (see abstract in Appendix 1) members of this research team estimated the potential future impact of services (group and pharmacy) on inequalities (Chesterman et al, 2005a). This analysis found that services were effectively reaching smokers living in disadvantaged areas in that they were distributed between deprivation categories roughly in proportion to smoking prevalence rates in those areas. This in itself is a considerable achievement, mirroring findings in other parts of the UK that suggest that smoking treatment services are overcoming the inverse care law (Chesterman et al, 2005b, Lowey et al, 2002).

However, what the additional study also found, and this report describes in more detail, is the fact that quit rates are significantly lower amongst more disadvantaged smokers. The difference is marked enough that current services are at risk of exacerbating inequalities in health caused by smoking rather than addressing them. In short, more needs to be done in Glasgow to help poorer smokers to quit. This is not just about increasing the volume of services in disadvantaged communities as compared with more affluent areas. We believe it is also about modifying and improving services so that they are more effective in supporting smokers. This means improving short and longer-term outcomes for more disadvantaged groups. Although we have very little research evidence to guide us, we do know that disadvantage is associated with higher levels of addiction, and what is required to help more heavily addicted smokers to stop is more intensive services. This can be group-based or one-to-one, as long as the support is frequent and sustained. Briefer interventions are unlikely to be successful. Careful consideration of how drop out rates in the first week or two of service receipt can be reduced should also be considered, as should strategies for relapse prevention.

The Role of NRT

The vast majority of smokers in this study used nicotine replacement therapy to support their quit attempt. We did not specifically set out to examine the role of NRT. There is already an extensive literature on the subject. Our examination of the topic was limited to collecting and analysing information about the receipt of NRT by individual clients and its relationship with short-term outcomes.

This study, in line with many others, suggests that smokers who use NRT appropriately (throughout their quit attempt) are more likely to stop smoking. What is slightly unusual about smoking treatment services in Glasgow, however, is that NRT can be supplied directly by the pharmacist on prescription without direct involvement of GPs. Smokers accessing group support services are also referred to pharmacists for the weekly supply of NRT. This arrangement has a number of advantages, including the fact that it may be more convenient for clients to obtain NRT from a

pharmacist without having to visit their GP practice. However, direct supply of NRT in Glasgow involves a single supplier and a first line product – the 16 hour patch. A tendering process was undertaken to select a supplier and the successful bidder was Pfizer/Pharmacia, who produce the Nicorette patch. This is available in three strengths. Clients accessing treatment services in Glasgow can still receive NRT via GP prescription and in these instances any product can be supplied. However, the vast majority of smokers treated are receiving NRT directly from pharmacists and for these smokers the first line product is the 16 hour patch. Other products can only be supplied 'if the client has tried and failed the Nicorette patch' (NHS Greater Glasgow, 2005).

Provision of the 16 hour patch as a first line product is in itself relatively unproblematic, as studies have established the efficacy of the product. However, findings from our research suggest that preference for this single product is not without its problems. It limits the flexibility of trained advisers in terms of the advice they can provide to smokers about the wide range of products that could potentially help them to quit. It also means that the capacity of individual practitioners to support particular smokers (in particular very heavily addicted smokers) to quit by using more than one product from different manufacturers is limited. We believe there is a need for further research in Glasgow to determine whether current arrangements for the provision of NRT are in the best interests of smokers, particularly those who need the most intensive and flexible support to quit. This study has very little to say about this issue but we believe it should be examined in further detail in the future.

Relationship Between Services

As we noted above, different models of smoking treatment are available in Glasgow and it is likely that group-based services will be more appropriate for some smokers whereas pharmacy-based support may be better for others. Additional services – in the form of a specialist project ('breathe') for pregnant women and cessation support in secondary care for patients are also available in the city. However, findings from this study suggest that professionals involved in the day to day delivery of smoking treatment, particularly pharmacists, have little or no awareness of the other services available. It should be possible for smokers accessing one service to be easily referred to the other and vice versa. Although group clients can attend the pharmacy beyond week seven to receive NRT and access brief advice, the reverse (pharmacy clients being referred to groups) does not appear to routinely take place, despite Starting Fresh documentation containing details of the LHCC groups. In addition, further work needs to be done to ensure that other health professionals referring smokers to services (in particular GPs) are aware of the different forms of support available and can help a client decide which is best for them. This is particularly important for heavily addicted smokers living in disadvantaged areas.

One of the current barriers to this transfer of clients between services is the limited availability of group services and the potential for smokers to become discouraged while waiting for a group to become available in their area. Serious consideration needs to be given within the newly emerging CHPs and within NHS Greater Glasgow to efforts to expand this service, particularly given the increase in demand for support that will occur as a result of Scotland's ban on smoking in enclosed public spaces. Intensive group-based services are effective. There should be more of them available in Glasgow.

There are a number of other issues emerging from this study that we cannot revisit in detail in this conclusion. We believe there is scope for considerable further research, particularly in relation to the cost-effectiveness of services and a more comprehensive external evaluation of pharmacy-based support to quit. The final point we would like to emphasise is the relationship between smoking treatment services and wider tobacco control efforts in Glasgow. It is important to recognise that treatment services in themselves will not make a vast difference to levels of smoking in the city. Their role, as recently described by Robert West, is 'not to reduce smoking prevalence but to provide cost-effective, life saving treatment to those that want it' (West, 2005). What will make a difference in Glasgow is the combination of widely available, accessible smoking treatment tailored to the needs of different groups of smokers, combined with serious and concerted tobacco control measures.

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APPENDIX 1

Reducing Smoking Inequalities in Glasgow: Estimating the potential impact of smoking cessation services

A paper prepared for NHS Health Scotland

John Chesterman, Ken Judge & Louise Lawson

ABSTRACT

Aims: To assess the potential future impact of smoking cessation services in Glasgow reducing overall smoking prevalence in general and inequalities between areas in particular.

Design: Observational study of administrative information linked with synthetic estimates of smoking prevalence for small areas and assumptions about future levels of service delivery and long-term success.

Measurements: Synthetic estimates of smoking prevalence for the 144 electoral wards in Glasgow were obtained from Health Scotland. The Scottish Index of Multiple Deprivation was used to combine small areas into two sets of deciles ranked in order of disadvantage. One set of deciles was derived from data for Glasgow only, and the other used data for Scotland as a whole. Area of residence data from smokers setting a quit date in 2004 were used to calculate the proportion of smokers in receipt of treatment services in deprivation deciles. Estimates of long-term success rates were derived from published studies.

Findings: In general services are provided in proportion to the number of smokers in each deprivation decile. For example, using Glasgow only deciles, 48.9% of smokers treated lived in the most disadvantaged decile compared with 50.2% of all smokers. In contrast, 7.4% of those treated lived in the most advantaged decile where 8.2% of all smokers resided. Simulations suggest that services might be expected to reduce overall smoking prevalence amongst adults, from a baseline of 39.47% in 2004, by between 6.7% (36.82%) and 13.8% (34%) over a period of ten years. On the most plausible assumptions, however, services will not help to reduce inequalities and using Glasgow decile data the relative index of inequality is predicted to increase from 2.78 in 2004 to 2.91 in 2014, a rise of almost five per cent.

Conclusions: Smoking treatment services in one of the most disadvantaged cities in the UK have proved very successful in overcoming the inverse care law and ensuring that cessation services are provided broadly in proportion to need in all deprivation deciles. However, because higher levels of addiction among the most disadvantaged smokers produce lower cessation rates for these groups, more innovative and intensive forms of support need to be developed and evaluated if treatment services are to make a positive contribution to reducing inequalities.