



Exploration of characteristics of community pharmacies that may influence the successful outcomes of Stop Smoking Services

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Abstract

Background

National Health Service (NHS) Lothian community pharmacies contracted to deliver the Stop Smoking Service have varying success rates. A clearer understanding of the factors or predictors which may impact on the success of the NHS community pharmacy Stop Smoking Services is required by NHS Lothian Public Health Directorate.

Aim

To describe the characteristics of community pharmacies within one health board delivering Stop Smoking Services and propose characteristics which in future studies can be tested for association with stop smoking success rates.

Methods

A questionnaire survey and a national database recording success rates and client demographics were used to explore characteristics of the pharmacies. Data collected included details of client recruitment methods; staff training; number, type and continuity of staff; use of consultation room; approach used; use of appointments; use of carbon monoxide monitoring and perceived outcomes from repeated quit attempts. Pharmacy responders and demographics of clients were separated into three arbitrary pharmacy categories based on their success rate to provide a guide to potential predictors of success.

Results

During 2012, the 182 pharmacies achieved a median (interquartile range (IQR)) of 19 (6 – 45) quit attempts. The IQR of stop smoking success rates (self-reported quits at 4 weeks) among the pharmacies was 25.8% to 55.1%. Of all responders, 67.6% reported that over 80% of all initial consultations were held in the consulting room. Of all responders, 38.4% reported that over 80% of all follow-up consultations were held in the consulting room. The highest proportion of responders (60.5%) reported that pharmacy staff had utilised NHS smoking cessation training, whilst a similar proportion of responders (53.9%) reported pharmacy staff had utilised sponsored training and employment training. The majority of responders (53.3%) reported that pharmacy staff had undertaken one-off training. A higher proportion ($\chi^2(1) = 14.298, p < 0.001$) of responders with a success rate $\geq 41\%$ and with client quit attempts ≥ 10 had clients over 45 years of age compared to responders with

a success rate < 41% and with client quit attempts ≥ 10 . Using the same arbitrary groups there was a difference in the proportion of males and females having a successful quit attempt ($\chi^2(1) = 4.035$, $p = 0.045$) and the proportion of employed clients and non-employed clients having a successful quit attempt ($\chi^2(1) = 16.197$, $p < 0.001$). Other data collected for pharmacy factors did not suggest any potential influence on success rates. There was consensus that pharmacies would like to receive feedback on their success rates which currently does not happen.

Conclusion

There is a wide range of quit attempts and quit rates across 182 community pharmacies in NHS Lothian. For those pharmacies that do not use the consulting room frequently, should be encouraged to utilise it more. Gender, age, employment status of clients and use of the consultation room in community pharmacies should be tested for association with successful smoking cessation outcomes. Pharmacies should be provided with their success rates as a potential motivator. There is a wide range in the access to and frequency of training by pharmacy staff delivering the service. The recommendation is to review the training undertaken by pharmacy staff who are delivering the service in NHS Lothian. Consideration should be given to defining levels of competence to deliver the service to help assure a minimum standard of service delivery.

Abbreviations

CMS – Chronic Medication Service

IQR – Interquartile Range

LJF – Lothian Joint Formularies

MDN - Median

MDS – Minimum dataset form

NICE - National Institute for Health and Clinical Excellence

NRT – Nicotine Replacement Therapy

PC1 – Pharmacy category 1

PC2 – Pharmacy category 2

PC3 – Pharmacy category 3

QALY – Quality-adjusted life year

R&D – Research and Development

SIMD - Scottish Index of Multiple Deprivation

WHO – World Health Organization

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1. INTRODUCTION

1.1 Epidemiology of smoking: Harmful effects and smoking prevalence

Cigarette smoking increases the risk of preventable widespread illnesses such as coronary heart disease and other cardiovascular diseases, cancer and respiratory diseases (1). The World Health Organization (WHO) has estimated that smoking globally attributes to 71% of lung cancer cases, 42% of chronic respiratory disease cases and 10% of cardiovascular disease cases. WHO has also estimated that smoking ascribes to almost 6 million deaths annually. Second hand smoking attributes to 600,000 deaths out of these. In 2009, the global prevalence of cigarette consumption was 22% among adults, whilst in 2008, the European prevalence of smoking was 29% among adults (2-4). Despite that most people are well aware of that smoking is harmful, people continue to start smoking for a variety of reasons. Adolescents that have parents, siblings or peers that smoke, live in a deprived area or go to a school where smoking is common tends to be factors that favours smoking initiation (5).

Smoking attributes to an estimated 13,000 deaths annually in Scotland. This number comprises approximately 25% of all Scottish deaths. Of adults aged 16 and over, 23% were current smokers in 2011. Among age groups, adults aged 25-34 had the highest prevalence of smokers (30%), whilst the lowest prevalence of smokers (7%) was among adults aged 75 and over. From 1995 to 2011, the prevalence of Scottish adult smokers has fallen from 35% to 26% (6).

Measures have been taken by the Scottish Government the last decade to reduce the number of smokers even further, including the smoke ban in all public places in 2006 and by increasing the age limit for buying cigarettes from 16 to 18 in 2007 (6). The Scottish Government aims to achieve at least 80,000 successful quits from 2011 – 2014 through its Stop Smoking Service delivered by community pharmacies among others (7).

1.2 Aids to smoking cessation

Pharmacotherapy and behavioural support are proven effective in smoking cessation and are usually combined to increase the likelihood of success (8, 9). Pharmacological treatments that support smoking cessation attempts are nicotine replacement therapy (NRT), varenicline and bupropion in Scotland. NRT is available over the counter in pharmacies, whilst varenicline and bupropion are available only on prescription.

1.2.1 Pharmacological treatments in smoking cessation

NRT

Cigarettes contain more than 60 tumour initiators or tumour promoters, but also the addictive substance nicotine (10). Between 1 and 3 mg of nicotine are delivered by smoking one cigarette and 20 to 40 mg nicotine is absorbed by an average smoker who smokes 20 cigarettes a day (11). NRT contains only the active substance nicotine and is used to help relieve psychological and physical withdrawal symptoms that occur when persons stop smoking (12). Common symptoms are difficulty concentrating, impatience, restlessness, anxiety, depression and sleepiness. These symptoms usually peak within the first week and last for several weeks (13). NRT continues to stimulate the neural nicotinic acetylcholine receptors in the brain that is lost when stopping smoking, consequently leading to excitation of the mesolimbic pathway and release of dopamine in the nucleus accumbens. Ultimately, this increases the activity in the brain's reward centre. If this is not sustained in the beginning of the smoking cessation period, complete nicotine withdrawal might result in relapse due to the altered stimuli and pleasure sensation (14). Unfortunately, nicotine is susceptible to extensive first pass metabolism in the liver, resulting in poor bioavailability. Because of this fact, it is not beneficial to administer nicotine as a tablet or capsule (15).

NRT is, however, available as chewing gum, lozenges, sublingual tablets, nasal spray and inhalers. In these formulations nicotine is absorbed through the oral mucosa, thereby bypassing first pass metabolism. These products rapidly deliver nicotine to the blood and are used several times a day. Another NRT product is the transdermal skin patch and is applied on the skin once daily. The patch releases nicotine passively through the skin into the blood over a certain time period (16 or 24 hours).

The current NRT products marketed in Scotland are summarised in the table below (16-18).

Table 1 - NRT products

NRT product	Type	Available doses
Nicotine transdermal patch	Sustained release	5 mg, 10 mg, 15 mg doses used over 16 hours 7 mg, 14 mg, 21 mg doses used over 24 hours
Nicotine chewing gum	Immediate release	2 mg and 4 mg
Nicotine sublingual tablet	Immediate release	2 mg
Nicotine lozenge	Immediate release	1 mg, 1.5 mg, 2 mg and 4 mg
Nicotine inhalator	Immediate release	10 mg and 15 mg
Nicotine metered nasal spray	Immediate release	0.5 mg dose/spray
Nicotine oral spray	Immediate release	1 mg/spray

The preferable choice of NRT product should be based on personal preference and how well the product is tolerated by the client. Evidence suggests using the nicotine transdermal patch and an acute dosing type rather than a single product (11). Furthermore, evidence suggests that high dependent smokers should receive a higher dose of NRT (11). There is a 50-70% increased chance of a long-term quit with all of the mentioned NRT products compared to placebo, but only for smokers who have high motivation to stop smoking and have high nicotine dependence (11). A recently published study, however, found that persons who had successfully quit with NRT relapsed a few years later at same rates as persons who had successfully quit without using NRT (19). Adverse effects of NRT products are minor. A common adverse effect with transdermal patches is skin irritation at placement site, whilst common adverse effects for nicotine gum, lozenge and nasal spray are mouth and throat irritation (20).

Bupropion

If the smoker is unlikely to succeed with NRT or the client has had an unsuccessful attempt with NRT, then bupropion is another pharmacological alternative available to aid in a smoking cessation attempt. Bupropion is a weak reuptake inhibitor of the neurotransmitters dopamine and norepinephrine. Its effect on dopaminergic systems seems to be the most important mechanism of action in smoking cessation. High doses of bupropion have shown to inhibit dopamine depletion. However, the dose of bupropion for smoking cessation is relatively low and therefore it has been suggested its effect comes from inhibiting reuptake of dopamine in particular areas in the brain, especially in the nucleus accumbens. If this is the case, bupropion might continue stimulating the reward sensation that falls away upon nicotine withdrawal (21). Studies have shown that the increased chance of a long term quit with bupropion is nearly double compared to placebo. However, adverse effects occur frequently with the drug. Dry mouth and nausea are common light side effects, but 30-40 % of users experience insomnia (22).

Varenicline

Varenicline is another non-nicotinic drug used in smoking cessation. It is a selective partial agonist at $\alpha_4\beta_2$ nicotinic acetylcholine receptors and exerts both agonistic and antagonistic effects. By activating this receptor, it increases release of mesolimbic dopamine, thereby relieving craving and withdrawal symptoms associated with nicotine. In the event of smoking, it prevents nicotine from inducing dopamine through its antagonistic effect and subsequently removes the positive reinforcing effects of nicotine (23). The chance of a successful long-term quit with varenicline is 2-3 times greater than placebo. Mild to moderate nausea is the most frequent side effect when using the drug, but this usually decreases with time (24). However, a recently published BMJ paper states that there has been reported some serious adverse effects such as psychiatric and cardiovascular events, but a casual association is not confirmed. The paper recommends clients taking varenicline should be advised to stop if they develop unstable angina or suicidal ideation (25).

Comparison of NRT, bupropion and varenicline

A meta-analysis published in 2012 compared the effectiveness of NRT, bupropion and varenicline relative to each other at 4 weeks, 3 months, 6 months and 12 months. The study found that varenicline is significantly more effective than the other pharmacotherapy alternatives at almost every time point (26). NICE guidelines state that healthcare professionals should come to a mutual agreement with the client as to what medicine should be used (8). As NRTs safety profile may be the better than varenicline safety profile, it could be that varenicline is not recommended to be the preferable first-line choice even though they show a greater effect than NRT. It is unknown how frequently NRT, varenicline and bupropion are prescribed relative to each other in Scotland.

1.2.2 Behavioural support

Individual counselling involves a trained smoking cessation counsellor providing advice to a smoking client over a period of at least 1 month. Initially, the counsellor assesses and documents the clients' smoking history and their motives for quitting. Secondly, the professional examines what occasions that especially trigger the client to smoke and subsequently helps the client to be more aware when faced with these events. In addition, strategies are provided to overcome these high risk situations. Follow-up sessions are usually undertaken to motivate and develop cessation skills further (8). A smoking cessation advisor will have knowledge-based training in smoking demographics, effects of smoking and of stopping smoking, pharmacotherapy and many other areas. They will also have skill-based training in assessing client's nicotine dependency and motivation to quit, maximising commitment to quit, reviewing client's motivation and responding to common client questions (27).

A Cochrane review looked at 22 studies that compared individual counselling sessions to minimal intervention. The individual counselling involved face-to-face consultations with a counsellor for more than 10 minutes whilst the minimal intervention involved either usual care or up to 10 minutes advice. The authors concluded that individual counselling was more effective than a brief intervention (28). A study from 2003 compared patients receiving individual counselling and nicotine patches to patients receiving minimal intervention and nicotine patches initiated in a hospital setting. The individual counselling involved a 30-60 minute initial consultation followed by follow-up phone calls lasting under 30 minutes for a period of 3 months. Patients in the minimal intervention group received one 10 minute counselling session. The authors found that patients receiving individual counselling with nicotine patches had a significantly higher long-term abstinent rate than the control group (29).

Individual counselling with NRT is used by the National Health Service (NHS) Stop Smoking Services delivered by specialists and pharmacies in the UK. The service was established in 1990-2000 in the UK (30).

1.3 The NHS Stop Smoking Service

Pharmaceutical care and implementation of the NHS Stop Smoking Service in community pharmacies in Scotland

Pharmaceutical care can be defined as:

“The responsible provision of drug therapy for the purpose of achieving definite outcomes that improve a patient’s quality of life”. (Hepler and Strand, 1990) (31)

This definition of pharmaceutical care has and still is widely accepted world-wide ever since Hepler and Strand first introduced the term over two decades ago. It’s important to note that ‘pharmacist’ is not a part of the definition. This is to mark that the patient is the centre of attention and that care is delivered by a team of healthcare professionals in a number of different clinical settings such as primary care and in community pharmacies (32).

In the UK, especially Scotland, pharmaceutical care as a concept has been a part of the development of pharmacy since the early 90s and the profession has become more and more patient orientated (33). The Scottish Government took action towards improving pharmaceutical care further in Scotland by implementing the strategy “The Right Medicine” in 2002 (34). This was to ensure modernisation of pharmacy services in both the community and hospital setting and make better use of pharmacist’s skills, consequently optimising patient care. As a result of this strategy, community pharmacies in NHS Scotland were commissioned to deliver the NHS Stop Smoking Service in 2008 when the service was included in the NHS community pharmacy contract (35).

NHS community pharmacies are one of several venues that provide a smoking cessation service that smokers can join. They are very accessible compared to for example a general practitioner where you have to book an appointment in advance. The service involves pharmacotherapy with NRT and counselling over a time period of 12 weeks by trained staff (36). It is free of charge, including the NRT products prescribed to the client and is eligible for people over the age of 12. However, pregnant women, people with unstable angina, cardiovascular disease, patients on certain medications or other special cases are assessed to see if they are eligible for the pharmacy based Stop Smoking Service. A trained independent pharmacist prescriber can prescribe varenicline if a client has had an unsuccessful quit attempt with NRT in NHS Greater Glasgow & Clyde as part of the Stop Smoking Service, but not in other health board areas (37). It is up to the different health board areas in Scotland to decide if other pharmacological options should be a part of their Stop Smoking Service. Other NHS Stop Smoking Services that are non-pharmacy based are local support programs provided by a NHS specialist advisor which offer NRT and intensive group or 1:1 support for a series of planned sessions.

These services have more dedicated time to deliver the service than the pharmacy based service and are extensively trained in behavioural support (Giovanna DiTano, Lead Pharmacist, Smoking Cessation, NHS Lothian, emailed personal communication, 2012 November 11). Pharmacies can refer clients to these services but there are no criteria defining which patients might benefit most from the more intensive service.

Abrupt smoking cessation vs. gradual smoking cessation

The NHS Stop Smoking Service provides a service based on abrupt cessation of smoking and not gradually cutting down smoking. No NHS venue in the United Kingdom offers reduction to stop smoking as a strategy. However, a meta-analysis has shown that NRT is an effective intervention for people that want to cut down smoking gradually although the effectiveness is shown to be a bit lower than smoking cessation programmes (38). There is some concern that offering both programmes might lead the smoker to choose the reduction programme, because it sounds easier and yet, in reality, it is less effective and might be more expensive compared to the cessation programme. Trials of smoking reduction have only been undertaken in specialist clinics, but there is an on-going pilot study in the UK to assess the feasibility of offering a smoking reduction programme within pharmacies (39).

Effectiveness

Evidence show that community pharmacy-based smoking cessation services are effective in helping clients stop smoking (40, 41). A study from Glasgow evaluated the 'Starting Fresh' service delivered in community pharmacies in 2006 and found it to be an effective approach to get people to stop smoking (CO validated four week cessation rates of 20%) (40). However, the study did not compare the service against usual care or other services. The 'Starting Fresh' service was executed similar to the current Stop Smoking Service delivered by pharmacies. A randomised controlled trial evaluated whether a structured smoking cessation intervention based in the pharmacy would increase quit rates compared with usual care (control group). Subjects assigned to the pharmacy intervention group received a one-to-one interview with the pharmacist (including NRT supply) and follow-up advice weekly for 4 weeks, subsequently monthly for 3 months. The control group received only provision of NRT. The authors found that 14.3% were abstinent in the pharmacy group at 12-month follow up compared to 2.7% in the control group ($p < 0.001$) (41). It is unknown how the pharmacy based service was delivered and if it compares with the current service delivered in community pharmacies.

Approximately 108 000 quit attempts were done using the NHS Stop Smoking Service in Scotland during 2011 (42). Out of these quit attempts, 70% did it through the pharmacy. After four weeks of following the smoking cessation program, around 24,000 and 16,600 self-reported that they had successfully stopped smoking using respectively the pharmacy and non-pharmacy NHS cessation

services (specialist services). This total number of successful quits accounts for 38% of all quit attempts made, 59% from pharmacies of the total (42). No studies have been undertaken to compare the current NHS Stop Smoking Service delivered by pharmacies against usual care or other services.

There is limited evidence of the cost-effectiveness of the current community pharmacy Stop Smoking Service. One study has evaluated the cost-effectiveness of the 'Starting Fresh' service as previously described. They found that the service provided an additional quality life adjusted life year (QALY) at an incremental cost of approximately £2,500 in comparison to a 'self-quit attempt' (43). NICE considers an intervention to be cost-effective when it has an incremental cost-effectiveness ratio of less than £20,000 per QALY (44). As the current Stop Smoking Service delivered in community pharmacies delivered in community pharmacies is similar to 'Starting Fresh' it can be considered cost-effective.

Community pharmacy based smoking cessation service in other countries

Although studies show that community pharmacy-based smoking cessation services are both effective and cost-effective, few smoking cessation services similar to the NHS service are delivered in community pharmacies in other countries. Barriers such as high workload, lack of reimbursement and lack of training, make it difficult for pharmacies to provide a smoking cessation program (45). However, New Mexico, United States, received funding to meet these barriers in 2005 and established a pharmacy-led smoking cessation service. The funding allowed both for reimbursement and training of New Mexico pharmacies in providing the service (46). The pharmacists were trained in Rx for change curriculum (47) and comprises among others the '5 A's approach', ask, advise, assess, assist, arrange, recommended by United States clinical practice guidelines (48). A study published in 2012 assessed the quit rate among smokers participating in this service and found it to be a successful approach towards reducing smoking. No literature explains how this service is provided currently, but the published study stated it was a 6 month program, which included one initial minimum 30-minute counselling session to begin with and three follow-up consultations. At the end of the program, the client had received at least 90 minutes of counselling. The pharmacist had the option to prescribe NRT products, varenicline or bupropion to the client (46). Accordingly, the program differs from the NHS pharmacy service in duration, number of follow-up consultations and the pharmacological options to treat the client.

1.3.1 The NHS Stop Smoking Service in community pharmacies in Lothian

Execution of the service in NHS community pharmacies in Lothian, Scotland, is similar to community pharmacy services in other health board areas, but differs in regards to training of staff and demographics. It is unknown how much the training differs from each other.

Execution of the service – initial engagement, initial consultation and follow-up consultation

Different types of staff members work at the community pharmacy in Scotland (49). In addition to a pharmacist, the pharmacy team can consist of a medicines counter assistant, dispensing assistant, pharmacy technician and pre-registration pharmacist (see appendix 1 for roles and education requirements). Medicine counter assistants, dispensing assistants and pharmacy technicians are regarded as support staff and they are usually the ones that have an initial engagement with a smoker that wants to join the service. Brief advice on how to stop and information about the service are the type of things that can be discussed in the initial engagement before being forwarded on to the pharmacist for counselling. Community pharmacies differ from each other in regards to the types of support staff they have.

When a smoker has signed up to the pharmacy service, the pharmacist meets with the client for an initial consultation to assess his or her smoking status and the level of support needed to be tailored to the individual client before the client begins the program. A form called minimum dataset (MDS) facilitates this process (Appendix 2). Furthermore, the pharmacist assesses the clients' motivation for quitting and nicotine dependence, subsequently assessing what type of NRT products that are the most appropriate to use. Accordingly, the pharmacist tries to tailor the product of choice in regards to the client's preferences and their approach towards the client's motivation of quitting. NRT products are prescribed by using a community pharmacy urgent supply form to collect remuneration for the medicines. The pharmacist also gives information on common withdrawal symptoms and advice on how to manage these symptoms. Written material in form of booklets and leaflets about staying stopped is usually handed out to the client. Although the client has the option to start on the program immediately after signing up, a formal quit date is set approximately a week after the initial consultation. This allows the client to have time to prepare for their quit attempt (36, 50).

After the initial consultation has taken place, the smoker comes back for weekly follow-up sessions to get more advice and encouragement and to pick up a weekly supply of NRT products from either a pharmacist or a trained staff member. Some pharmacies operate with appointments for the initial consultation and follow-up consultations and others do not. Consultations are either undertaken in a private room, area or at the counter in the pharmacy. 92% of NHS community pharmacies in Lothian have a private room or area (51).

Carbon monoxide monitoring

Carbon monoxide monitoring is undertaken during the program. It varies from pharmacy to pharmacy how often this procedure is done, but guidelines recommend doing it in week 1, 5 and 12 (52). This tool functions as a motivational factor when helping clients to stop smoking, but it is also used to confirm a quit. It enables clients to see that carbon monoxide level decreases in their system the longer

they are not smoking and that they are consequently getting healthier (Giovanna DiTano, Lead Pharmacist, Smoking Cessation, NHS Lothian, emailed personal communication, 2012 November 11).

Support tracker sheet

A support tracker sheet (Appendix 3) is also used week by week during the three month program. This is a printed sheet from the NHS with tips on how to encourage the smoker to keep on the program. The responsible staff member can furthermore write down comments on how the smoker is coping week by week. If a different staff member sees the client the next week, this conveniently allows for a rapid overview of the client's status. Certain pharmacies try to keep the client with the same staff member every time they visit during the program, thereby building up a good relationship with the client (Giovanna DiTano, Lead Pharmacist, Smoking Cessation, NHS Lothian, emailed personal communication, 2012 November 11).

Figure 1 explains the client journey in further detail and is based on the client journey provided by NHS Glasgow and Clyde (52) and information provided by Lead Pharmacist for Smoking Cessation in NHS Lothian.

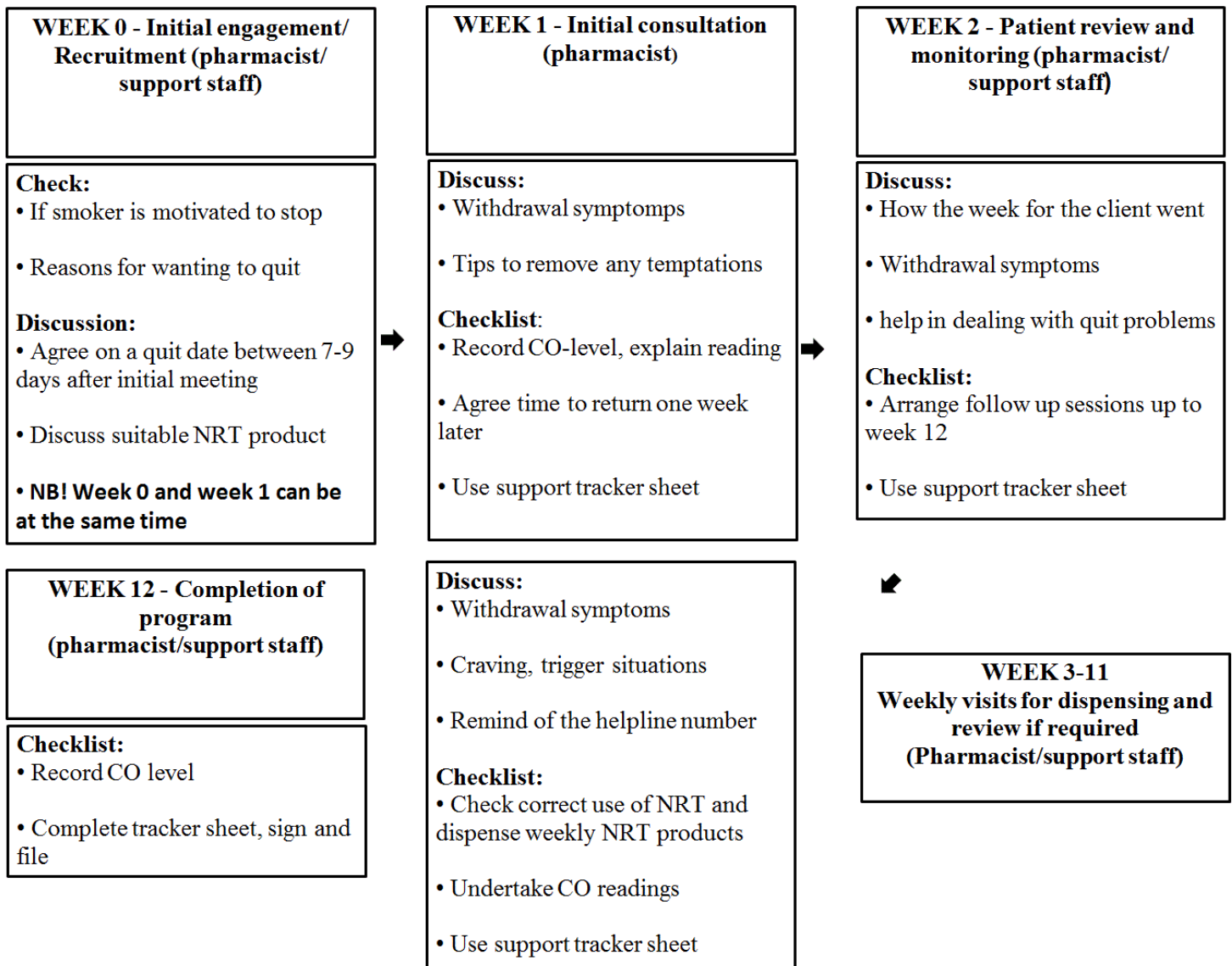


Figure 1 - The client journey

Guidelines on how to use NRT in Lothian

Although the choice of NRT product should be based on the client's preference, NHS Lothian Joint Formulary (LJF) has made a guideline in form of a flowchart as to what type and strength of NRT products can be prescribed (see table 2) (53). LJF based their decision chart on the 2005 guideline "Smoke free Hospital" from The British Thoracic Society (54). This flowchart is going to be included in the next guideline (due April, 2013) for NHS community pharmacies in Lothian (Giovanna DiTano, Lead Pharmacist, Smoking Cessation, NHS Lothian, emailed personal communication, 2013 March 5).

Table 2 - LJJ Flowchart

		Discuss product choice with the individual		
		> 20 cpd¹	10-20 cpd¹	< 10 cpd¹
		NICOTINE PATCH (Nicorette® Invisi or Niquitin®)		
LJJ first choice	Long-acting NRT	16 hour	16 hour	16 hour
		25 mg patch	15 mg patch	10 mg patch
		24 hours	24 hour	24 hour
		21 mg patch	14 mg patch	7 mg patch or short-acting NRT
		NICOTINE GUM (Nicorette®) OR NICOTINE LOZENGE (Niquitin®mini)		
LJJ second choice	Short-acting NRT	4 mg gum/lozenge used p.r.n. ² , max 15/day	2 mg gum/1,5 mg lozenge used p.r.n. ² , max 15/day	2 mg gum/1,5 mg lozenge used p.r.n. ² , max 15/day
		NICOTINE INHALATOR (Nicorette®)		
		15 mg cartridge used p.r.n. ² , max 6/day	15 mg cartridge used p.r.n. ² , max 6/day	15 mg cartridge used p.r.n. ² , max 6/day

¹Cpd = cigarettes per day²p.r.n. = when necessary

Training

Four main NHS training events are run annually by the Lead Pharmacist in smoking cessation for pharmacy staff members in Lothian. These are training events approved by Partnership Action on Tobacco and Health, a joint initiative between the NHS, the Scottish Government and Action on Smoking & Health (50). Depending on the event, generic training is attended by pharmacists, pre-registration pharmacists and support staff to reinforce training whilst more specialised training is usually attended by pharmacists. Generic training involves how to assess the client, smoking and health, withdrawal symptoms, coping strategies and form filling, whilst other training involves smoking cessation in pregnant patients, young patients, patients with complex mental or health issues and patients on certain medicines that interact with NRT. There is no competency framework set by NHS Lothian for pharmacy staff delivering the service (Aileen Muir, Public Consultant, NHS Lothian, personal communication, 2013 May 5).

There are also training events sponsored by pharmaceutical companies (e.g. McNeil) that pharmacy staff can attend. Pharmacy multiples like Lloyds and Boots furthermore arrange trainings within their pharmacies (Giovanna DiTano, Lead Pharmacist, Smoking Cessation, NHS Lothian, emailed personal communication, 2013 March 5). NHS has provided online e-learning packages on how to raise the issue of smoking and how to provide a pharmacy based smoking cessation service which are available for all pharmacies (55, 56).

Recruitment of smokers to the service

Clients can access the service through self-referral, referrals from local surgeries nearby, and the Chronic Medication Service (CMS) in the community pharmacy. The latter is a service provided by pharmacies to help patients with long term conditions get a better understanding of their medicine usage and furthermore optimising their therapy (57). Clients can also be pro-active recruited by pharmacy staff members (e.g. providing brief advice about smoking cessation to people looking to buy NRT products). As deprivation is strongly correlated with smoking (6), it could be that pharmacies in more deprived areas recruit more clients. The Scottish Government has developed a measure of deprivation called the Scottish Index of Multiple Deprivation (SIMD) to identify deprived areas in Scotland (58). Scotland is divided into 6505 small areas by this index and each area contains approximately 350 households. Each area is ranked from 1 (most deprived) to 6505 (least deprived) and can be further split into 5 groups, where 1-1301 areas have a rank of 1 (most deprived) and 5205-6505 areas have rank number 5 (least deprived). Several aspects such as employment, income, health, education, skills and training and crime are the basis of this index. NHS Lothian has made a map that illustrates pharmacies (blue dots) and SIMD in Edinburgh. This is shown in figure 2 (51). All NHS Lothian pharmacies have a deprivation score.

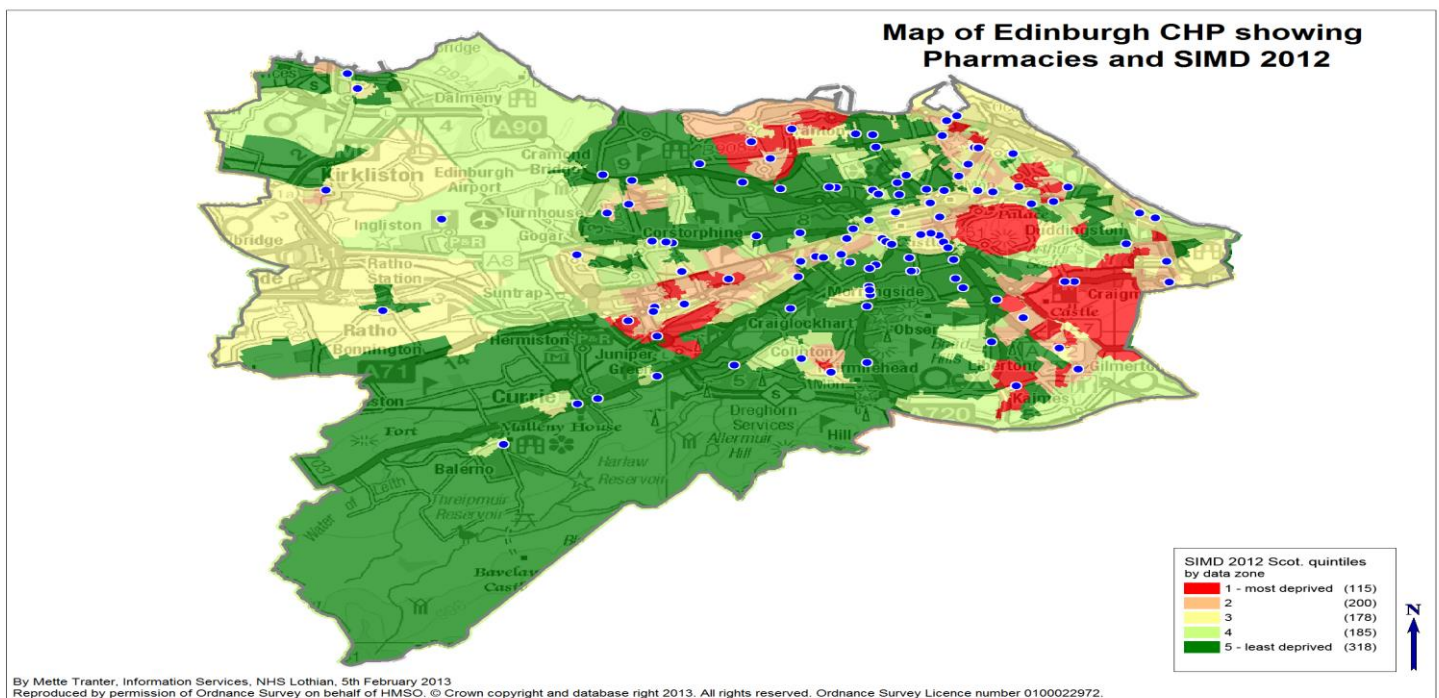


Figure 2 - Map of pharmacies in Edinburgh and SIMD

Recording of quits and claims

NHS community pharmacies complete and submit a Public Health Service (PHS) claim form to receive remuneration from the Scottish Government & NHS Boards. This is done every four weeks for each client undertaking the program and a payment of £25 is collected every month for each client following the program (59). In addition pharmacies have to complete the MDS form to record the client quit and subsequently submits it to a national database. The form is completed during week 4-5 of the program and to record the quit, the smoker is asked if he or she has smoked during the last 2 weeks following the program (36). The client is recorded as a successful outcome if the client has not smoked and as an unsuccessful outcome if the client has smoked. An individual that has smoked has to wait a period of 6 months before re-entering the service again. The client can re-enter the service again before the 6 month waiting period in special cases (e.g. pregnancy, heart attack). The database has data of successful and unsuccessful quit attempts, lost to follow-up quit attempts in addition to gender, age, employment status of quit attempts.

1.4 Predictors of successful smoking cessation attempts

Many studies have been undertaken to determine whether or not individual client variables are predictors of a successful quit attempt. The degree of nicotine dependence is perhaps the strongest predictor of smoking cessation where low level of nicotine dependence (light smokers) is associated with quit success (60-62). A study from 2009 showed that high motivation is associated with making a quit attempt, but that it is not associated with continued abstinence (61). In the same study, they found that people aged over 45 are associated with quitting successfully and reported that this could be the fact that these people are more concerned about their health than younger people. However, a meta-analysis reviewing 16 papers on predictors of success found that, age, gender and marital status are not consistently associated with successfully quitting (62). The review found furthermore that there was some evidence that showed that those who have not made a previous quit attempt are more likely to succeed than those who have made a previous quit attempt and relapsed within less than a week. There are some studies that show that deprived groups and people with low education are more likely to relapse sooner than affluent groups and people with high education (63, 64).

Potential pharmacy predictors

Although it is difficult determining predictors of successful quit attempts, a better understanding of these factors may improve smoking cessation interventions further. The existing MDS data show that the community pharmacy Stop Smoking Services provided across NHS Lothian are variable in terms of success rates. These data on quit rates have not been correlated with individual pharmacies and the type of service they provide. The project was designed as a pilot fieldwork to identify variables within NHS community pharmacies in Lothian providing the Stop Smoking Service that could be used in a future study to confirm potential associations with quit rates.



2. AIMS AND OBJECTIVES

2.1 Aim

To describe the characteristics of community pharmacies in Lothian, Scotland delivering Stop Smoking Services and propose characteristics in future studies for association with stop smoking success rates.

2.2 Objectives

1. To design a questionnaire to survey community pharmacies about their delivery of the Stop Smoking Service
2. To describe all NHS Lothian community pharmacies in relation to number of attempts and successful quits
3. To identify characteristics of community pharmacy Stop Smoking Services that could be tested in future studies for association with quit rates



3. SUBJECTS AND SETTINGS

The subjects were staff employed in NHS community pharmacies in Lothian who are contracted to provide NHS Stop Smoking Services to patients. All these pharmacies (n=182) were invited to take part in a questionnaire survey exploring characteristics of the service provided. There were no exclusion criteria. The MDS database held at Lothian Board, Directorate of Public Health was used to explore success rates and client demographics of the community pharmacies.

The research team consisted of a student investigator, an academic supervisor, a clinical supervisor and a collaborator involved with the Stop Smoking Service in NHS Lothian. The investigator was an exchange master student in pharmacy from University of Tromso through ERASMUS and Strathclyde University and was an honorary member of the NHS Lothian Pharmacy Education, Research, and Development team, Western General Hospital during the project period. The academic supervisor was Head of Pharmacy Education, Research & Development, NHS Lothian and honorary senior lecturer at University of Strathclyde, the clinical supervisor was consultant in Pharmaceutical Public Health, NHS Lothian and honorary research fellow, University of Strathclyde, and the collaborator was Lead Pharmacist for smoking cessation in NHS Lothian.

Approval process of research project

The South East Scotland Research Ethics Service deemed the project not to require research ethics review. However, to meet requirements of Scottish research governance framework (65), the research project had to undergo approval within the Research and Development (R&D) offices in NHS Lothian. To fulfil these governance requirements, the research investigator and the academic supervisor completed a form about the project through the Integrated Research Application System (66). This system collects the information and subsequently sends it to the relevant review body. The research project was successfully approved by R&D offices in early November, 2012 (Appendix 4).



4. METHODS

4.1 Questionnaire design

Database interrogation

A database was developed by the collaborator covering the rates of successful quits for all pharmacies in NHS Lothian for the time period 1st April to 30th June 2012. Pharmacies were arbitrarily allocated into five different categories by the collaborator.

- I** No attempts
- II** Low success rate
- III** High success rate – Low number of attempts
- IV** High success rate – High number of attempts
- V** High number of ‘lost to follow-up attempts’

Lost to follow-up patients could be clients that have successfully quit, but there has been no confirmation. Specific criteria’s for each of the categories were not set and the pharmacies were allocated based on the collaborator’s experience.

The investigator analysed the database and purposively selected 11 potential pharmacies for interview to explore their views about the service provided. Two pharmacies from each category were selected, apart from category IV where three pharmacies were selected. The selected pharmacies were discussed within the research team and were cut down to two from category IV and one from each other category as a purposive sample. Subsequently it was identified that the database was not complete and data was not yet available for all pharmacies. It was agreed that the database would be updated as a priority. The collaborators therefore used their experience in selecting six pharmacies for interview to provide a wide variation in response. A larger sample is likely to have been required to achieve saturation but for the purpose of reducing investigator bias in the questionnaire a manageable sample size was agreed.

Interviews of purposive sample of pharmacies

There were limited literature on how the community pharmacy Stop Smoking Service in Scotland is executed, but the investigator did an e-learning course involving this (55). A meeting with the investigator and the other research team collaborators discussed and proposed possible questions that could be asked at the interview. The proposed questions were generated mainly by the research team and not the investigator. However, the investigator finalised the interview schedule which was subsequently reviewed and approved by the rest of the team. Literature about semi-structured

interviews was reviewed (67). A pilot interview was undertaken with the Lead Pharmacist for smoking cessation in Lothian and she made no comment about the interview schedule.

The Lead Pharmacist made a phone call to each selected pharmacy to briefly inform them about the project, and asked if they were willing to participate. All six pharmacies were willing to participate. Subsequently, the investigator called the pharmacies to set up an interview appointment and an invitation letter (Appendix 5) and participant information sheet (Appendix 6) were sent to each pharmacy.

Six semi-structured interviews lasting approximately 15 minutes were undertaken at separate pharmacies to gather data about different aspects of the stop smoking service to help inform the design of a questionnaire. At the interview appointment, the background of the study project and the motive behind the interview was explained to the interviewees. Furthermore, the investigator explained that the interview would be kept anonymous with no recording of data that would identify the pharmacy or the pharmacist. Everyone consented to be audio recorded and signed the consent form (Appendix 7). The interviewer informed that the recording would be deleted following transcription. The transcriptions were reviewed by the administration assistant at the Pharmacy Education, Research and Development department at Western General Hospital. Transcription amounted to 47 pages (Appendix 8).

The transcriptions were subsequently manually analysed using conventional content analysis (68). By reading through the transcriptions, the researcher and the academic supervisor agreed upon four themes.

Questionnaire

A questionnaire (Appendix 9) was developed based on the information provided at the semi-structured interviews and on a previous study exploring users' views of smoking cessation services provided in community pharmacies (69). The investigator made an initial draft of a questionnaire which was validated during a meeting with the research team to discuss the draft. A second draft was subsequently made, reviewed and approved. As of this, the questionnaire was determined face validated (measured what it was intended to measure) and content validated (covers the research area of interest) by the research team according to Bowling's definition of validation (70). Closed questions with statements where the responder uses an ordinal (Likert scale) as well as nominal and ratio scales were used in the questionnaire. A cover letter (Appendix 10) and a reminder (Appendix 11) were made.

Piloting the questionnaire

Two pilots were undertaken. A third part pilot participant was e-mailed the questionnaire and had nothing to comment. A 20 minute face-to-face pilot was done with a community pharmacist selected by the Lead Pharmacist. She was given both the cover letter and the questionnaire to read and complete.

Afterwards, the investigator and the participant discussed the questionnaire and the cover letter.

Changes made to the questionnaire and cover letter after the pilot:

Statement questions was amended to “*For each of the following statements please tick the box that most closely matches your personal opinions (one tick per statement)*”

A training alternative called “one-off training” was included in the questionnaire and the former alternative called “less than annually” was removed.

The cover letter was amended to “it is not necessary to get precise figures to answer the questions concerning proportions”.

Suggestion proposed by the pilot participant:

Contact the area managers of the big multiple community pharmacies to increase response rate.

A letter (Appendix 12) to the managers was composed and was subsequently circulated by the Lead Pharmacist of Smoking Cessation in Lothian to the responsible persons.

After the pilot phase had been completed, the research investigator reported the results of it to the collaborators and finalised the questionnaire.

Circulating the questionnaire

The questionnaire and the cover letter designed were circulated to all NHS Lothian community pharmacies (182) by the personal assistant to one of the research team members working at NHS Lothian. This was done by post on February 8th 2013. A reminder with a questionnaire enclosed was sent by post to pharmacies that had not replied approximately two weeks after the questionnaire had been sent. Responders faxed back the questionnaire.

The personal assistant added the contractor code number for each community pharmacy to the questionnaire before circulating them. The contractor code number could only be deciphered by the personal assistant and enabled her to send reminders to those who had not responded and maintained

anonymity for the research team. The contractor number also allowed the anonymous link-up of MDS data to each answered questionnaire. This process identified that some contractor codes were outdated but these were subsequently updated. To maintain anonymity, the contractor code number was given an arbitrary study number.

4.2 Description of all NHS Lothian community pharmacies

The investigator was authorised access to the MDS data for each contractor code number in Lothian and retrieved data for the time period 01.01.12 – 31.12.12 by using the online database Smoking Cessation System (71). The database is based on quit attempts, not clients, thereby figures retrieved may include repeat quit attempts for the same client. Data reports were generated between 08.03.13 – 28.03.13 for questionnaire responders and non-responders by using the contractor code assigned to the questionnaire. The investigator excluded contractor codes (pharmacies) that had not been sent the questionnaire. Retrieved data of number of successful quit attempts, unsuccessful quit attempts and lost to follow-up attempts for all contractor codes were input into the software program Microsoft Excel 2010®.

From the data the following was calculated:

1. Total number of attempts (lost to follow-up, unsuccessful and successful quit attempts)
2. Success proportions of total number of attempts where lost to follow-up attempts counted as unsuccessful attempts (number of successful attempts divided by total number of attempts, subsequently multiplied by 100%)

The success proportion and number of attempts for the community pharmacies that had been posted the questionnaire were illustrated in a 100% stacked chart (successful and unsuccessful proportions) with a scatter plot of the number of attempts.

All community pharmacies were allocated into three different categories based on their success rate and the total number of successful and unsuccessful quit attempts they had:

- I** Pharmacies with success rate greater than or equal to 41% and total number of attempts greater than or equal to 10
- II** Pharmacies with success rate less than 41% and total number of attempts greater than or equal to 10
- III** Pharmacies with total number of attempts between 0-9 *

*No success rate criteria were set for this category

The success rate cut-off was based on the average success rate of the NHS Lothian specialist service for the time period 01.01.12 -31.12.12, whilst the quit attempt cut-off was agreed within the research team.

SIMD scores for every pharmacy that had been posted the questionnaire were retrieved from one of the research team members.

4.3 Characteristics of NHS Lothian community pharmacy responders

MDS data and questionnaire data were used to identify characteristics of community pharmacy stop smoking services.

MDS data

Demographic data of quit attempts were retrieved from the Smoking Cessation System for pharmacies who responded to the questionnaires. This included data on number of successful and unsuccessful males, females, employed clients, students/unemployed/retired/homemaker client attempts in addition to number of client age ranges. Other MDS data of attempts such as cigarette consumption and number of previous quit attempts the last year were not available to retrieve.

Questionnaire responders

Questionnaire responders were allocated into the pharmacy categories described in 4.2.

Some of the questionnaires had missing data and the following imputations were conducted:

- Missing data of questions regarding successful quit attempts were left blank and included in the analysis.
- Three responders had left out answering three or more questions and were left blank, but were included in the analysis.
- Questionnaires which were faxed back with only 2 pages were included in the analysis.
- Some questionnaires missed one question and were completed after considerations by the research investigator and academic supervisor, and subsequently was regarded as completed.
- Missing data of Q11.1 were ticked off the same as they had done for the standard approach in Q12.1.
- One responder had left out Q8.6 and was ticked off as '0-20%' as they had ticked off this alternative for Q8.5.
- One responder had left out Q20, and this was ticked off as 'agree' as they had ticked off 'disagree' for Q21.
- Blank alternatives for Q8.1-8.5 were ticked off as 0-20%.
- For Q3 some responders had written 1-2 pharmacists. These responses were regarded as 'more than one pharmacist' in the analysis.

4.4 Statistics used to describe NHS Lothian community pharmacies

The research team observed the raw data of questionnaire and MDS data, and identified numerical differences to be confirmed by chi-square tests in terms of factors to be tested in future studies.

Interferential statistics, normality tests and Mann-Whitney tests were calculated by using IBM SPSS Statistics version 19.0®, whilst descriptive statistics were calculated by using Microsoft Excel 2010®.

Statistics used on different data:

- Number of pharmacies, success rates, number of quit attempts and SIMD score for each pharmacy category were described by descriptive statistics.
- Normality tests were run on success rates and number of quit attempts for pharmacies in each category.
 - Both significantly deviated from a normal distribution (Shapiro-Wilk's test: $p < 0.05$).
 - Median (Mdn) and interquartile range (IQR) was therefore used to describe descriptive statistics of success rates and number of quit attempts.
- Descriptive statistics and some interferential statistics (chi-square tests) were used to describe questionnaire results in relation to the arbitrary pharmacy categories.
- Normality tests were run on different demographic variables for each pharmacy category and most significantly deviated from normal distribution (Shapiro-Wilk's test: $p < 0.05$)
 - Median and interquartile range was therefore used to describe descriptive statistics for demographic data.

5. RESULTS

5.1 Questionnaire design

The characteristics of the type of interview participant and the associated pharmacy are summarised in the table 3. Four female participants and two males were interviewed.

Table 3 - Characteristics of participants' pharmacies

Type of participant	Type of community pharmacy	Geographical location
Pharmacy Technician (Pt _a)	Independent	Affluent area
Pharmacist (P _b)	Multiple	Shopping centre
Pharmacist (P _c)	Multiple	Deprived area
Pharmacist (P _d)	Independent	Rural area
Pharmacist (P _e)	Independent	Rural area
Pharmacist (P _f)	Small multiple	City centre

Table 4 presents the 5 main themes with associated subthemes from the manual transcription analysis.

Table 4 - Thematic framework

Theme	Subtheme
Recruitment of clients	Initial approach
	Referrals from other services
	Engagement
	Consultation
	Information
	Training
Type of client	Age
	Repeats
	Referrals to other services
Staff-client relationship	Follow up consultations
	Service provider
	Use of tracker sheet or alternative
	Feedback and customer satisfaction
	Tailored or standard approach
	Frequency of carbon monoxide monitoring
Barriers	Service availability
	6 month waiting period
	Paperwork/administration
	Maintenance of CO ₂ machine
	Perception of failure

Recruitment

The majority of the interviewees reported that clients usually refer themselves to be recruited to the service. When asked if they approached the client to recruit the individual, most interviewees said it was mainly through clients looking to buy NRT products. However, two pharmacists said they would approach clients that are involved in the Chronic Medication Service and with whom they directly have a professional relationship.

“...Some patients on CMS or people that I know have a problem with smoking I would approach...” (P_c)

Furthermore, one pharmacist mentioned that they recruit clients through referrals from local surgeries nearby the pharmacy, confirming that the surgery is aware of the service and is happy to refer clients.

“...and often they are referred from the local surgery where they’ve been.” (P_f)

The pharmacy technician (P_a) stated she would engage a client discretely if she could smell smoke off the person:

“...but we are trying to be proactive as well, in a way that is not too in the face but if we can smell the smoke from them or if we’ve just seen them put a cigarette out as well maybe pop a wee leaflet in.” (PT_a)

When asked if they would approach clients who present with a prescription for a smoking related disease, three participants said they would.

“As far as prescription goes, unless, again, if you smell it off them and you’re aware of it as well, you would maybe say to them ‘have you thought stopping smoking’” (PT_a).

“...some of them you will put a little sticker on it saying have you heard about the service, you know” (P_c)

These findings lead to the development of certain questions regarding recruitment and engagement in ‘Section 2’ of the questionnaire.

Most participants stated that the initial consultation was undertaken by the pharmacist whilst some participants reported that follow-up consultations are done by support staff. One pharmacist stated that support staff in other pharmacies do the initial consultation and not the pharmacist:

“...I know a lot of place that the dispensers do it, but here it’s the pharmacists that sit down with them in the initial consultation...” (P_d)

A question regarding which type of staff member that actively takes part in the initial engagement, consultation and follow-up consultation was therefore included in the questionnaire.

When asked about where they have a discussion with the client, most said it was in a consultation room. The pharmacy technician said it was preferred, but it was not always feasible.

“Unless this one (consultation room) is being taken up by another consultation or something else, well but, generally in here, it’s much easier” (PT_a)

One pharmacist said the consultations would be in the consultation room only if the customer wanted to or if they were doing carbon monoxide monitoring.

“We would bring them in here for their initial consultation if they wanted to, depends when they came into the pharmacy. If they came into the pharmacy and it’s quiet at the reception desk then we can have the conversation with the customer there. In that way we can do the, we can do the service much quicker so we would only bring them in here if we were carbon monoxide testing, so the, you know when they come in to collect their prescriptions, we would just do the consultations and find out how they’re getting on with them at, at the desk” (P_b)

Two questions regarding how many of the initial consultations and follow-up consultation were located in the consultation room were included in the questionnaire.

Written information about smoking cessation for the client was not given by every pharmacy interviewed. Some participants said they would give the client both written and oral information about smoking cessation, whilst others would mainly give advice.

“...leaflets and things, like that would be an idea, but no, we tend to just give, you know, advice to come in whenever you want and just give, give the advice.” (P_c)

A statement question was included in the questionnaire to see if pharmacies provide clients with written information.

The training the participants had received to undertake the stop smoking service was mostly NHS smoking events and sponsored trainings by manufacturers. One of the pharmacists working for a multiple pharmacy said that they receive in-house trainings.

“As a company, the company give like in-house trainings, so we’ve got like 30 minutes tutorials and there is always a stop smoking one.” (P_b)

These training options were included in the question regarding ‘how are pharmacy staff trained’ in the questionnaire. None of the participants mentioned the available online NHS e-learning course on smoking cessation when asked about training. This was, however, included as an alternative in the same training question. One pharmacist mentioned that staff members went fairly often to training events.

“...It’s been, you know, every 6 months or so, there’s one sort of evening program in, you know, quite often there’s a few people that will go to it...” (P_c)

One pharmacist said however they had only gone to training events a couple years ago.

“And the training, god, I don’t remember when that was, that was 2007/08 or something, we just went to the evening trainings all of us.” (P_f)

From this variety of responses, we included a question about how often pharmacy staff are trained in the questionnaire.

Type of client

Most interviewees had difficulty describing their clients as they get a complete mix of people. They were nevertheless able to characterise clients in term of age.

“Usually, it’s, I’d say, early 20s for some of it and then you’ve got your 30-40s, late 30-40s who have stopped in the past.” (PT_a)

“Most of them are just random, random people. There’s no set definition. I would say probably under the age of 45, more than over that age.” (P_c)

In the questionnaire, we therefore asked about client’s age, but not ethnic origin, pregnancy status or their employment status.

All six participants reported they had had clients with previous unsuccessful quit attempts come back for another quit attempt. An approximate proportional question regarding how many of all their success attempts came from first attempts and further attempts were included in the questionnaire. One pharmacist said they would refer them to other services if they had tried several times the pharmacy based stop smoking service several times.

“We’ve had a few people that have dropped off and maybe started again and then dropped off again and then at the second time they come back, we’ve just given them the details of the Lothian stop smoking clinics and said to them, you know, ‘you’re really looking for additional help’.” (P_b)

A statement question was included to see if pharmacies provided information about other support options available.

Staff-client relationship

Four of the participants said it would generally be different staff members who see the client during the program whilst two participants said it was generally the same person who saw the patient week by week. Four participants thought it was important with continuity as it builds up a good relationship with the client.

“...but we usually try and tend to see the same patient, because I think if they get to know us in the first consultation, it’s maybe a little bit easier for them to talk to us and be more honest with us, if they see the same person you get to know the patient as well, so we do like to see the same person every week.” (P_f)

Every participant, except one, used the NHS support tracker sheet or an alternative tracker sheet week by week. A question regarding continuity of staff member and use of tracker sheet was added to the questionnaire.

One of the participants working at a multiple pharmacy said they have a customer satisfaction form in order to get feedback on the service delivered throughout the 12 week program. This was considered to be included in the questionnaire, but was left out after discussions with the team collaborators as they thought that independent pharmacies or small multiple pharmacies would most likely not have this.

There were varied answers as to what approach they would use when talking to the client with low motivation. Two interviewees said they would change their approach.

“...But it’s trying to gauge what their feelings are when they come in as well as to whether or not you do a softly, softly approach...” (P_a)

“You would tend to mould your response as to how their, what their behaviour is.” (P_c)

A third participant said he would use the same approach regardless if they were motivated or not motivated.

“It’s, it’s just a standard one, I mean we’ve all done the same training, training course two years ago and realistically we are a busy pharmacy. Me or any of the other technicians have certain time, we need to stick to certain time, so the one, on one interview is a good opportunity to know better the patient, but motivation, you know, it’s willpower mainly if you really want to quit you will succeed, we give you the help, any more than that we don’t do it for you.” (P_f)

When asked if they would approach a client with a previously unsuccessful quit attempt differently, one (P_c) said they would change the client to other NRT products. Three said they would try to find out the reason why the smoker relapsed. The pharmacy technician said they would consider changing the client to another staff member to see if the client would react differently.

“So instead of it being me, cause I’d already did them the last time, one of my other pharmacists will take it, or, dispensing assistant, just to see if they’ll react differently to a different person” (P_a)

From the different approach views in the interviews, statement questions regarding approach were developed.

Frequency of carbon monoxide should have been asked more directly at the interviews, however one pharmacist said that they did not undertake CO monitoring every time clients visit.

“And the other thing with it is that we don’t always do the carbon monoxide testing. We would do it, if customers were very specific about it. It’s not, at the moment, it’s not, I think it’s good practice, I think it’s, it’s, it’s, we can, in Lanarkshire, I think they brought it in that you had to do it and it’s not, you don’t have to do in Lothian...” (P_c)

A question regarding how often carbon monoxide testing are undertaken during the program was included in the questionnaire.

Barriers

Only one participant said they operated with appointments for consultations whilst one said that if a client comes in on a Saturday, they would tell them to come back another day as they do not have time to undertake the service in the weekend. Questions regarding if pharmacies operates with appointments for consultations were hence included in the questionnaire.

When asked if a client that has had an unsuccessful quit attempt could re-join the service immediately, the answers differed. One said that they could take them on right away, whilst others said they would have to assess the client to see if they were ready for another quit attempt. Two said they operated with a 6 month waiting period before the client could re-join the service.

“We’ve had a couple of kind of failed attempts. There’s the problem is the, you know, our guidelines say that you only have it every 6 months, OK, in pharmacy, so you know, they, they come in, they get their first week, they try it and something happens, they go away, they come back in about 2 months later and we can’t actually redo it, so we have to refer them to other services” (P_c)

Three participants said that the administration of paper and the chase up of patients to see if they have quit were the main barriers for executing the service as it is very time consuming. One expressed that an online system to facilitate the forms would be more optimal instead of faxing the paper forms.

“Probably the paperwork. You know, the forms that you have to fax over within...after 4 weeks...so the paperwork is a bit, kind of, a bit time consuming I would say, it might be a better way to do it whether that’s an online system, you know, quickly filling out their details and there we go, that might be a better, you know, I, you know it’s a some sort of database that you just kind of log in...” (P_c)

One participant said that they had problems with the carbon monoxide monitors.

“The only other thing I have is the smokalisors... You know the, the machines that check their carbon monoxide level. Ours is suddenly stopped working, so who do we go to sort that out, I don’t know. I’m assuming NHS stores or some sort, but yeah... It’s suppose, well, every, you know, every time you have a consultation, so you know, we do, I’d say about 4 to 10 consultations at least a month, so every time you’re supposed to use that, you’re suppose to calibrate it yourself, but we don’t actually have the material to calibrate it with even though we’ve ordered it so yeah that’s a bit of a issue there.” (P_c)

Another participant reported that she was unsure of what to do with patients that had smoked during the program. She said that she would continue the program with clients that had only had one cigarette, but not with those had cut down the number of cigarettes smoked per day.

“And the other thing that I don’t, that I’m always unsure of is, at the 4 week review and you ask them if they’ve had a cigarette in the last 2 weeks. I’ve had people that have said ‘Yeah I fell off the wagon once’, you know, ‘I’ve had a night out, I had some alcohol, I had a cigarette, I regretted it the next day, I’ve not had any ever since’, now technically that’s a fail, because they’ve had a cigarette in their 2 weeks, but I wouldn’t kick them off the program for that, because I think, you know, it’s someone off, that’s fine, but then I think, well is that right, is that, that wrong, you know, it’s different to somebody that would say ‘I’m still having one a day, but I’ve cut it down from 20’” (P_b)

Given the challenge of minimising the questionnaire, questions about these barriers were omitted.

5.2 Description of all NHS Lothian community pharmacies

Success rates and number of quit attempts for each of the 182 NHS community pharmacies in Lothian are illustrated in figure 5 (see page 30). The assumption of normality for success rate and number of quit attempts was violated, as assessed by Shapiro-Wilk's test ($p < 0.05$). Success rates ranged from 0 to 100% and number of attempts ranged from 0 to 182. Median success rate was 38.4% (IQR = 25.8-55.1%) per pharmacy whilst median number of quit attempts was 19 (IQR = 6-45 attempts) per pharmacy.

Figure 3 and 4 summarises statistical findings for number of quit attempts and success rates for the community pharmacies. Each of the boxplots reveals outliers. There were four pharmacies with over 100 quit attempts, whilst there were four pharmacies with 100% success rate. The four pharmacies with 100% success rate had only one successful quit attempt for the collected time period.

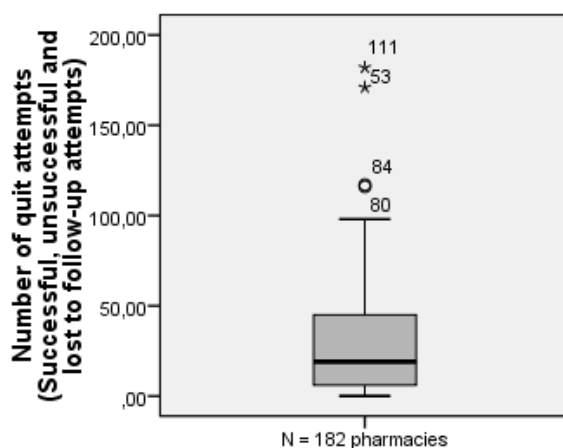


Figure 4 - Boxplots of quit attempts

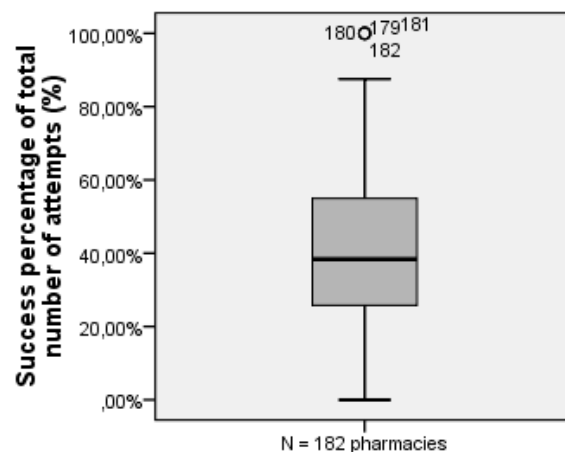


Figure 3 - Boxplots of success proportions

Table 5 (see page 31) describes number of community pharmacies in Lothian for the same time period as stated above in relation to three arbitrary pharmacy categories; success rate greater than or equal to 41% and quit attempts greater than or equal to 10 (pharmacy category 1); success rate less than 41% and quit attempts greater than or equal to 10 (pharmacy category 2); and success rate 0-100% and quit attempts between 0-9 (pharmacy category 3). SIMD scores for pharmacies in relation to their pharmacy category are also included in the same table

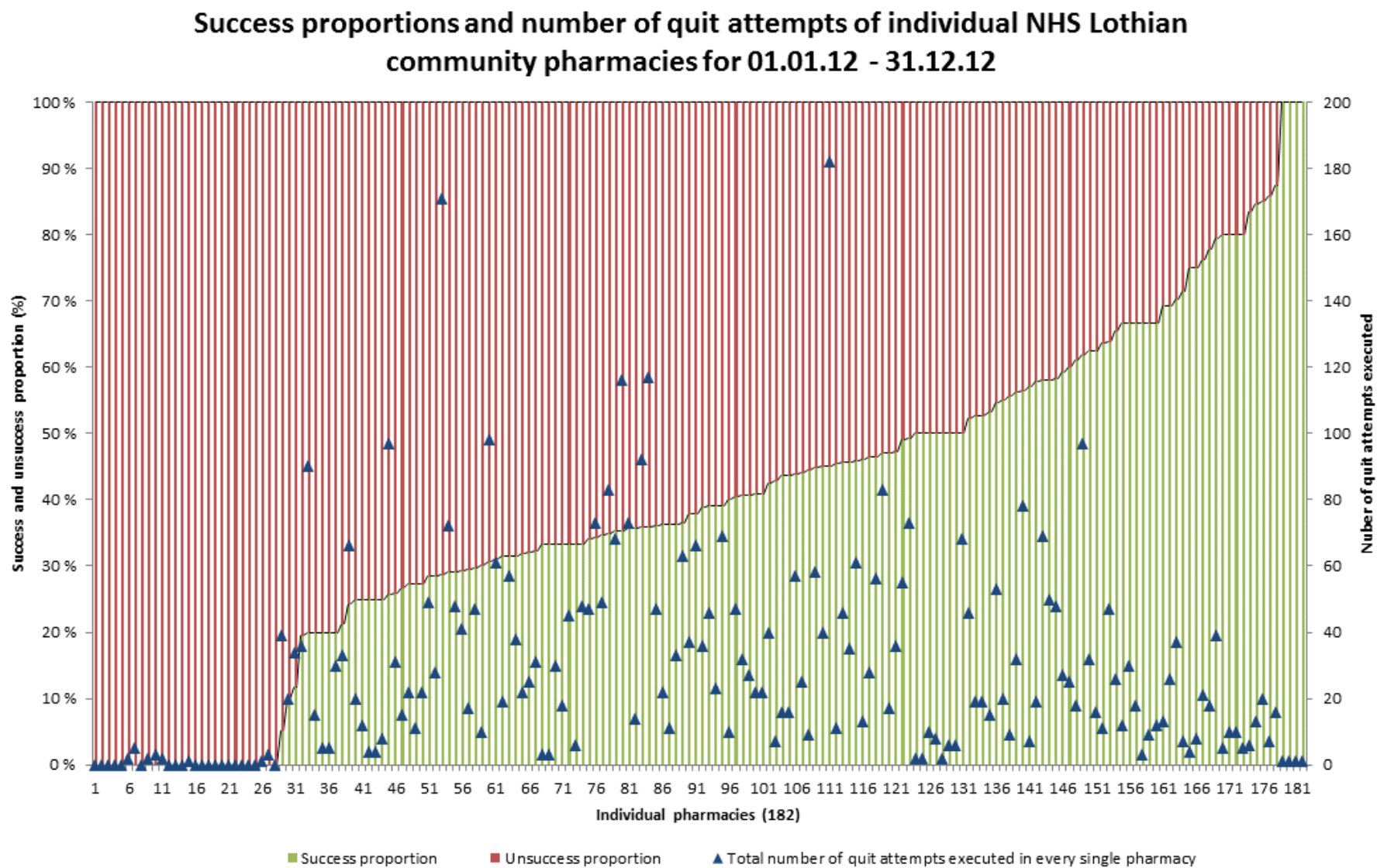


Figure 5 - Success and number of quit attempts for NHS Lothian community pharmacies

There were 58 pharmacies in pharmacy category 1 (PC1), 65 in pharmacy category 2 (PC2) and 59 in pharmacy category 3 (PC3). Median success rate for pharmacies PC1 and PC2 were 56% (IQR = 46.4-66.7%) and 32% (IQR = 27.2-36.2%) respectively.

Of pharmacies in PC1 and PC2, 12.1% and 13.9% respectively had a SIMD score of 5. Of pharmacies in PC3, 45.8% had a SIMD score of 5. Median SIMD score number for pharmacies in PC1 and PC2 was 3 whilst median SIMD score number for pharmacies in PC3 was 5.

Table 5 - Description of community pharmacies (n=182)

Type of pharmacy	Number of pharmacies	Median success rate per pharmacy, % (IQR)	Median quit attempts per pharmacy, n (IQR)	Number of pharmacies with a specific SIMD score, n (%)*
Pharmacy category 1 (PC1): Success rate \geq 41% and quit attempts \geq 10	58	56 (46.4 – 66.7)	27 (16 – 49)	Score 1 = 12 (20.7) Score 2 = 16 (27.6) Score 3 = 17 (29.3) ¹ Score 4 = 6 (10.3) Score 5 = 7 (12.1)
Pharmacy category 2 (PC2): Success rate < 41% and quit attempts \geq 10	65	32 (27.2 – 36.2)	36 (22 – 62)	Score 1 = 14 (21.5) Score 2 = 14 (21.5) Score 3 = 15 (23.1) ¹ Score 4 = 13 (20.0) Score 5 = 9 (13.9)
Pharmacy category 3 (PC3): Quit attempts between 0 and 9 with any success rate	59	20 (0 – 55.6)	2 (0 – 5)	Score 1 = 4 (6.8) Score 2 = 8 (13.6) Score 3 = 12 (20.3) Score 4 = 8 (13.6) Score 5 = 27 (45.8) ¹

*SIMD = Scottish Index of Multiple Deprivation - Identification of deprived areas in Scotland – 1 = most deprived, 5 = least deprived

¹ Median SIMD score for each pharmacy category

5.3 Characteristics of NHS Lothian community pharmacy responders

Questionnaire response rate and MDS data of demographics of responding pharmacies

Of the 182 community pharmacies, 81 (44.5%) responded to the questionnaire where 29 (50.0%) were from pharmacy category 1, 32 (49.2%) were from pharmacy category 2 and 20 (33.9%) were from pharmacy category 3.

Table 6 describes success and quit attempts in relation to gender for each pharmacy category that responded to the questionnaire for the study time period. Pharmacies in PC1, PC2 and PC3 carried out 991 quit attempts (Mdn = 26, IQR = 17-48), 1441 quit attempts (Mdn = 47, IQR = 25-65) and 86 quit attempts (Mdn = 5, IQR = 0-8) respectively.

The highest proportion of quit attempts were done by females for PC1 (55.6%) and PC2 (54.9%), whilst the highest proportion of successful quits were done by males for PC1 (59.0%) and PC2 (36.1%).

A Chi-square test (Appendix 13) was conducted to identify if there was a difference between the proportion of males and females having a successful quit. Number of successful males, unsuccessful males, successful females and unsuccessful females for pharmacy category 1 and pharmacy category 2 were calculated. There was a statistically significant difference between the proportion of males and females having a successful quit ($\chi^{2(1)} = 4.035$, $p = 0.045$). There was no statistically significant difference between proportion of males and females being in pharmacy category 1 compared to pharmacy category 2 ($\chi^{2(1)} = 0.217$, $p = 0.642$) (Appendix 14)

Table 6 - Quit attempts by gender for pharmacy responders in relation to their pharmacy category

Characteristics		Pharmacy Category 1 (n=29)	Pharmacy Category 2 (n=32)	Pharmacy Category 3 (n=20)
Quit attempts	N, (Mdn, IQR)	991 (26, 17-48)	1474 (47, 25-65)	86 (5, 0-8)
Males	%	44.1	45.0	48.8
Females		55.9	55.0	51.1
Males		437 (12, 10-22)	664 (18, 10-29)	42 (3, 0-4)
Successful quits	N, (Mdn, IQR)	258 (7, 6-12)	240 (8, 3-11)	18 (1, 0-2)
Unsuccessful quits		179 (6, 3-9)	424 (12, 6-17)	24 (1, 0-2)
Successful quits	%	59.0	36.1	42.9
Unsuccessful quits		41.0	63.9	57.1
Females		554 (14, 8-27)	810 (19, 12-35)	44 (3, 0-3)
Successful quits	N, (Mdn, IQR)	303 (9, 5-14)	259 (7, 3-13)	21 (1, 0-2)
Unsuccessful quits		251 (5, 3-16)	551 (15, 9-25)	23 (1, 0-2)
Successful quits	%	54.7	32.0	47.7
Unsuccessful quits		45.3	68.0	52.2

* Real data

The highest proportion of quit attempts were undertaken by clients aged 45-59 for pharmacies in PC1 (29.7%) and by clients aged 25-34 (25.9%) for pharmacies in PC2 compared to other client age groups. The smallest proportion of quit attempts were done by clients aged 13-24 for both PC1 and PC2. A chi-square test was conducted to see if there was a difference between quit attempt age groups of PC1 and PC2 (appendix 15). A cut-off was made and clients greater than or equal to 35 years of age were allocated in one group and clients below 35 years of age were allocated in another group for both pharmacy categories. A statistically significant higher proportion of quit attempts in pharmacies in PC1 compared to pharmacies in PC2 were done by clients greater than or equal to 35 years of age ($\chi^{2(1)} = 12.558$, $p < 0.001$). Another chi-square test was conducted for clients greater than or equal to 45 years of age and clients below 44 years of age (appendix 16). A statistically significant higher proportion of quit attempts in pharmacies in PC1 compared to pharmacies in PC2 were done by clients greater than or equal to 45 years of age ($\chi^{2(1)} = 14.298$, $p < 0.001$). Table 7 shows number of attempts based on age ranges, whilst figure 5 illustrates pharmacies in PC1 and PC2 age ranges based on their proportion.

Table 7 - Quit attempts by age for pharmacy responders in relation to their pharmacy category

Characteristics		Pharmacy Category 1 (n=29)	Pharmacy Category 2 (n=32)**	Pharmacy Category 3 (n=20)***
Quit attempts	N, (Mdn, IQR)	991 (26, 17-48)	1474 (47, 25-65)	86 (5, 0-8)
13-24 years of age		113 (3, 2-5)	207 (5, 3-8)	31 (1, 0-3)
25-34 years of age		214 (6, 3-10)	380 (11, 6-16)	23 (1, 0-2)
35-44 years of age	N, (Mdn, IQR)	241 (6, 3-11)	364 (11, 5-17)	13 (0, 0-1)
45-59 years of age		294 (8, 4-16)	342 (9, 4-16)	27 (1, 0-3)
60 years of age and over		129 (4, 2-6)	173 (5, 2-7)	14 (1, 0-1)
13-24 years of age		11.4	14.0	36.0
25-34 years of age		21.6	25.8	26.7
35-44 years of age	%	24.3	24.7	15.1
45-59 years of age		29.7	23.2	31.4
60 years of age and over		13.0	11.7	16.3

* Real data

**Age data missing for 8 quit attempts – Proportions do not add up to 100%

*** Age data missing for 1 quit attempt – Proportions do not add up to 100%

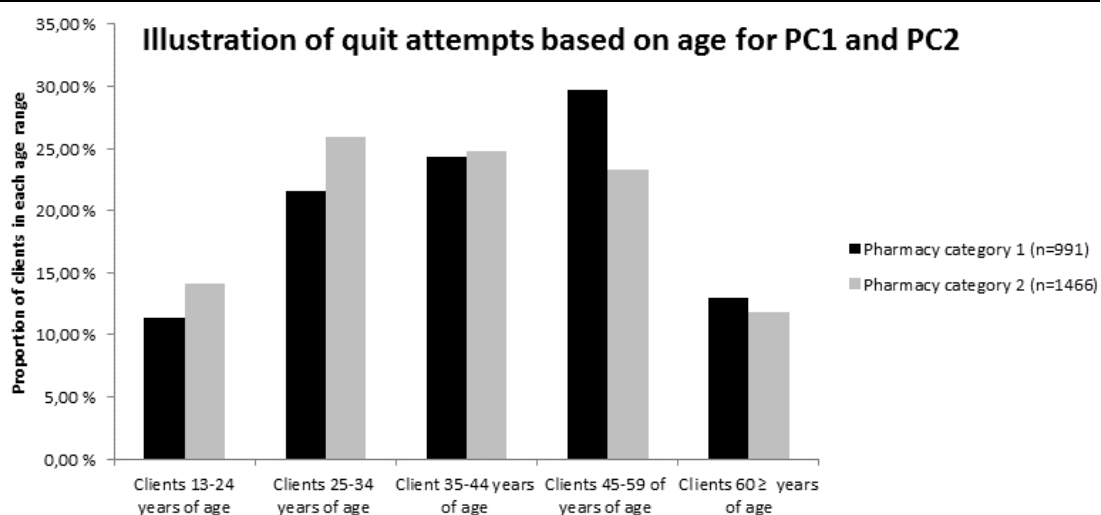
**Figure 6 - Quit attempts by age for PC1 and PC2**

Table 8 describes success and quit attempts in relation to employment status. The highest proportion of successful quits were done by employed clients for PC1 (59.9%) and PC2 (38.1%) compared to

non-employed clients (students/unemployed/retired/homemaker clients). Most quit attempts were also done by employed clients for PC1 (57.6%) and PC2 (55.9%). In comparison, 33.1% and 34.9% were students/unemployed/retired/homemaker clients for pharmacies in PC1 and PC2 respectively.

A Chi-square test was conducted to identify if there was a difference between proportions of employed clients and non-employed clients and having a successful quit. Successful and unsuccessful employed clients and successful and unsuccessful students/unemployed/retired/homemaker (non-employed) were calculated for PC1 and PC2. A statistically significant higher proportion of employed clients had a successful quit compared to non-employed clients ($\chi^{2(1)} = 16.197$, $p < 0.001$). There was no statistically significant difference between the proportion of quits attempts in pharmacies in PC1 and PC2 and being done by employed clients compared to non-employed clients ($\chi^{2(1)} = 0.895$, $p = 0.344$)

Table 8 - Quit attempts by working status for pharmacy responders in relation to their pharmacy category

Characteristics		Pharmacy	Pharmacy	Pharmacy
		Category 1 (n=29)	Category 2 (n=32)	Category 3 (n=20)
Quit attempts	N, (Mdn, IQR)	991 (26, 17-48)	1474 (47, 25-65)	86 (5, 0-8)
Employed clients		57.6	55.9	59.3
Students, unemployed, retired and homemaker clients	%	33.1	34.9	24.4
Permanent sick or disabled, other and homemaker clients		9.3	9.2	16.3
Employed clients		571 (15, 11-25)	824 (25, 12-32)	51 (2, 0-5)
Successful quits	N, (Mdn, IQR)	342 (9, 6-16)	314 (9, 4-12)	26 (1, 0-2)
Unsuccessful quits		229 (6, 4-13)	510 (16, 6-20)	25 (1, 0-3)
Successful quits		59.9	38.1	51.0
Unsuccessful quits	%	40.1	61.9	49.0
Students, unemployed, retired and homemaker clients		328 (8, 5-16)	515 (14, 9-25)	21 (1, 0-1)
Successful quits	N, (Mdn, IQR)	172 (5, 3-9)	151 (5, 2-7)	8 (0, 0-1)
Unsuccessful quits		156 (3, 2-9)	364 (10, 6-16)	13 (0, 0-1)
Successful quits		52.4	29.3	38.1
Unsuccessful quits	%	47.6	70.7	61.9

Table 8 - Continued

Characteristics		Pharmacy	Pharmacy	Pharmacy
		Category 1 (n=29)	Category 2 (n=32)	Category 3 (n=20)
Permanent sick or disabled, other and unknown clients		92 (1-5)	135 (4, 2-5)	14 (0, 0-1)
Successful quits	N, (Mdn, IQR)	47 (1, 1-3)	34 (0, 2)	5 (0, 0)
Unsuccessful quits		45 (1, 0-3)	101 (3, 1-4)	9 (0, 0-1)
Successful quits		51.1	25.2	35.7
Unsuccessful quits	%	48.9	74.8	64.3

* Real data

Questionnaire results – General

As table 9 shows, there was a higher proportion of responders with more than 16 years of pharmacy experience for questionnaire responders in PC1 (51.7%), PC2 (40.6%) and PC3 (30.0%).

Most participants in PC1 (62.1%) and PC2 (46.9%) who completed the questionnaire worked in a multiple pharmacy whilst most participants in PC3 (60.0%) worked in an independent pharmacy. Over 85% of all participants for every pharmacy category reported that their Stop Smoking Service is most frequently open during pharmacy opening hours.

The highest proportion of participants for each pharmacy category (>75%) reported that one pharmacist is working at any one time at their pharmacy.

The proportions of participants in PC1, PC2 and PC3 reporting more than two staff members delivering the Stop Smoking Service at their pharmacy were 34.5%, 46.9% and 20.0% respectively. Median response was two staff members for all responders and for every pharmacy category. Table 9 summarises results described above.

Table 9 - General results for all responders and in relation to their pharmacy category

Characteristics	All responders (n = 81)	Respondents PC1 (n = 29)	Respondents PC2 (n = 32)	Respondents PC3 (n = 20)
Experience, n (%)				
0-5 years	18 (22.2)	4 (13.8)	9 (28.1)	5 (25.0)
6-10 years	16 (19.8)	7 (24.1)	5 (15.6)	4 (20.0)
11-16 years	13 (16.1) ¹	3 (10.3)	5 (15.6) ¹	5 (25.0) ¹
Above 16 years	34 (41.9)	15 (51.7) ¹	13 (40.6)	6 (30.0)
Type of pharmacy, n (%)				
Independent	28 (34.6)	6 (20.7)	10 (31.2)	12 (60.0) ¹
Small multiple	16 (19.7) ¹	5 (17.2)	7 (21.9) ¹	4 (20.0)
Multiple	37 (45.7)	18 (62.1) ¹	15 (46.9)	4 (20.0)
Stop Smoking Service accessibility, n (%)				
Pharmacy opening hours	73 (90.1) ¹	27 (93.1) ¹	28 (93.1) ¹	18 (90.0) ¹
Only during week days	1 (1.2)	0 (0.0)	0 (0.0)	1 (5.0)
Only by appointments	7 (8.6)	2 (6.9)	4 (6.9)	1 (5.0)

Table 9 – Continued

Characteristics	All responders (n = 81)	Respondents PC1 (n = 29)	Respondents PC2 (n = 32)	Respondents PC3 (n = 20)
Pharmacists working at any one time, n (%)				
One	65 (80.2) ¹	23 (79.3) ¹	24 (75.0) ¹	18 (90.0) ¹
More than one	16 (19.8)	6 (20.7)	8 (25.0)	2 (10.0)
Staff members delivering the service, n (%)				
One	29 (35.8)	11 (37.9)	10 (31.3)	8 (40.0)
Two	23 (28.4) ¹	8 (27.6) ¹	7 (21.9) ¹	8 (40.0) ¹
More than two	29 (35.8)	10 (34.5)	15 (46.9)	4 (20.0)

¹Median response for each pharmacy category

The highest proportion of participants allocated to PC1 (57.5%) and PC2 (52.3%) reported they had clients between 36-50 years of age, whilst the highest proportion of participants in PC3 (51.7%) reports they had clients between 20-35 years of age. The second highest proportion of participants in PC1 (31.9%) and PC2 (34.1%) said they had clients between 20-35 years of age, whilst the second highest proportion of participants in PC3 (44.8%) said they had clients between 36-50 years of age. This concurs with data reported from MDS forms in table 7.

Questionnaire results – Recruitment

Most participants (> 60%) for each pharmacy category reported they approximately recruited 61-80% or 81-100% of all their clients through self-referral. Of participants in PC1, 27.6% reported they approximately recruited 21-40% of all clients through referrals from local surgeries compared to 18.8% of participants in PC2. The highest proportion of participants in PC1 (58.6%) and PC2 (65.6%) reported they approximately recruited 0-20% from local surgeries. Over 85% of all participants in each pharmacy category said they approximately recruited 0-20% of all their clients through CMS. Figure 6,7 8 and illustrates what participants in relation to their pharmacy categories reported regarding how many of all clients are approximately recruited through self-referral, local surgeries and CMS.

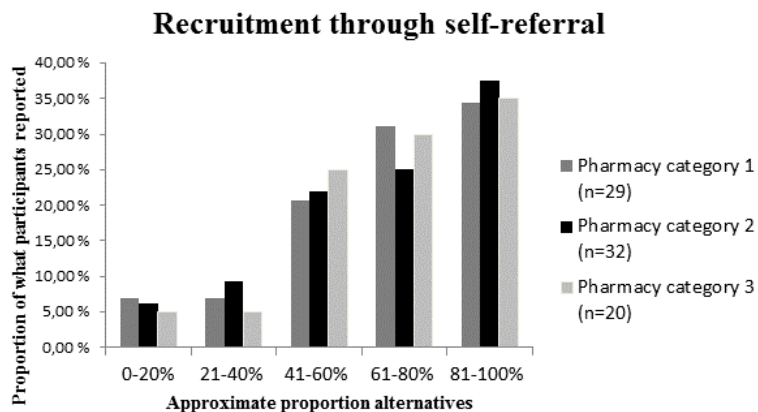


Figure 7 - Estimated client recruitment through self-referral for all clients

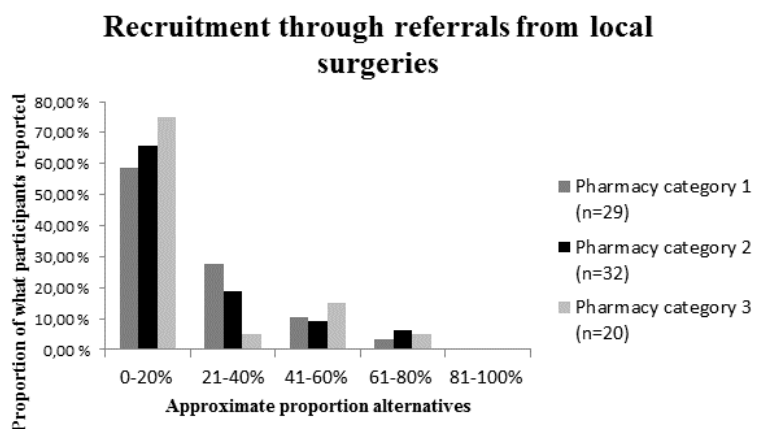


Figure 8 - Estimated client recruitment through referrals from local surgeries for all clients

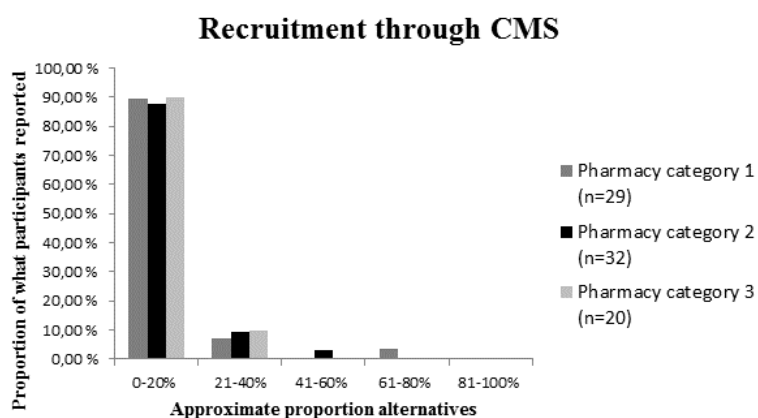


Figure 9 - Estimated client recruitment through referrals from CMS for all clients

Questionnaire results – Engagement and consultations

As table 10 shows, over 50% of participants in each pharmacy category reported that they predominantly engage with clients that purchase NRT products (80-100% of clients). Of all responders, 48.6% reported that they try to engage with 0-20% of clients who presents with a prescription for a smoking-related disease.

Of all responders, 67.6% responded that 81-100% of all their initial consultations were in the consultation room. There were 17.6% of all participants, reporting that 0-20% of all their initial consultations were in the consulting room. Of all responders in PC1 and PC2, 84.6% and 60.0% reported that approximately 81-100% of their initial consultations are held in the consultation room respectively. Of the participants in PC2, 23.3% reported that approximately 0-20% of all their initial consultations are held in the consultation room, whilst 7.7% of participants in PC1 reported this. Median response for all responders and pharmacy categories were 81-100%.

Of all responders, 38.4% and 26.0% reported respectively that 81-100% and 0-20% used the consulting room in the follow-up consultations. Most participants in PC1 (40.0%) reported that 81-100% of all their follow-up consultation are held in the consulting room. Most participant in PC2 (33.3%) reported that 0-20% of all their follow-up consultations are held in the consulting room. Median response for all responders and responders in PC1 and PC2 was 41-60%.

The highest proportion of all participants (42.5%) reported that the initial consultation lasts for approximately 10 minutes, whilst the second highest proportion (36.9%) reported approximately 15 minutes. Most participants in PC1 (52.0%) reported that the initial consultation lasts for approximately 10 minutes, whilst most participants in PC2 (36.7%) reported approximately 15 minutes.

The highest proportion of all participants (60.3%) reported that the follow-up consultation lasts for approximately 5 minutes. Of participants in PC1 and PC2, 64.0% and 63.3% reported that the follow-up consultation lasts for approximately 5 minutes.

Table 10 - Engagement and consultation results for all responders and in relation to their pharmacy category

Characteristics	All responders (n=81)	Respondents PC1 (n = 29)	Respondents PC2 (n = 32)	Respondents PC3 (n = 20)
Approximate proportion of NRT customers responders try to engage with, n (%)*				
0-20%	3 (4.1)	1 (3.8)	0 (0.0)	2 (11.1)
21-40%	3 (4.1)	0 (0.0)	0 (0.0)	3 (16.7)
41-60%	12 (16.2)	5 (19.2)	4 (13.3)	3 (16.7)
61-80%	13 (17.6)	6 (23.1)	5 (16.7)	2 (11.1) ¹
81-100%	43 (58.1) ¹	14 (53.8) ¹	21 (70.0) ¹	8 (44.4)
Approximate proportion of customers that presents with a prescription for a smoking related disease responders try to engage with, n (%)*				
0-20%	36 (48.6)	12 (46.2)	14 (46.7)	10 (55.6) ¹
21-40%	17 (23.0) ¹	6 (23.1) ¹	10 (33.3) ¹	1 (5.6)
41-60%	13 (17.6)	6 (23.1)	3 (10.0)	4 (22.2)
61-80%	5 (6.8)	1 (3.8)	3 (10.0)	1 (5.6)
81-100%	3 (4.1)	1 (3.8)	0 (0.0)	2 (11.1)
Approximate proportion of all initial consultations are in the consulting room, n (%)*				
0-20%	13 (17.6)	2 (7.7)	7 (23.3)	4 (22.2)
21-40%	4 (5.4)	1 (3.9)	1 (3.3)	2 (11.1)
41-60%	3 (4.0)	0 (0.0)	2 (6.7)	1 (5.6)
61-80%	4 (5.4)	1 (3.9)	2 (6.7)	1 (5.6)
81-100%	50 (67.6) ¹	22 (84.6) ¹	18 (60.0) ¹	10 (55.5) ¹
Approximate proportion of all follow-up consultations are the in consulting room, n (%)**				
0-20%	19 (26.0)	4 (16.0)	10 (33.3)	5 (27.8)
21-40%	8 (10.9)	4 (16.0)	3 (10.0)	1 (5.6)
41-60%	11 (15.1) ¹	5 (20.0) ¹	4 (13.3) ¹	2 (11.1)
61-80%	7 (9.6)	2 (8.0)	4 (13.3)	1 (5.6)
81-100%	28 (38.4)	10 (40.0)	9 (30.0)	9 (50.0) ¹
Approximate minutes the initial consultation lasts, n (%)**				
< 5	2 (2.7)	0 (0.0)	0 (0.0)	2 (11.1)
5	9 (12.3)	1 (4.0)	7 (23.3)	1 (5.6)
10	31 (42.5) ¹	13 (52.0) ¹	9 (30.0) ¹	9 (50.0) ¹
15	27 (36.9)	11 (44.0)	11 (36.7)	5 (27.8)
> 20	4 (5.5)	0 (0.0)	3 (10.0)	1 (5.6)

Table 10 - Continued

Characteristics	All responders (n=81)	Respondents PC1 (n = 29)	Respondents PC2 (n = 32)	Respondents PC3 (n = 20)
Approximate minutes the follow-up consultation lasts, n (%)**				
< 5	10 (13.7)	4 (16.0)	3 (10.0)	3 (16.7)
5	44 (60.3) ¹	16 (64.0) ¹	19 (63.3) ¹	9 (50.0) ¹
10	18 (24.7)	5 (20.0)	8 (26.7)	5 (27.8)
15	1 (1.3)	0 (0.0)	0 (0.0)	1 (5.6)
> 20	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

¹ Median response for each pharmacy category

* Proportion based on total number of participants answering question (74 for all responders, 26 for PC1, 30 for PC2 and 18 for PC3)

** Proportion based on total number of participants answering question (73 for all responders, 25 for PC, 30 for PC2 and 18 for PC3)

Pharmacists were the predominantly members of staff engaged with the service. As table 11 shows, 96.2%, 93.3% and 100.0% reported pharmacist to be actively engaged in the initial consultation for participants in PC1, PC2 and PC3 respectively. Most participants in PC1 (96.2%), PC2 (90.0%) and PC3 (94.4%) reported the pharmacist to be actively engaged in the follow up consultation.

For all responders, 93.2% reported pharmacist to be engaged in the initial consultation, whilst 16.2%, 20.3% and 21.6% respectively reported medicines counter assistant, dispensing assistant and pharmacy technician to be engaged in the initial consultation. For all responders, 93.2% reported pharmacist to be engaged in the follow-up consultation, whilst 21.6%, 29.7% and 35.1% medicines counter assistant, dispensing assistant and pharmacy technician to be engaged in the follow-up consultation respectively. Observation suggested there were no differences between proportions of participants in PC1, PC2 and PC3 and having reported a particular staff member being engaged in the initial consultation or the follow-up consultation, hence no statistical tests were conducted.

Table 11 – Engagement results for all responders and in relation to their pharmacy category

Characteristics	All responders (n=81)	Respondents PC1 (n = 29)	Respondents PC2 (n = 32)	Respondents PC3 (n = 20)
Type of staff member engaged in the initial consultation, n (%)*†				
Medicine counter assistant	12 (16.2)	4 (15.4)	6 (20.0)	2 (11.1)
Dispensing assistant	15 (20.3)	5 (19.2)	7 (23.3)	3 (16.7)
Pharmacy technician	16 (21.6)	4 (15.4)	7 (23.3)	5 (27.8)
Pre-registration pharmacist	11 (14.9)	2 (7.7)	6 (20.0)	3 (16.7)
Pharmacist	71 (95.9)	25 (96.2)	28 (93.3)	18 (100.0)

Table 12 - Continued

Characteristics	All responders (n=81)	Respondents PC1 (n = 29)	Respondents PC2 (n = 32)	Respondents PC3 (n = 20)
Type of staff member engaged in the follow-up consultation, n (%) ^{*†}				
Medicine counter assistant	16 (21.6)	7 (26.9)	8 (26.7)	1 (5.6)
Dispensing assistant	22 (29.7)	9 (34.6)	10 (33.3)	3 (16.7)
Pharmacy technician	26 (35.1)	9 (34.6)	10 (33.3)	7 (38.9)
Pre-registration pharmacist	12 (16.2)	3 (11.5)	6 (20.0)	3 (16.7)
Pharmacist	69 (93.2)	25 (96.2)	27 (90.0)	17 (94.4)

* Proportion based on total number of participants answering question (74 for all responders, 26 for PC1, 30 for PC2 and 18 for PC3)

† Staff member proportions are not relative to each other

Questionnaire results – Approach

As table 12 shows, the highest proportion of all participants reported that they strongly disagreed (23.6%) or disagreed (34.7%) that they did not use same standard approach when the client loses motivation during the program, whilst 26.4% reported that they neither agreed nor disagreed. Furthermore, most participants strongly agreed (58.9%) or agreed (30.1%) that they would try to find the reason for client's loss of motivation. Most participants strongly disagreed (45.2%) or disagreed (27.4%) that they would change the client to a different staff member when the client loses motivation. For responders in PC1, 50% reported neither agree nor disagree to change NRT products when the client loses motivation, whilst 46.7% of responders in PC2 reported agree to this.

Table 13 - Approach when client loses motivation results for all responders and in relation to their pharmacy category

Characteristics	All responders (n=81)	Respondents PC1 (n = 29)	Respondents PC2 (n = 32)	Respondents PC3 (n = 20)
Use of same standard approach, n (%) [*]				
Strongly disagree	17 (23.6)	8 (32.0)	8 (23.3)	3 (11.7)
Disagree	25 (34.7) ¹	7 (28.0) ¹	10 (33.3) ¹	8 (47.0) ¹
Neither agree/disagree	19 (26.4)	8 (32.0)	8 (26.7)	8 (17.6)
Find reason for client's loss of motivation, n(%) ^{**}				
Strongly agree	43 (58.9) ¹	15 (57.7) ¹	17 (58.6) ¹	11 (61.1) ¹
Agree	22 (30.1)	9 (34.6)	8 (27.6)	5 (27.8)
Neither agree/disagree	4 (5.5)	1 (3.8)	2 (6.9)	1 (5.6)

Table 14 - Continued

Characteristics	All responders (n=81)	Respondents PC1 (n = 29)	Respondents PC2 (n = 32)	Respondents PC3 (n = 20)
Tailor approach towards clients feelings, n(%)**				
Strongly agree	29 (39.7) ¹	9 (34.6) ¹	13 (43.3) ¹	7 (41.1) ¹
Agree	28 (38.4)	11 (42.3)	9 (30.0)	8 (47.1)
Neither agree/disagree	10 (13.7)	5 (19.2)	5 (16.7)	0 (0.0)
Change management to a different member of staff, n (%)***				
Strongly disagree	33 (45.2)	9 (34.6)	14 (46.7)	10 (58.8) ¹
Disagree	20 (27.4) ¹	11 (42.3) ¹	7 (23.3) ¹	2 (11.8)
Neither agree/disagree	12 (16.4)	5 (19.2)	5 (16.7)	2 (11.8)
Change client to different NRT products, n (%)***				
Strongly agree	13 (17.8)	2 (7.7)	9 (30.0)	2 (11.8)
Agree	32 (43.8) ¹	10 (38.5)	14 (46.7) ¹	8 (47.1) ¹
Neither agree/disagree	25 (34.3)	13 (50.0) ¹	7 (23.3)	5 (29.4)
Disagree	1 (1.4)	1 (3.8)	0 (0.0)	0 (0.0)
Strongly disagree	2 (2.7)	0 (0.0)	0 (0.0)	2 (11.8)

¹ Median response for each pharmacy category

* Proportion based on total number of participants answering question (72 for all responders, 25 for PC1, 30 for PC2 and 17 for PC3)

** Proportion based on total number of participants answering question (73 for all responders, 26 for PC1, 29 for PC2 and 18 for PC3)

*** Proportion based on total number of participants answering question (73 for all responders, 26 for PC1, 30 for PC2 and 17 for PC3)

When asked about same kind of approach questions as described above for clients who have re-joined the service, similar answers were reported compared to approach answers for client's that loses motivation.

Questionnaire results – Training and carbon monoxide monitoring

As table 13 describes, 60.5% out of all responders reported that pharmacy staff members were trained by going to NHS smoking cessations events. Of all responders, 53.9% reported that they were trained by sponsored training events. The same exact proportion reported to be trained by employment training. E-learning and further reading training options were reported 28.9% and 23.7% out of all responders respectively. Of participants in PC1 and PC2, 39.3% and 71.0% respectively reported that they were trained by NHS smoking cessations events. A Chi-square test was conducted to identify if there were differences between proportions of participants in PC1 and PC2 and having answered NHS smoking cessation events. There was a statistically significant higher proportion of participants in PC2

compared to PC1 reporting to have utilised NHS smoking cessation events ($\chi^{2(1)} = 5.991$, $p = 0.014$) (Appendix 17).

The highest proportion of all responders reported that pharmacy staff had undertaken one-off training (53.3%). Of participants in PC1, 32.1% and 21.4% reported that pharmacy staff members are trained annually and twice a year respectively. One-off training was reported by 39.3% participants in PC1. In comparison, 29.0% and 6.5% of participants in PC2 reported that pharmacy staff members are trained annually and twice a year respectively, whilst one-off training was reported by 61.3%. A chi-square was conducted to see if there was a difference between proportions of participants in PC1 and PC2 and being trained annually or more frequently. A cut-off was made and participants who had answered one-off training and never were allocated into one group and participants who had answered annually, twice a year and quarterly into another. There was no statistically significant difference between proportion of participants in PC1 and PC2 and having reported annually, twice a year and quarterly ($\chi^{2(1)} = 2.781$, $p = 0.095$) (Appendix 18).

As table 13 shows, similar answers for participants between PC1 and PC2 were reported for how often they monitor the client for carbon monoxide per quit attempt. As observation suggested there was no difference, no statistical tests were conducted. The highest proportion of all participants (29.8%) reported that the client is monitored twice for carbon monoxide per quit attempt. Of all participants, 15.6% reported that the client is monitored three times for carbon monoxide during a quit attempt. The same proportion was reported for four or more times. However, 25.9% reported that the client is not monitored for carbon monoxide per quit attempt.

Table 15 - Training and carbon monoxide monitoring results for all responders and in relation to their pharmacy category

Characteristics	All responders (n=81)	Respondents PC1 (n = 29)	Respondents PC2 (n = 32)	Respondents PC3 (n = 20)
Type of training pharmacy staff have undertaken, n (%) ^{*†}				
NHS smoking cessation events	46 (60.5)	11 (39.3)	22 (71.0)	13 (76.5)
Sponsored training events	41 (53.9) ¹	13 (46.4)	20 (64.5) ¹	8 (47.1) ¹
Employment training	41 (53.9)	18 (64.3) ¹	16 (51.6)	7 (41.2)
E-learning	22 (28.9)	9 (32.1)	10 (32.3)	3 (17.6)
Further reading	18 (23.7)	5 (17.9)	10 (32.3)	3 (17.6)

Table 16 - Continued

Characteristics	All responders (n=81)	Respondents PC1 (n = 29)	Respondents PC2 (n = 32)	Respondents PC3 (n = 20)
Frequency of training for pharmacy staff, n (%)**				
Quarterly	4 (5.2)	1 (3.6)	0 (0.0)	3 (16.7)
Twice a year	10 (12.9)	6 (21.4)	2 (6.5)	2 (11.1)
Annually	19 (24.7)	9 (32.1) [†]	9 (29.0)	1 (5.6)
One-off training	41 (53.3) [†]	11 (39.3)	19 (61.3) [†]	11 (61.1) [†]
Never	3 (3.9)	1 (3.6)	1 (3.2)	1 (5.6)
Frequency of carbon monoxide monitoring per quit attempt, n (%)**				
Once	10 (13.0)	5 (17.9)	4 (12.9)	1 (5.6)
Twice	23 (29.8)	9 (32.1)	9 (29.0)	5 (27.8)
Three	12 (15.6) [†]	4 (14.3) [†]	5 (16.1) [†]	3 (16.7)
Four or more	12 (15.6)	5 (17.9)	3 (9.7)	4 (22.2) [†]
Never	20 (25.9)	5 (17.9)	10 (32.3)	5 (27.8)

[†]Median response for each pharmacy category

* Proportion based on total number of participants answering question (76 for all respondents, 28 for PC1, 31 for PC2 and 17 for PC3)

**Proportion based on total number of participants answering question (77 for all respondents, 28 for PC1, 31 for PC2 and 18 for PC3)

[†] Training alternative proportions are not relative to each other

Questionnaire results – Success

Most of the participants had answered the question regarding how many of all their success quit attempts are from 1st, 2nd, 3rd or 4th or more attempts with some difficulty. For example some had answered 61-80% for both 1st and 2nd attempts. Regardless, table 14 summarises answers from these questions by participants.

Table 17 - Success results for all responders and in relation to their pharmacy category

Characteristics	All responders (n=81)	Respondents PC1 (n = 29)	Respondents PC2 (n = 32)	Respondents PC3 (n = 20)
Approximate proportion who reported success from 1 st quit attempts, n (%) [*]				
0-20%	20 (26.7)	5 (19.2)	10 (33.3)	5 (26.3)
21-40%	23 (30.7) ¹	11 (42.3) ¹	7 (23.3) ¹	5 (26.3) ¹
41-60%	19 (25.3)	6 (23.1)	8 (26.7)	5 (26.3)
61-80%	10 (13.3)	2 (7.7)	5 (16.7)	3 (15.8)
81-100%	3 (4.0)	2 (7.7)	0 (0.0)	1 (5.3)
Approximate proportion who reported success from 2 nd quit attempts, n (%) ^{**}				
0-20%	19 (25.7)	3 (11.5)	10 (33.3)	6 (33.3)
21-40%	28 (37.8) ¹	17 (65.4) ¹	8 (26.7) ¹	3 (16.7)
41-60%	17 (22.9)	4 (15.4)	7 (23.3)	6 (33.3) ¹
61-80%	8 (10.8)	1 (3.8)	5 (16.7)	2 (11.1)
81-100%	2 (2.7)	1 (3.8)	0 (0.0)	1 (5.6)
Approximate proportion who reported success from 3 rd quit attempts, n (%) ^{***}				
0-20%	35 (48.6)	9 (37.5)	14 (46.7)	12 (66.7) ¹
21-40%	18 (25.0) ¹	9 (37.5) ¹	8 (26.7) ¹	1 (5.6)
41-60%	9 (12.5)	3 (12.5)	4 (13.3)	2 (11.1)
61-80%	9 (12.5)	3 (12.5)	4 (13.3)	2 (11.1)
81-100%	1 (1.4)	0 (0.0)	0 (0.0)	1 (5.6)
Approximate proportion who reported success from 4 th or more quit attempts, n (%) ^{***}				
0-20%	46 (64.4) ¹	14 (58.3) ¹	19 (63.3) ¹	13 (72.2) ¹
21-40%	11 (15.3)	6 (25.0)	5 (16.7)	0 (0.0)
41-60%	5 (6.9)	1 (4.2)	2 (6.7)	2 (11.1)
61-80%	5 (6.9)	1 (4.2)	3 (10.0)	1 (5.6)
81-100%	5 (6.9)	2 (8.3)	1 (3.3)	2 (11.1)

¹ Median response for each pharmacy category

^{*} Proportion based on total number of participants answering question (75 for all responders, 26 for PC1, 30 for PC2 and 19 for PC3)

^{**}Proportion based on total number of participants answering question (75 for all responders, 26 for PC1, 30 for PC2 and 18 for PC3)

^{***} Proportion based on total number of participants answering question (72 for all responders, 24 for PC1, 30 for PC2 and 18 for PC3)

Questionnaire of results – Miscellaneous

As table 14 shows, the highest proportion of all respondents (52.6%) reported strongly agree to use the support tracker sheet during the follow-up consultations, whilst the second highest proportion (21.8%) reported agree. There were comparable proportions of responders in PC1 and PC2 with regards to reporting strongly agree and agree for this.

Most participants reported strongly agree (28.2%) and agree (32.1%) to that they try to have the same staff member with the client throughout the whole program. Of participants in PC1, 14.3% and 46.4% reported 'strongly agree' and 'agree' and of participants in PC2, 32.3% and 25.8% reported 'strongly agree' and 'agree'.

For all participants, there was a higher proportion reporting strongly disagree and disagree (50.0%) to set up appointments for follow-up consultations compared to participants answering strongly agree and agree (37.2%). Median response for all responders was disagree.

The highest proportions of participants reported strongly agree and agree (65.4%) to that their pharmacy provides information about other support options to clients. Of participants in PC1, 14.1% and 32.1% respectively reported strongly agree and agree to that their pharmacy provides information about other support options to clients, whilst of participants in PC2, 22.6% and 54.8% respectively reported strongly agree and strongly agree.

Of all participants, 28.6% and 38.9% reported respectively strongly agree and agree to that they provide smokers with written information such as booklets and leaflets, whilst 14.3% reported neither agree or disagree. Median response was agree for all participants, whilst median response for participants in PC1 and PC2 was respectively neither agree/disagree and agree.

Of all participants, 41.0% reported agree to that their Stop Smoking Service is highly prioritised, whilst 32.1% reported neither agree/disagree. The total proportion of participants that reported 'disagree' and 'strongly disagree' was 12.8%. This characteristic appeared to be similar for responders in every pharmacy category. Over two-thirds of all participants reported strongly agree and agree to that they would like feedback on their success rates.

Table 18 - Miscellaneous results for all responders and in relation to their pharmacy category

Characteristics	All responders (n=81)	Respondents PC1 (n = 29)	Respondents PC2 (n = 32)	Respondents PC3 (n = 20)
Use of support tracker sheet during the follow-up consultations, n (%)*				
Strongly agree	41 (52.6) ¹	14 (50.0)	17 (54.8) ¹	10 (52.6) ¹
Agree	17 (21.8)	7 (25.0) ¹	4 (12.9)	6 (31.6)
Neither agree/disagree	4 (5.5)	1 (3.6)	2 (6.5)	1 (5.2)
Try to have the same staff member with the smoker throughout the whole program, n (%)*				
Strongly agree	22 (28.2)	4 (14.3)	10 (32.3)	8 (42.1)
Agree	25 (32.1)	13 (46.4)	8 (25.8)	4 (21.1)
Neither agree/disagree	14 (17.9) ¹	5 (17.9) ¹	6 (19.4) ¹	3 (15.8) ¹
Disagree	12 (15.4)	5 (17.9)	3 (9.7)	4 (21.1)
Strongly disagree	5 (6.4)	1 (3.6)	4 (12.9)	0 (0.0)
Appointment for follow-up consultations, n (%)*				
Strongly agree	11 (14.1)	3 (10.7)	6 (19.4)	2 (10.5)
Agree	18 (23.1)	7 (25.0)	3 (9.7)	8 (42.1) ¹
Neither agree/disagree	10 (12.8)	4 (14.3)	3 (9.7)	3 (15.8)
Disagree	19 (24.4) ¹	10 (35.7) ¹	7 (22.6) ¹	2 (10.5)
Strongly disagree	20 (25.6)	4 (14.4)	12 (38.7)	4 (21.0)
Smokers come randomly for follow-up consultations, n (%)*				
Strongly agree	13 (16.7)	3 (10.7)	8 (25.8)	2 (10.5)
Agree	21 (26.9)	10 (35.7) ¹	9 (29.0)	2 (10.5)
Neither agree/disagree	15 (19.2) ¹	3 (10.7)	6 (19.4) ¹	6 (31.6) ¹
Disagree	18 (23.1)	8 (28.6)	6 (19.4)	4 (21.1)
Strongly disagree	11 (14.1)	4 (14.3)	2(6.5)	5 (26.3)
Providing information about other support services to clients, n (%)*				
Strongly agree	19 (24.4)	4 (14.3)	7 (22.6)	8 (42.1)
Agree	32 (41.0) ¹	9 (32.1)	17 (54.8) ¹	6 (31.6) ¹
Neither agree/disagree	14 (17.9)	9 (32.1) ¹	3 (9.7)	2 (10.5)
Disagree	10 (12.8)	5 (17.9)	3 (9.7)	2 (10.5)
Strongly disagree	3 (3.8)	1 (3.8)	1 (3.2)	1 (5.3)

Table 19 - Continued

Characteristics	All responders (n=81)	Respondents PC1 (n = 29)	Respondents PC2 (n = 32)	Respondents PC3 (n = 20)
Providing smokers with written information, n (%)*				
Strongly agree	22 (28.6)	8 (28.6)	6 (20.0)	8 (42.1)
Agree	30 (38.9) ¹	12 (42.8)	11 (36.7) ¹	7 (36.8) ¹
Neither agree/disagree	11 (14.3)	4 (14.3) ¹	6 (20.0)	1 (5.3)
Stop Smoking Service highly prioritised, n (%)*				
Strongly agree	11 (14.1)	4 (14.2)	7 (22.6)	0 (0.0)
Agree	32 (41.0) ¹	14 (50.0) ¹	13 (41.9) ¹	5 (41.0) ¹
Neither agree/disagree	25 (32.1)	7 (25.0)	9 (29.0)	9 (32.1)
Disagree	6 (7.7)	2 (7.1)	1 (3.2)	3 (7.7)
Strongly disagree	4 (5.1)	1 (3.6)	1 (3.2)	2 (5.1)
Feedback on their success rates, n (%)*				
Strongly agree	23 (29.5)	6 (21.4)	15 (48.4)	2 (10.5)
Agree	36 (46.2) ¹	16 (57.1) ¹	10 (32.3) ¹	10 (52.6) ¹
Neither agree/disagree	8 (10.3)	2 (7.1)	5 (16.1)	1 (5.3)

¹Median response for each pharmacy category

* Proportion based on total number of participants answering question (78 for all respondents, 28 for PC1, 31 for PC2 and 19 for PC3)

6. DISCUSSION

6.1 Statement of principal findings

This exploratory study found that there was a large spread in number of quit attempts and success rates among NHS Lothian community pharmacies in 2012. This study intended to identify factors, which may be associated with different success rates which can be used in a future analysis. Many responders reported that 81-100% of all their initial and follow-up consultations were held in the consulting room, but there were several reporting below 81%. There is thus still room for improvement with regards to using the consulting room more frequently. A previous study has also reported that clients' prefer to have the consultation in the consulting room (69). This variable should be further investigated with regards to successful smoking cessation.

A statistically significant higher proportion of quit attempts in pharmacies with success rates greater than or equal to 41% (PC1) compared to pharmacies with success rates less than 41% (PC2) were achieved by clients who were over 44 years old. Previous studies have found that older age is a predictor of successful outcomes (61). This variable should therefore also be included in a future study to confirm this association.

This study also suggests that gender and employment status of the client may affect successful smoking cessation in community pharmacies delivering the Stop Smoking Service and this should be explored further to confirm association with success.

There was a wide variation in the access to and frequency of training by pharmacy staff in NHS Lothian delivering the service. This may of course influence the stop smoking success rate of pharmacies and requires further investigation. Training needs have to be identified to ensure that all staff are competent in the knowledge and skills required to deliver this service.

There was a wide spread of responses from the questions in the questionnaire and categorising pharmacies using arbitrary categories did not help to identify any other potential influencing factors.

6.1.1 Description of community pharmacies

Success rates, number of quit attempts and recruitment

The 182 community pharmacies contracted by NHS Lothian achieved a median number of 19 quit attempts with an IQR of 6 to 45 quit attempts in 2012. The interquartile range suggests that community pharmacies have a wide range of clients relative to each other. It also appears that there is a variable success rate among community pharmacies as the IQR was 25.8% to 55.1%. The large

variation in number of quit attempts and success rates made it difficult to further divide the pharmacies into subcategories based on success rates and number of quit attempts. In the absence of evidence for the best approach, a cut-off based on the average success rate of the NHS Lothian specialist service was used to categorise pharmacies appropriately for the scope of this study. The NHS Lothian specialist service achieves the best average quit rates of services in Lothian. In contrast to community pharmacies, where many services are provided, specialist services provide only smoking cessation. It was therefore reasonable to suggest that a quit rate higher than their average could be considered successful. The research team agreed to further categorise the community pharmacies based on those that had undertaken 10 or more quit attempts in 2012 and those who had undertaken less than 10 quit attempts. Future studies are, however, needed to determine what constitutes a high success rate and a low success rate in relation to the number of quit attempts a community pharmacy has undertaken for a one year time period. If this is possible, it would enable comparison of client characteristics and the service delivery between community pharmacies with a high success rate and a low success rate in a more optimal way.

There were 59 community pharmacies out of 182 that had undertaken between 0 to 9 quit attempts (PC3). Since the data on quit attempts was retrieved for the period of one year, it is interesting to see that almost one third out of all community pharmacies do not deliver the service extensively. From observation, it appeared that a high proportion of community pharmacies that had undertaken quit attempts between 0 and 9 had a SIMD score of 5, whilst a low proportion of community pharmacies that had undertaken over 9 quit attempts had a SIMD score of 5. This suggests that several pharmacies with low numbers of quit attempts and with SIMD score of 5 are located in geographical areas that serve a population with a low level of deprivation. A Scottish Health Survey found that there was a much higher proportion of smokers in deprived areas compared to the Scottish average (6) and this suggests why some of the community pharmacies in PC3 with a SIMD score of 5 have lower numbers of Stop Smoking Service clients since they are located in areas with low a level of deprivation. It is still unclear why some of the community pharmacies in PC3 with a SIMD score of 1 and 2 had undertaken low number of quit attempts as they are located in a more deprived area. While analysing the contractor code numbers of the pharmacies, it was discovered that some of the pharmacies with low number of quit attempts had changed owners in 2012. These pharmacies might not have prioritised delivering the service during the time when they were negotiating change of ownership and immediately after the new owner took over. It could also be that one pharmacy is located close to another pharmacy and that one of them may not prioritise delivering the Stop Smoking Service.

Of all community pharmacies in PC1 and PC2 had a median SIMD score number of 3 and from observation it may suggest that these pharmacies are located in more deprived areas compared to

pharmacies in PC3 and are in equal ideal locations to recruit clients. Consideration should be made to see if more resources and support should be given to pharmacies with high number of quit attempts.

There seemed to be a perception among questionnaire responders that community pharmacies recruit clients mostly through self-referral as opposed to pro-active recruitment or through referrals from other services. A high proportion (> 85%) of pharmacies reported that approximately 0-20% of their smoking cessation clients were recruited from the CMS, another health service provided by community pharmacies. It is likely that some of the clients who use the CMS are also smokers as these have long-term medical conditions and it would be ideal to refer these clients to the Stop Smoking Service. However, the CMS in community pharmacies in NHS Lothian is not fully implemented; hence it is likely that pharmacies do not recruit many clients from this service. Future studies should explore the benefit of the potential link between the CMS and the Stop Smoking Service.

Four pharmacies had undertaken over 100 quit attempts during the study time period respectively, and it would be interesting to qualitatively explore why these pharmacies had such a high number of quit attempts. It could be that these pharmacies not only had a high number of client self-referrals, but also have a strong collaboration with other health services (e.g. general practitioners, secondary care, dentists) and leading to a higher number of referrals from these services. Finding out how they have established the collaboration would potentially provide a new strategy to recruit more clients for those community pharmacies that do not deliver the service extensively.

6.1.2 Demographical characteristics of NHS Lothian community pharmacy responders

Questionnaire responders were also categorised into PC1, PC2 and PC3 based on their success rate and number of quit attempts.

Gender

A chi-square test showed that there was a statistically significant difference between the proportion of males and females having a successful quit attempt when clients for responder pharmacies in PC1 and PC2 were added up. However, the finding is questionable and not conclusive as the test did not take into account confounding variables such as level of nicotine dependence of these clients or the potential of selection bias. Furthermore, it was not determined if this could be extrapolated to represent all pharmacies in PC1 (n = 58) and PC2 (n = 65) in NHS Lothian as the chi-square test only included 29 pharmacies from PC1 and 32 from PC2. However, the chi square test indicates that gender might be a predictor to include in a future study. Any future analysis should look at gender-specific predictors to establish whether or not there should be tailored approaches by community pharmacy staff to address male and female clients specifically. The consideration for future studies to explore specific types of smoking cessation strategies targeted at different population subgroups has been

made before by researchers who also found that certain demographical characteristics such as gender, age and socio-economic status seem to have an influence on smoking cessation outcomes (72).

This study suggests that women were more likely to use the Stop Smoking Service in community pharmacies in Lothian when compared to men since 55.6% of all quit attempts in pharmacies in PC1 and 54.9% in PC2 were made by female clients. However, it remains unclear if this observation can be extrapolated to all community pharmacies in Lothian. There are currently no studies suggesting that men would be more reluctant to sign up for smoking cessation services than women.

Age

A statistically significant higher proportion of quit attempts in pharmacies in PC1 compared to pharmacies in PC2 and being clients over 44 years of age. This finding suggests that older age is a predictor of successful smoking cessation in NHS Lothian as pharmacies in PC1 have a greater success rate than pharmacies in PC2 since previous research has shown that older age (>45 years) is a predictor of smoking cessation (61). Future research should focus on this characteristic to confirm an association with successful smoking cessation among clients in a community pharmacy setting.

Employment

A chi-square test revealed that there was a statistically significant higher proportion of employed clients having successful quit compared to non-employed clients (students, unemployed, retired and homemaker clients) when clients for responder pharmacies in PC1 and PC2 were added up. This test does not conclude that employed clients are more likely of succeeding than non-employed clients since there are additional factors that need to be taken into consideration. Students, housewives and unemployed and retired clients were all added together to make the data manipulation process easier, but in retrospect this should have been done individually for each occupation. The previously identified proportion difference in successful quit rates between employed and non-employed clients might not be evident when employed clients would be compared to retired clients specifically. Nonetheless, this study suggests that employment and socio-economic status have an impact on successfully quit rates and should be investigated more closely in a future analysis to confirm an association with successful smoking cessation among clients in a community pharmacy setting.

6.1.3 Stop Smoking Service characteristics of NHS Lothian community pharmacy responders

General

Most responder pharmacies in PC1 and PC2 were multiple retail chain pharmacies compared to responder pharmacies in PC3 which were mainly independent pharmacies. Multiple chain pharmacies

tend to be greater in size and employ greater number of staff than independent pharmacies and are better suited to attract more people and to recruit more people to the Stop Smoking Service than independent pharmacies. There are no available data on the size and the number of staff employed for each community pharmacy contracted by NHS Lothian. Furthermore, there appeared to be no difference between pharmacies in PC1 and PC2 with regards to being a multiple, small-multiple or independent pharmacy. This suggests that the type of pharmacy does not influence successful smoking cessation outcomes. However, there are anecdotal reports that independent pharmacies provide better, more personal care than large multiples, but this is not reflected in the current data.

There was no indication that the number of pharmacists available at any one time would affect successful smoking cessation outcomes since most community pharmacies reported that there was at least one pharmacist working at any time in the pharmacy for both participants in PC1 and PC2. Almost an equal proportion of participants in PC1 and PC2 reported that the Stop Smoking Service was delivered by either i) one, ii) two or iii) two or more staff members of staff. This suggests that the number of staff members delivering the service does not appear to influence successful smoking cessation outcomes. In retrospect, this question was a bit ambiguous since service delivery can be interpreted differently by responders. Some responders might have only included the staff members that deliver the initial consultation and not the staff members delivering the follow-up consultation, and some might have included the staff members delivering the initial consultation and the staff members delivering the follow-up consultations.

Initial and follow-up consultations

Of all responders, 67.6% reported that approximately over 80% of all initial consultations were held in the consulting room. Of all responders, 38.4% reported that approximately over 80% of all follow-up consultations were held in the consulting room. It is reassuring that many pharmacies use the consultation room frequently, but there were several responders reporting not utilising it that frequently. Clients seen initially and during follow-up consultations might have more confidence in the program provided by the pharmacy since this is more professional than counselling them in an area open to other customers. A study exploring the clients' view of the service found that clients preferred to have the consultation in the consulting room and felt uncomfortable when being counselled in a public area (69). Pharmacies should be encouraged to use the consultation room more since clients prefer to be counselled privately.

Of all responders, most reported that the initial consultation lasted approximately 10 and 15 minutes and from observation it did not appear to be any difference between responders in PC1 and PC2 and using a certain amount of time in the initial consultation. A very high proportion of all participants reported that the follow-up consultations lasted for approximately 5 minutes. This surrogate marker

implies that counselling is not delivered intensively to clients. A Cochrane review showed that more intensive behavioural support was likely to increase the chance of successful cessation (73). United States Department of Health and Human services conducted a meta-analysis which found that there was a dose-response relationship between length of sessions and successful smoking cessation and as a result recommends more intensive counselling sessions (48). Increasing the availability of counselling training for pharmacy staff would lead to an increased quality of the counselling process. Longer sessions with the client might lead to a less cost-effective service and therefore careful considerations have to be made regarding this. In retrospect, the consultation question in the questionnaire should have been rephrased into several questions to estimate the time used for the first consultation, the second to fourth consultation, the fifth to seventh consultation and so on. This would have made it clearer how intensive the support was in relation to contact time, but it would not have established the quality of the consultation process. The amount of consultation time used by community pharmacies delivering the Stop Smoking Service should be explored further to see if it affects successful smoking cessation outcomes.

Type of staff member involved in the initial consultation and follow-up consultation

Almost all responders reported that the pharmacist was involved in the initial consultation and the follow-up consultation. However, it was interesting to see that approximately 20-35% of all responders reported that medicines counter assistants, dispensing assistants and pharmacy technicians were also involved in the initial consultation and follow-up consultations. There were comparable proportions of responders in PC1 and PC2 with regards to reporting a particular staff member being involved in the initial consultation and the follow-up consultations. This highlights a potential for involving more support staff in the delivery of the service. Giving more responsibility to support staff would empower these members of staff and make appropriate use of their skills. This approach would be more effective since support staff might have more time to undertake follow-up consultations than pharmacists. A NICE review reported that there is anecdotal evidence that the levels of training and interpersonal skills of individual staff members are more important in the effectiveness of the service than having a certain job title (74). However, the review did not identify any definite evidence supporting this. Training support staff as specialists in the service would also make the service more cost-effective.

Training and carbon monoxide monitoring

This study reports that training for community pharmacies within NHS Lothian varies and most reported that they utilised the NHS smoking cessation events as a training event. A statistically significant higher proportion of participants in PC2 reported attending NHS smoking cessation events compared to PC1. NHS smoking cessation events are considered as the main form of training that

pharmacy staff member should undertake and it was therefore interesting to see that pharmacy staff members in PC2 had reported undertaken more of these training events compared to pharmacy staff members in PC1. One explanation for this could be that pharmacies in PC2 have more difficult clients than pharmacies in PC1 and therefore deem it necessary to have staff trained by going to NHS smoking cessation events. Furthermore, over half of all participants reported that they had undertaken one-off training. There was no statistically significant difference between proportion of participants in PC1 and PC2 with regards to whether they had been trained annually, twice a year and quarterly compared to one-off training and never. These findings suggest that the effectiveness and frequency of the training should be explored further with regards to successful outcomes. Defining the levels of competence of staff members delivering the service in NHS Lothian would be beneficial to guide staff in terms of their training needs. Consideration should also be made to contact pharmacies that undertake a substantial number of quit attempts per year to establish whether additional support and training should be offered to these or not.

There was some inconsistency in the number of carbon monoxide tests performed per quit attempt by all participants and there appeared to be no difference among the categories of responders (PC1, PC2, PC3). There are reports that clients preferred to be monitored as it provided a measure of progress and a feeling of accomplishment (69). Although there is a lack of definite evidence that carbon monoxide testing increases the likelihood of a successful quit, carbon monoxide tests should be undertaken frequently to aid smoking cessation. Making this a requirement of the service may improve its use.

Approach

There was no consensus among participants regarding the use of a standard approach when engaging demotivated clients. In retrospect, this question was too ambiguous and could have been omitted. There is a possibility that some participants use a standard approach when engaging demotivated clients, but do not want to report it. Direct observation of practice is a more reliable method than self-report data. It seemed that pharmacies, regardless of their pharmacy category, do not try to use a different member of staff when clients are demotivated. This suggests that staff members are persistent in their attempt to support the client and do not refer the client to another staff member when problem arises. It was interesting to see that there was a higher proportion of participants in those pharmacies with a success rate of less than 41% (PC2) and reporting 'strongly agree'/'agree' to change the client to different NRT products compared to those pharmacies with a success rate of greater than or equal to 41% (PC1) when clients are demotivated. There is no evidence suggesting that a switch to different NRT products is inappropriate, but many participants in the group with a higher success rate stated they 'neither agreed nor disagreed' to do this. Staff might assess the client first to identify any additional required support rather than changing the client to different products. However, no definite conclusion can be drawn from this observation.

Miscellaneous

Most participants agreed that they used the support tracker sheet and there seemed to be no differences between pharmacies with a high success rate (PC1) compared to pharmacies with a low success rate (PC2) in reporting this. This is reassuring as it provides the person who delivers the service with simple coping strategies to support the client in their quit attempt. Furthermore, it is reassuring that community pharmacies use the resources the NHS Lothian have provided for them.

More of those pharmacies with a high success rate (PC1) were expected to report on the agreement on having the same staff member doing all consultations with the client when compared with pharmacies with a lower success rate (PC2). This expectation was based on a previous study, which reported that clients felt more supported and encouraged when they were given the chance of building a relationship with the responsible staff member (69). However, there appeared to be no difference between participants in PC1 and PC2 in reporting this. Several participants reported that they did not agree with this and a recommendation would be to further encourage this practice.

Of all responders, most reported that they strongly disagree and disagree to operate with appointments for follow-up consultations. This suggests that most pharmacies see clients on demand. Consideration should be made with regards to what approach is best. If community pharmacies operate with an appointment system for the service, this might lead to less lost to follow-up clients.

It was interesting to see that a higher proportion of participants in the lower success category (PC2) reporting 'strongly agree' and 'agree' in providing the client with information on other support services when compared to participants with higher success rates (PC1). However, interpreting this result is difficult. Pharmacies with lower success rates might have more demanding clients than those pharmacies with higher success rates and therefore provide information about other supportive services which can offer them additional support.

There appeared to be consensus among all participants on receiving feedback regarding their individual success rates. This should be considered by NHS Lothian to encourage and help pharmacies with low success rate to improve their service delivery

6.2 Strengths and weaknesses

A strength of this study was the use of the MDS database to retrieve data on success rates and demographical data on quit attempts. The MDS database is considered to be reliable as NHS Lothian has undertaken prior work to increase the consistency of forms being submitted by community pharmacies. Data on smoking consumption among clients was not available. Community pharmacies with low success rates were expected to have more clients with high nicotine dependency compared to community pharmacies with high success rates as high nicotine dependency has been previously reported to predict relapse (60).

Response rate

The response rate of the questionnaire was 44.0% and 10 participants only faxed back 2 out of the 3 pages of the questionnaire. The response rate was not excessively high, but not excessively low either. The questionnaire was only three pages and this might have affected the response rate in a positive direction. One explanation for what might have affected the response in a negative direction could be that pharmacies that do not deliver the service eminently might think it would not be worth to complete the questionnaire. In retrospect, the potential issue of people not sending back the whole questionnaire should have been addressed during the planning phase and a sentence about this should have been included in both the cover letter and at the end of the questionnaire to avoid this problem. Offering a monetary incentive for the completion of the questionnaire and posting the questionnaire with a stamped-return envelope may have increased the response rate (75). However, a monetary incentive and a stamped-return envelope could not have been offered due to limited financial resources.

Validation and reliability

The questionnaire was piloted on two community pharmacists and was face validated by them, but was not face validated thoroughly enough. Many participants misinterpreted the proportional questions regarding success and in retrospect these questions should have been omitted. More face-to-face interviews with pilot participants would have increased the face validity of the questions asked in the questionnaire and avoided participants' misinterpretation of the questions and reluctance in answering the questions. This might also have increased the response rate. Due to time and resource constraint, extensive face validity was not feasible. Furthermore, the questionnaire could not be compared to an established validated tool or a gold standard to determine if the questionnaire was accurate in its results (criterion validity) as there were no previously validated and established tools measuring the same variables.

The questionnaire was not tested for reliability, again, due to limited time and logistics. Ideally, a sample of participants should have completed the questionnaire at the beginning of the project and halfway through the project and to test the reproducibility. This would have revealed any inconsistent interpretations and dubious wording of certain questions. Questions were also not tested for internal consistency. Internal consistency of the questions could have been established by including differently worded questions asking about the same subject to test if the answers correlated with each other. This would have resulted in an even longer questionnaire and potentially decreasing the response rate. However, the purpose of this project was exploratory and it was not deemed necessary to undertake thorough tests of both validity and reliability.

Study design

Questionnaire

A quantitative questionnaire was probably not the ideal method to use in this exploratory study of the NHS Stop Smoking Service in community pharmacies. Since there are several members of staff in a pharmacy that deliver the service, it is likely that individual staff members have different opinions from each other. Moreover, there is a possibility that participants were biased in their response as the questionnaire explored on their own performance in the Stop Smoking Service. However, the cover letter stated that answers to the questionnaire would be confidential and this should have enabled participants to give more sincere answers about their own performance.

On reflection and after acquiring more knowledge about providing smoking cessation therapy, the investigator should have asked more specific questions in the questionnaire with regards to training of pharmacy staff in providing the Stop Smoking Service to obtain results on the grade of basic advice training, advanced advice training and medicine interaction training among other areas pharmacy staff have received. There are also more training alternatives for pharmacy staff that they can attend such as one-to-one support training delivered by Partnership Action on Tobacco and Health (76), but these apply more for staff involved in specialist services and are attended for a significant fee. However, it would have been appropriate to had an 'other' alternative box in the questionnaire where they could have specified what other training pharmacy staff attends. Furthermore, a question should have been added to ask how pharmacists are trained and how support staffs are trained separately.

Including an open-ended question about what type of advice participants give to the client would have also resulted in interesting data. Due to the fact that the questionnaire had to be as short as possible

and that it was going to be completed by only one participant per pharmacy, it was not considered feasible. However, it would have been more appropriate to have asked about this instead of the questions regarding approach and success, but this view was only developed after the research suggested difference in approach was not important.

Approach questions should have explored more specifically how they support a quit attempt in the initial consultation. This could have been if they list common withdrawal symptoms and their natural time course, if they give an explanation on how to prepare for a quit attempt and if they provide coping strategies. They are, however, likely to do this as many responders reported that they used approximately 10 and 15 minutes in the initial consultation, but this would have provided a better picture on how service delivery is undertaken. Analysis of the approach questions revealed that using quantitative questions about the individual approach of certain members of staff results in biased answers since staff members are likely to be reluctant to admit not having used the 'correct' approach. A more qualitatively assessment of pharmacy staff's counselling technique would give a better view of how the service is currently delivered and this could be measured to optimise service delivery.

A question should have been added to ask if they use staff members that are not trained in delivering the service in the initial consultation and follow-up consultations. This would have established further exploration on how the service is delivered.

Questions regarding recruitment should also have been amended. As most responders reported that all their clients are recruited through self-referral, the recruitment question should have been amended to a 'tick as apply' question instead of having alternatives that the responders could use. This would have most likely given a better picture on how pharmacies recruit clients and would have also given a better measure of comparison between the recruitment alternatives.

Semi-structured interviews

In retrospect, the questions asked at the semi-structured interviews with pharmacist should have been better prepared and phrased differently to gather more accurate data about how the Stop Smoking Service in NHS Lothian community pharmacies is run. For example the investigator should have inquired more thoroughly how each member of staff is trained and how extensively they are trained in delivering one-to-one support. It would also have been interesting to include questions about how the initial consultation and the follow-up consultations were undertaken and what topics are discussed with the client during these consultations. However, the investigator did not have substantial

knowledge and experience with how the Stop Smoking Service were delivered in community pharmacies when the interviews were conducted since this was early in the project time period. The time frame for conducting the interviews was 15 minutes and it was therefore difficult to address all questions appropriately given the restricted amount of time available. Some of the questions were missed during the interview and there were some misinterpretations between the participants and the investigator due to the fact that English was not the investigator's first language.

Other qualitative methods such as focus group sessions including staff members of pharmacies with good success rate and poor success rates might have been a better approach to seek opinions about what constitutes an ideal Stop Smoking Service within a community pharmacy setting. This would have enabled a discussion among participants and the investigator and also among participants themselves around the delivery of the service and provided more information on what attempts of each individual pharmacy results in successful smoking cessation.

6.3 Proposal of future studies

Follow-up study of clients

Community pharmacies are likely to be biased in their view of how they deliver the service. Therefore, it would have been beneficial to explore clients' views on how the service has been provided. A previously published study exploring clients' view on the smoking cessation service did not link their view to the success rate of the pharmacy they attended (69). Future studies could aim to recruit clients of pharmacies with both high and low success rates and send out a questionnaire about delivered service. The questionnaire could include questions about whether or not clients had received information and advice on health benefits, information on what type of withdrawal symptoms to expect and advice on how to deal with cravings. Additional questions could have tried to establish if clients felt that provided information was useful, if they expected any other information or activity that was not provided, if they were counselled by the same staff member every time and if their carbon monoxide levels were frequently monitored. They could also be asked them to estimate the approximate time used per consultation, how much they felt this information was useful and how motivated they felt they were when they started the program. This might have resulted in clearer results regarding any differences in service delivery between pharmacies with high and low success rates. A questionnaire could be designed to be given to clients registered for the service and would serve to provide continuous feedback and improvement.

Before and after study

A before and after study would result in clearer evidence on how training impacts successful smoking cessation outcomes in community pharmacies. Initially, a fixed sample size of community pharmacies could be observed for a certain time period to determine how many successful quit attempts they have. Clients could then be assessed in terms of certain client predictors such as stage of nicotine dependency, gender, age, employment and socio-economic status, and number of previous quit attempts. Ideally, there could be an inclusion and exclusion criteria for clients such as involving only employed clients with high nicotine dependency that are between the age of 40-65 years of age. After determining how the pharmacies success rates are and client predictors have been assessed, certain pharmacies and their employees can be assigned to a specialised training program and other pharmacies to not attend a training program, and then observed again over a certain time period again in terms of successful quits. Clients would be assessed again in terms of individual predictors. This might give a clearer view on the impact of training on successful smoking cessation. The two pharmacy groups included in the study would have to be matched for example in terms of i) consistency and number of staff members involved in the service, ii) years of working experience in a

pharmacy setting of each staff member, iii) time-restrictions in delivering the service, iv) size of the pharmacy and v) number of clients recruited vi) geographical location.

Participant observation

A participant observation study could be conducted to assess how the service is delivered in the initial consultation and follow-up consultation. It would be most optimal to do this covertly, because this would not influence the change behaviour of the participant being observed. This would therefore give a more accurate data on how the staff member interacts with the client and what type of advice they give. However, participant observation would most probably involve getting consent to conduct this from both the pharmacy staff member conducting the consultation and the client receiving the consultation. Consent would also be required for an overt approach but may be more likely to be agreed even though this would influence the behaviour of the participant being observed.

6.4 Similar studies

A previous survey was sent out to community pharmacies in Scotland, investigating community pharmacists' views on the smoking cessation service (77). Of the 120 participants who took part, over 90% reported that they discussed previous quit attempts, current tobacco use with the client, current smoking status, that quit date was agreed and information was given on different types of NRT. Furthermore, the highest proportion of participants reported that they saw smoking cessation clients on demand, but approximately a third reported that they offered a mixture of on demand and appointments. Only 10% estimated that more than 75% of clients returned for a second visit. Many reported that they had received local NHS Board training such as brief intervention training and in depth advice training (77).

6.5 Recommendations for the future development of the service

Varying success rates among community pharmacies indicate the need for a best practice approach in delivering the service in NHS Lothian. When NHS Lothian community pharmacies were contracted to deliver the service in 2008, the NHS provided local training events that pharmacy staff could attend. These training events did not include a best practice approach and if pharmacy staff have undertaken only this type of training and nothing additional, there is clearly a need for more training. Furthermore, the current training events delivered by NHS Lothian do not have a clear framework with regards to how support should be delivered during consultations. The support tracker sheet developed by NHS Lothian and the MDS form are valuable tools to address topics for discussion with the client, but the tracker sheet could be further optimised and contain a checklist with regards to what behavioural change techniques should be utilised preferably during consultations. A previous study assessed what behavioural change techniques were associated with successful short term quit outcomes. They retrieved training manuals from 43 English specialist Stop Smoking Services and client outcome data for each of the services over a one year time period. They found a statistical significant association between nine behavioural change techniques and self-reported and carbon monoxide-verified 4-week quit rates. These were i) addressing motivation of the client, ii) advising changing routine, iii) measuring carbon monoxide, iv) giving options for additional and later support, v) providing rewards after successfully stopping smoking, vi) facilitating relapse prevention and coping strategies, viii) asking about the experiences of medication that the smoker is using, and ix) prompt clients views of stop smoking. However, a limitation of the study was that the authors did not observe if these techniques were utilised during practice (78). Nevertheless, this study provides guidance on what type of topics should be included in a structured protocol and competencies that staff members should have in providing the service.

Therefore, the NHS Lothian smoking cessation training should be revised and provide a competency framework. Another recommendation would be to revise the support tracker sheet for community pharmacies and focus primarily on certain behavioural change techniques that have been associated with short term successful outcomes. Pharmacies should also be provided with their individual success rates relative to the average success rates for the NHS Board.

7. CONCLUSION

This exploratory study identified that there is a wide range of quit rates across 182 community pharmacies in NHS Lothian. The median number of quit attempts per pharmacy was 19 for the duration of 2012 whereas the median success rate per pharmacy was 38.4%.

The study has identified a number of potential predictors for success of Stop Smoking Services in community pharmacies, which can be investigated more thoroughly in future studies. These include gender, age, employment status and use of the consultation room.

Pharmacies should be provided with their individual success rates as a potential motivator.

The study has highlighted a wide variation in the access to and the frequency of training of pharmacy staff in NHS Lothian delivering the service. The recommendation is to revise the training undertaken by pharmacy staff delivering the service in NHS Lothian and consideration should be given to define levels of competence required to deliver the service to help assure a minimum standard of service delivery.

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9. APPENDICES

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Appendix 1 – Roles and Requirements of pharmacy staff

Definitions and education requirements of pharmacy support staff:

Type	Role	Education requirement
Medicines counter assistant (MCA)	Involved in sales over-the-counter. Provide basic advice on treatment of minor ailments. Takes part in receiving prescriptions.	Must complete a 3-6 month training course. Involves: <ul style="list-style-type: none"> • Assist in the sale of medicines and products • Receive prescriptions from individuals • Assist in the issuing of prescribed items
Dispensing assistant	Supports the pharmacist and pharmacy technician in the dispensing process. Also involved in the dispensary stockings. If needed, the dispensing assistant can take the role of MCA.	Must complete a 6-12 month training course based on their job role.
Pharmacy technician	Supports the pharmacist in dispensing. Prepare medicines and other healthcare products and supply them to patients. Provide advice and guidance on taking medicines to clients.	Must complete a 2 year training working at the pharmacy and 720 hours knowledge-based qualification.
Pre-registration pharmacist	Perform duties as a pharmacist under supervision by a tutor.	Must complete four-year MPharm degree. After completing 52 weeks of satisfactory supervised and assessed training, a pre-registration pharmacist can apply to be a pharmacist

Reference: Pharmacyregulation.org

Appendix 3 – Support tracker sheet

Stop Smoking Support Tracker Sheet

Name: _____

Quit date _____ Main Motivator _____

Wk	Notes	CO	Hints & Tips for Motivation	Product Supplied	Sign
1.			Focus on getting ready for quit date. Anticipate problems that may trigger smoking. Keep busy.		
2.			Take it a day at a time. Use your support systems. Change your routine. Find things to do with your hands. Think of your motivator.		
3.			Drink cold water or orange juice – it helps. Just one more week!		
4.					
Month 1 PHS Claim			Submitted on (date)		
5.			Remember 4 week follow-up and contact the patient Fax to Pharmacy Office 0131 537 6552. Well done! 1 month quit.		
Date MDS form faxed to Pharmacy office					
6.			Think of your motivator and how much you have saved. Remember deep breathing helps. Distract yourself.		
7.			Keep busy. Don't let temptation take a grip.		
8.			You don't smoke!		
Month 2 PHS Claim			Submitted on (date)		
9.			You're doing well. Keep using your NRT. Don't weaken		
10.			You've only a few more weeks NRT to go – how will you cope?		
11.			Keep busy. Prepare to stop your NRT. You'll be fine		
12.			If not coping refer on for further support starting week 13. See contacts list Last week of NRT. Do you need more support? Well done! Give service flyer		
Month 3 PHS Claim			Submitted on (date)		
Notes					

Appendix 4 – Research and development approval**University Hospitals Division**

Queen's Medical Research Institute
47 Little France Crescent, Edinburgh, EH16 4TJ

CPP/SS/approval

09 November 2012

Mrs Aileen Muir
NHS Lothian Waverly Gate
2-4 Waterloo Place
Edinburgh
EH1 3EG

Dear Mrs Muir



Research & Development
Room E1.12
Tel: 0131 242 3330
Fax: 0131 242 3343

Email: R&DOffice@luht.scot.nhs.uk

Director: Professor David E Newby

Lothian R&D Project No: 2012/P/GP/10

Title of Research: Characterisation of community pharmacies delivering stop smoking services with reference to the number of quits and quit rates

REC No: N/A

Patient Information Sheet: Version 1 **Consent Form:** Version 1 dated 19 October 2012
dated 19 October 2012

Protocol: Version 1 dated 19 October 2012

I am pleased to inform you that this study has been approved for NHS Lothian and you may proceed with your research, subject to the conditions below. This letter provides Site Specific approval for NHS Lothian.

Please note that the NHS Lothian R&D Office must be informed if there are any changes to the study such as amendments to the protocol, recruitment, funding, personnel or resource input required of NHS Lothian. This includes any changes made subsequent to management approval and prior to favourable opinion from the REC.

Substantial amendments to the protocol will require approval from the ethics committee which approved your study and the MHRA where applicable.

Please inform this office when recruitment has closed and when the study has been completed.

I wish you every success with your study.

Yours sincerely

A handwritten signature in cursive script that reads 'C Phillips'.

Dr Christine P Phillips
Deputy R&D Director

Cc Paul Dearie, QA Manager
 Ms Moira Kinnear, Chief Investigator

Appendix 5 – Invitation letter to pharmacies

**Department of Pharmacy
Western General Hospital
Crewe Road South
Edinburgh
EH4 2XU**

*Lead Pharmacist West
Head of Quality Assurance Services
Head of Education, Research and Development
Lead Pharmacist, Edinburgh Cancer Centre
Principal Pharmacist, Dispensing Services
Departmental Administrator*

Fax Number: 0131 537 2370



CERTIFICATE NO. FS 31228

Shona Kerr 0131 537 1206
Jim McDade 0131 537 2329
Moira Kinross 0131 537 1216
Heather Dalrymple 0131 537 2337
Liz Stanley 0131 537 1215
Lynn Grayatt 0131 537 2499

Main Switchboard Tel: 0131 537 1000



INVITATION LETTER

I am working alongside Aileen Muir, Consultant in Pharmaceutical Public Health, NHS Lothian to explore influences on success of smoking cessation services in community pharmacies. This project is a part of my MSc in pharmacy at University of Tromso, Norway.

I would like to interview you to find out your experiences in delivering smoking cessation services. This data will help inform the design of a questionnaire that will be sent to all NHS Lothian community pharmacies. The outcome from this survey will be used to help you improve service delivery.

The interviews are scheduled to take place in late November 2012 at a mutual convenient time and place, and should take no more than 15 minutes. I am happy to come to your premises.

I hope you will agree to participate. Please read the attached participant information leaflet about your involvement and we will contact you to confirm your participation in the project.

If you require any further information, please do not hesitate to contact me or my supervisors. It is confirmed that this project does not require research ethics approval.

Thank you in anticipation for your contribution.

Yours sincerely,

Kristian Mortensen,
Master student in pharmacy

Aileen Muir
Consultant in Pharmaceutical
Public Health

PARTICIPANT

Research project about characterisation of community pharmacies delivering stop smoking services with reference to the number of quits and quit rates

Appendix 6 – Participant information sheet**INTERVIEW PARTICIPANT INFORMATION
SHEET for PHARMACISTS****Research project about characterisation of community pharmacies delivering stop smoking services with reference to the number of quits and quit rates**

I invite you to take part in a project about smoking cessation services in community pharmacies. Do not hesitate to ask if you would like more details about the project.

The community pharmacies stop smoking service

There is a national database to record smoking quit attempts based on reviewed minimum dataset forms and Public Health Service claims made for pharmacy based interventions, but this data is not directly linked. NHS Lothian Public Health Directorate are keen to have a clearer understanding of the factors which impact on the success of stop smoking services.

What is the study about and what is the purpose of the study?

Cigarette smoking is a major health issue worldwide and smoking cessation services in community pharmacies (CP) can contribute to prevention of smoking related illness. We want to explore influences on the success of smoking cessation services in community pharmacies to help inform best practice. To do this we plan to send a questionnaire to all pharmacies in NHS Lothian. Before designing this we would like to interview a small number of pharmacists so we don't miss anything important in the questionnaire.

Why is this research being done?

The research is being done to inform recommendations for the improvement of stop smoking services in community pharmacies.

Why have you been chosen as a possible participant in this research?

We have selected pharmacists from a range of pharmacies identified from the database as having varying rates of stop smoking services.

Do I have to take part?

You are free to decline the opportunity to be a part of this study without giving an explanation.

PARTICIPANT

Research project about characterisation of community pharmacies delivering stop smoking services with reference to the number of quits and quit rates

What will happen if I take part?

The investigator will arrange to meet with you at your community pharmacy at a time convenient to yourself. The interview should take no more than 15 minutes.

With your permission the interview will be audio recorded and transcribed, so that no vital information is left out. The recording will be destroyed after transcription. Your knowledge and practice might lead to a better understanding of what characteristics are important in delivering smoking cessation service

What are the possible benefits of taking part?

The research will help design an unbiased questionnaire, the results of which will inform best practice.

What are the possible disadvantages and risks of taking part?

There may be inconvenience to you for the time taken during interview. Apart from this, there are no disadvantages or risks.

What happens when the research study is finished?

Recommendations will be made for improving community pharmacy stop smoking services.

Will my taking part in the study be kept confidential?

All interviews will be anonymous with no recording of data that will identify the pharmacy or the pharmacists. Ethical and legal practice will be followed. Confidentiality of your identity as a research participant will be kept within the research team.

Who is organising the research and why?

Members of the research team and collaborators within NHS Lothian and the Pharmacy Education, Research and Development team at Western General Hospital have organised the research to optimise the outcome of stop smoking cessation services delivered by community pharmacies. Through this engagement there is an opportunity for a master student to undertake this unfunded work.

Who has reviewed the study?

The South East Scotland Research Ethics Service has deemed the project not to require research ethics review, but it will undergo Research and Development management approval.

PARTICIPANT

Research project about characterisation of community pharmacies delivering stop smoking services with reference to the number of quits and quit rates

Further information

If you require any further information, please do not hesitate to contact Consultant in Pharmaceutical Public Health Aileen Muir (0131 465 5445), Head of Pharmacy Education, Research & Development Moira Kinnear (0131 537 1216), Lead Pharmacist Stop Smoking Service Giovanna DiTano (gditano@nhs.net) or Pharmacy Group Locality Co-ordinator Anne Lorimer (0131 537 6625).

PARTICIPANT

Research project about characterisation of community pharmacies delivering stop smoking services with reference to the number of quits and quit rates

3

Appendix 7 – Consent form**CONSENT FORM**

Student Investigator: Kristian Mortensen, master student in pharmacy and Honorary member of the NHS Lothian Pharmacy Education, Research, and Development team, Western General Hospital

Please initial box

1. I confirm that I have read and understood the information sheet (version 19/10/12) for the above study. I have had the opportunity to consider the information and to ask for further information.
2. I understand that my participation is voluntary.
3. I understand that the interview will be audio recorded and that it will be transcribed. The recording will be destroyed following transcription.
4. I agree to be interviewed

Name

Date

Signature

PARTICIPANT

Research project about characterisation of community pharmacies delivering stop smoking services with reference to the number of quits and quit rates

Version 1 - 19/10/12

1

Appendix 8 – Transcriptions

Interview schedule

- Is it in the consultation room that you have discussion with clients or is it somewhere else?
 - **Private consulting rooms**
 - Do you always undertake the consultations here?
 - **Private area**
 - Privacy
 - Noise
 - Do clients ever comment on level of privacy?

- How do you recruit clients to the service - do they approach you or do you approach them?
 - **If you approach them:**
 - How do you raise the issue of smoking?
 - If you get a prescription with chronic medication for smoking related illnesses, would you actively recruit the patient?
 - **If they approach you:**
 - What happens before the consultation takes place?
 - Brief intervention?
 - Who does this? You/staff
 - Do you make an appointment for them to come back or do you see them then?
 - Can the other members of staff speak to them and consult/set up an appointment
 - Do you think your process for recruiting clients to the service could be improved?
 - How?

- Can you describe your clients
 - Socio-Economically Deprived Groups
 - Pregnant women
 - Young people
 - People on medication/who have a medical condition
 - None of the above

Scenario: Some people have already made up their mind and are highly motivated to stop smoking, but some people have low motivation to stop smoking

- What clients do you mostly get?
- How quickly can you tell which category they fall into? From onset or as you get to know them?
- Do you use the same approach for each case?
 - **Yes**
 - **No**
- Do you think the client remembers all the information you give them?
 - Do you give them booklets or leaflets?
- Are there any of your clients that have tried to stop on multiple occasions?
- Do people with unsuccessful quit attempts come back?
 - Do you change your approach then or is your approach always the same?

- How?
 - Do they have to wait for a period of time before they can enter the service again?
 - **Yes:** How long?
 - **No**
 - **Depend on level of patient motivation?**
- Who is delivering the smoking cessation service?
 - **You:** How are you trained?
 - **Support staff:** How are they trained?
 - How much responsibility is delegated to the support staff?
 - Are support services offered by the stop smoking facilitator (Giovanna) accessed?
 - Have you been to local NHS training?
 - Have you been to product sponsored training?
 - Have you contacted Giovanna for specific training or help?
 - Does the client see the same staff member every time they visit?
 - Do you think this is important?
 - If this is not possible do you use the support tracker sheet?

Q5: What do you think is the importance of recruiting patients to this service in relation to other services delivered from the pharmacy?

- Do you feel a strong commitment in delivering the service?
 - **Yes:** Could you elaborate?
 - **No:** Why is that, do you think?
- Do you have company or personal targets to achieve?
 - **Yes**
 - **No**
 - Could you explain briefly what targets you have?
- How do you feel when clients quit?
 - Professional satisfaction?
- Is the success celebrated with either the client or the rest of the pharmacy team?
 - Do you think doing this would encourage staff in the delivery of this service?
- What's the most difficult barrier to overcome when delivering smoking cessation services?
 - **Time**
 - **Lack of confidence or knowledge**
 - **High noise levels**
 - **Language**
 - **Attitudes and beliefs**
 - **The individual is emotionally upset**
- Do you have any suggestions on how to improve the smoking cessation service?
 - **More training**
 - **More marketing**
 - **More information leaflets to hand out**
 - **More time to undertake the service**

- Is there anything else you want to say about the smoking cessation service, that I haven't asked you?

Type of participant	Type of community pharmacy	Geographical location
Pharmacy Technician (Pt _a)	Independent	Affluent area
Pharmacist (P _b)	Multiple	Shopping centre
Pharmacist (P _c)	Multiple	Deprived area
Pharmacist (P _d)	Independent	Rural area
Pharmacist (P _e)	Independent	Rural area
Pharmacist (P _f)	Small multiple	City centre

Interview with Pharmacy Technician A**Pharmacy Technician (PT_a)****Interviewer (In)****In: Let's start off with the location of the client consultations. Is it here (private room)?**PT_a: Yes.**In: So not in the private area**PT_a: No. Unless this one is been taken up by another consultation or something else, well but, generally in here, it's much easier.**In: Okay, so you don't notice anything about the noise levels?**PT_a: No, it's usually fine. Or even if we do pull them up to that end there, it is quite quiet as well.**In: Yeah. And the client doesn't comment on the noise levels?**PT_a: No, they haven't.**In: No.****In: Recruiting and approaching clients. How do you recruit clients to the service? Do they approach you or?**PT_a: Yeah, a lot of them do approach us first hand, just from coming in off from the street or they've heard about it, but we are trying to be proactive as well, in a way that is not too in the face but if we can smell the smoke from them or if we've just seen them put a cigarette out as well maybe pop a wee leaflet in. If they're getting anything as well just to say about the service that pharmacies can provide and also obviously if they are then, or if someone comes in just to buy a patch, or buy nicotine, any nicotine replacement we will tell them then about the service that the pharmacies can offer and try and recruit them in that way.**In: But if you see a prescription with chronic medication for a smoking related illness. Do you actively..**PT_a: No, they get. Pharmacies in here as well do have asthma clinics so they are aware of quite a lot which patients have asthma and smoke as well, so we'll recommend in that way that their clinics. As far as prescription go, unless again, if you smell it off them and you're aware of it as well, you would maybe say to them, 'have you thought about stopping smoking?'. It might help with your asthma and everything else that leads on to.**In: Yeah..?**

PT_a: Yeah.

In: Okay. What happens before the consultation takes place? Do you do a brief intervention first or?

PT_a: Yes. Usually have a quick chat with them as to when their thinking about stopping and also, do they have the time to speak to me just now, do I have the time to speak to them just now, or can I just give them leaflets or information so they can have a good read of it and come back to me at a time that is convenient for them to be able to sit down with me.

In: But you can take them there and then?

PT_a: Yes. Yep. Yeah. Can take them there and then. If they turn and say 'it's either you or I'm buying cigarettes next door. Yeah, we'll take them as quickly as we can into here so to try to get it sorted.

In: Yeah. And, can the other members of staff set up an appointment

PT_a: Yes.

In: ..or does it have to go through you?

PT_a: No, no. They usually will pull me aside just to ask if it's convenient or anything else. But we do have, one of the other members of staff, a dispensing assistant, she takes part in it as well in helping, and the other members of staff will all know to point them in the right direction or give out any information as well to then to give it on to us as well.

In: Yep, okay. Do you think your process for recruiting clients to the service could be improved?

PT_a: Yeah. I mean. I think we need to approach it a lot more, or approach patients a lot more. As you say it, it us knowing why they're on the medication and we know that they smoke, saying that as well. But, just be more actively when somebody comes into the pharmacy as well. Just, I think we're going to put it on the radar for next year. As a monthly, you know, stop smoking campaign, and 'do you know of anyone who does smoke', 'are you a smoker yourself', 'would you like to try and stop'. So yeah, I mean all of that, could be brought up a bit higher in our way of thinking.

In: Yeah.

PT_a: Yeah. It's getting, getting, that all out at the same time.

In: Yeah, do you get any GP referrals?

PT_a: Sometimes. If the GP.. Sometimes you get a GP who wants to give them champix or anything like that which we can't do, so that's fine. But if they're going to be doing patches, we've have quite a few referrals from the GPs who say they have 12 week plan up in the pharmacy, if you go into them, they can help you give the.. Cause they can't go up to the GP every think either. And sometimes they

feel it's a lot better that they're getting the one-on-one support weekly as opposed to 'there are your patches, off you go'. So, yeah, sometimes the GPs will refer to us.

In: The types of smoking clients you get. Could you describe your clients? If they're pregnant women, young people, people on medication and so on

PT_a: Uhm. No. We've had in the past, I think one pregnant woman and it was her mum as well we were trying to stop. Usually, it's, I'd say, early 20s for some of it and then you've got your 30-40s, late 30-40s who have stopped in the past, have started smoking again and come back and then you've got your quite a bit of the older generation, I say older, I'm not far over (chuckle), 50-60s and older who say 'I have to stop' so quite a variation, but I would say more older than young people coming in just now as well.

In: Some people have already made up their mind and are highly motivated to stop smoking, but some have pretty low motivation. What clients do you mostly get?

PT_a: I would say mostly motivated or, at least they tell me that maybe on week 1 and that they definitely want to stop, they definitely want to do it this time. I have quite a few that are called the boomerang patients, they go away, they come back, they go away, they come back. Most of them are motivated, I would say a good 90%, but not all of them have that motivation to keep going either.

In: So, can you tell them right away that their highly motivated or do you..?

PT_a: Usually, yeah, usually they are, but then you get the odd who goes 'hmm. Not sure. No, I don't know' and you know that it's possibly that they need to, but it's not the right time, they're not going to be able to go away that night to say 'I'm stopping'. So it's. Yeah. You call straight away as to whether or not they're..

In: Yeah, but do you use the same approach for each case? If..

PT_a: No. It kind of varies. I mean, yeah, you've got this sort of spiel and of what, how, what it involves and how can you help them, but it's trying to, you know, gauge what their feelings are when they come in as well as to whether or not you do a softly, softly approach, often you know you'll be fine, we can do it with you, or you have to stop, you know, let's do it together, we'll help you get through it, you know, so, yeah, you're kind of gaging it just as they get come into you as well, but with the same idea behind it, the same incentive of what you are going to do with them.

In: Do you think the client remembers all the information you give them?

PT_a: I'll guess not. So you try and give as much you can, to get them on that 'I'm stopping, I'm going to stop, this is my stop date', give them a wee information leaflet, booklets, there is one booklet that we use in particular, which has a lot info in it and we tell them use that as your bible, read it through, keep referring back to it, but every week as well on our sheets, we've got little reminders for ourself as

to how they are maybe feeling at that time, what they can do to change things, and just keep nudging them on.

In: Is that the tracker sheet?

PT_a: Yeah, yeah, yeah. So, week by week, you're looking at the tracker sheet as well and trying to help them along with it instead of just saying, you know, you might feel like this or that, they don't know what they're going to expect if they have not done it before.

In: Okay. You mentioned the boomerang people. You have many clients that stop on multiple occasions?

PT_a: Yeah. Yeah. I'd say about half a dozen if not more just within in here in the past couple of years that have been back and forward.

In: Do you change your approach then when they..?

PT_a: Yeah, we do. We try to change the approach on how they are when they come in the next time and sometimes it's even a different person that's actually going to take them for either the first couple of sessions or anything. So instead of it being me, cause I'd already did them the last time, one of my other pharmacists will take it or, dispensing assistant, just to see if they'll react differently to a different person as well, then the way that they tell them, hoping that, you know, otherwise they'll just see me in saying 'I can't stop', you know, 'just tried, but I still can't do it', so if someone else comes into it, probably doing exactly the same approach as we all do, but it's just seeing somebody different as well, so we try and do that until they've got round us all and it's back to the normal again.

In: Yeah. Do they have to wait for a period of time before they can enter the service again?

PT_a: No. It used to be that. But no. We can now literally if they fall off the wagon, straight back on it.

In: OK. Who is the delivering the smoking cessation service. Is it you and..?

PT_a: Myself, the pharmacists that are in here as well and dispensing assistant. I do have a pre-reg pharmacist as well who is trying to get involved with it as well, but obviously that's changing every year. But, yeah. She's involved a bit as well, just trying to get her into it.

In: OK. And how are you trained?

PT_a: I was trained by the pharmacist that I've worked with. We've worked together in different pharmacies and also going along to smoking cessation nights, the ones that a couple of the pharmacists do and also you get, ones from your manufacturer and things who'll put on smoking cessation nights as well, just to try and train you up a bit, motivate you to motivate them.

In: Yeah. So you know Giovanna DiTano?

PT_a: Yes.

In: Have you come to her events?

PT_a: Yes. Yeah. Anything that she's been involved in, I try and go along to as well and if there was ever a problem or a query or anything that I had in here, she would be my first port of call.

In: OK. So. Have you contacted Giovanna for a specific help or?

PT_a: I haven't. I haven't come against anything yet, I just have her number splattered across my folder so I can.

In: Have you been to any local NHS training?

PT_a: Yes. We've went to one, I think it was for, it was for pregnant people as well and it was done by... and it was up at one of the hotels as well, a few months ago now and any of the local ones that come up I try and go to as well... I can't remember it. I think it was, it was a McNeil's one that we went to just recently as well. But yeah.

In: OK. Was that a sponsored training?

PT_a: That one was. Yeah. Yeah.

In: Does the other staff members have the same training as you?

PT_a: Yes.

In: OK. So the client do he see the same staff member every time they visit or? You said something about..

PT_a: We can do if, if, if, one person who has started with them if they can keep it going with that person because usually you're in the same day, that would be great, obviously if they're off ill or holidays then that's only a time usually, but you're trying to keep it off going with the same person unless you get that stumbling block of 'I just, I don't know how to motivate them or I feel they are not right', so maybe a change of face would help, but yeah, generally it is the same person that tries to see them cause you know what they're like week to week as well and how they are getting on with it.

In: And do you think it's important?

PT_a: I do. I think. Yeah. As much as possible if you've got that continuity, they know, you know, everyone wants praise and whatever so if you're getting it from the same person you go away you come back and you say 'I did it', so it's, yeah, I, I quite like the continuity of it as much as possible. Again, as I say though, It would only be changing it if you felt you just, you know, I've had my chance with them, lets see if you can help as well.

In: Yeah. And you use the support tracker sheet?

PT_a: Yes.

In: What do you think is the importance of recruiting patients to this service in relation to other services you deliver here at the pharmacy?

PT_a: Well. For this one, obviously if we're stopping them smoking hopefully we're going to help increase their health and/or take them off tablets or inhalers or things that as well, so it should help reduce their medicines usage as well that they're trying to get that's not benefiting them cause they're still smoking.

In: So you feel a strong commitment to..

PT_a: I do, yeah, yeah. Trying to getting them stopped would be great.

In: Do you have any company or personal targets you're trying to achieve?

PT_a: Not yet. Sometimes we try and looking at that we're trying to recruit as many people as possible and you know, we'd maybe have a prize at the end of it or something, but at the moment we're OK, we're just going to slowly take it on, just with so many other things on at the moment, but I think once we do, you know, as I say probably in the new year, I think it's going to be a big hit that we're trying to do that, that we will do an incentive, staff incentive to get as many people on board as possible and keep them on, that's the one that's hard and get one person in every week, but keeping them there for the 12 weeks is the tricky part.

In: Yeah. And how do you feel when a clients, when a client quits?

PT_a: Oh. It's great. I feel like I quit with them. (laughter) No, it's really good and we've got a few people that we have helped to quit and they come back in every now and again to say 'Still stopped!' and... Cause they've not been in for anything else so, yeah, no... It's, it's great if you can help somebody to stop. It's good.

In: Yeah and is the success celebrated within the pharmacy team or?

PT_a: Yeah. I mean, you know, well we know who we've got coming in here as well as much as it's the one person who sees them. You're always asking how they are doing, are they okay, so when they quit. Yeah. I mean we are all happy when one person has quit. Yeah. We do try and celebrate it a bit. We don't break open the champagne or anything, but yeah, it's good to know that we've managed as a team to release one person to help them to get them stopped, so yeah.

In: Do you think this encourage the, the deliverance of the service?

PT_a: Yeah. I think so. It's trying to be, yeah. Positive about it that it is not a negative thing when you're coming in here and you're trying to get them stopped, yeah, no, it's come on we can all help to try and do it as well.

In: Okay. What's the most difficult barrier to overcome when delivering the smoking cessation service? Is it time?

PT_a: Uhm. Time sometimes, just if it's busy or short staffed. Especially for your first consultation, you don't want to be rushing that so yeah, time can be a bit tricky there.

In: How about lack of confidence or knowledge?

PT_a: Uhm. Yeah. If you've got somebody who's just not quite sure what they're doing, it comes across that way and the patient thinks 'it's not going to work for me' if though. Yeah. Got to get everyone confident with it.

In: Yeah. High noise levels..?

PT_a: We seem to be alright in here. Usually it's okay. It's not usually that noisy.

In: Any language barriers with client..?

PT_a: We haven't. Not as much a language barrier, we've had a patient who has mental health issues and things as well, so it's more the way we word things to get it across to her in her terms. But language barriers we do, but not for smoking.

In: OK. Yeah. Do you have any suggestions on to how improve the smoking cessation service?

PT_a: No, I mean, I think they do quite a lot of these nights that Giovanna involves herself in as well. She's very bubbly and motivated too, so to have her, you sort of think, 'I can do that'. Other things... Don't know. Just me getting my team involved a lot more as well, in trying to get them positive and not faking it or blagging it, but making sure you are confident with it as well, just to get that going and I think we're quite good in it, that we've got enough hands on things as well, we got the booklets, we got leaflets, you've got the inhalators and things to be able to show them things how to do it as well so. On a whole it's there, it's just getting your clients in over the door and keeping them.

In: Is there anything else you want to say about the smoking cessation service, that I haven't asked you?

PT_a: Mm. Don't think so. I think, kind of covered everything, I think there's no tricks up my sleeve that I know of that we've managed to keep in anyone else... No. Just perseverance and trying, yeah, no, I think just, people who are giving it or trying to help people to stop smoking, as much as you sometimes feel 'aaahh... them again...', it's really hard and you just can't let that go over to them, that they know that you're thinking the same thing of 'they're not just going to manage it'. So getting the motivation to keep it going with them, is just the only thing, I think everyone can keep trying and plugging on with (laugh)...

In: OK. Thank you very much.

Interview with Pharmacist B**Pharmacist (P_b)****Interviewer (In)****In: Let's start off with the location of the client consultations. Is it here (private room)?**P_b: Yes**In: Yeah. So not in the private area**P_b: In a private area?**In: Yeah. Outside the private consultation room**P_b: No. It would be here.**In: Do the patients ever comment on the noise levels**P_b: No**In: No..?**

P_b: No. We would bring them in here for their initial consultation if they wanted to, depends when they came into the pharmacy. If they came into the pharmacy and it's quiet at the reception desk then we can have the conversation with the customer there. In that way we can do the, we can do the service much quicker so we would only bring them in here if we were carbon monoxide testing, so the, you know when they come in to collect their prescriptions, we would just do the consultations and find out how they're getting on with them at, at the desk.

In: Recruiting and approaching clients. How do you recruit clients to the service?

P_b: Our healthcare assistants. Anyone that comes in to buy NRT products, they would have a conversation, you know, are, is this, is this something you're just starting and you know that we're, you can do the, the, the service. Because we do have people that have been buying chewing gum for a, a long number of years that have, have, so not, but they're not, they're not smoking, they're not ready to do this program, they're just using that, but we do have people who come in and are looking for advise and anybody that's looking for advise on smoking cessation, would be referred to ourselves to see if they were eligible for the program.

In: Yeah. So. So they both approach you and you approach them?

P_b: Yes. So our healthcare, the healthcare are trained, anybody buying any NRT they would have the conversation to see if they are eligible and if they are they would refer them up to us to speak to them, to see if they wanted to join the program.

In: And how do you raise the issue of smoking?

P_b: With the... We... we're not at the stage where we would be having conversations with people picking up prescriptions, you know like on a, you know, we would have other services that we would be offering in that instance regarding their prescriptions. It would only be if, if maybe somebody, you know, then comment about smoking, we would then have, have, instigate a, a conversation, but otherwise it would tend to be led by people asking for advice at the counter.

In: OK. So what happens before the consultation takes place? Do you do it there and then or do you have a brief intervention first?

P_b: Well the pharmacist on duty would speak to the patient and, and, highlight the fact that there it is a service available, would that maybe be, be something they were interested in. I mean you, to see whether that they are able to, for that they to be eligible so whether that, that they live locally because we get a lot of people who are just visiting for the day, so that it would something to be able to come back on a weekly basis with. And then if that's the case then we would, we would get them to fill out the form and once the form is filled out, we can then take it from there regarding the advice that we give.

In: Ok. And you said that, that the other members of staff can set up an appointment as well or?

P_b: Yeah. We don't tend to do appointments; they would just, if somebody approached the chemist counter and said 'I'm thinking of stopping smoking' and... You know, 'I'm looking for some patches' or whatever, then... [interruption]. Then the member of staff would at that point say, you know, we, 'there's a stop smoking program run in Lothian, would that something?', you know, and give them a few pointers on it and find out if that's something that they would be interested in, in, in starting and if that's the case then that member of staff would bring the patient up to a pharmacist and the pharmacist would then speak to them at, at the desk and just find out some, you know, quickly assess where they are and if they would be eligible and would it be suitable for them and then at that point we would then give them a form to fill out so they can fill that out. And we get them to fill the form out, you know, at the, at the desk or to sit down with our clipboard and fill out and hand out. We don't bring them in here, because we don't have luxury of sitting in here while they fill out that form out, so they would fill out there and once it's filled out then we can look to start them on the program

In: OK. Do you think your process for recruiting clients to the service could be improved?

P_b: Can always. Everything can always be improved. We could be targeting, we could be having conversations with much, with more people. We, as I say, we tend to just have the conversations with people who are looking to buy, we're, we're not targeting, you know, we're not asking everybody when we hand the prescription out, 'do you smoke?', 'are you thinking of stopping', but we're not at that level. We would just, you know, so... anything can be improved

In: The types of smoking clients you get. Can you describe your clients?

If they're young people or..?

P_b: Varied. Varied. Young, old. Yeah.

In: Some people have already made up their mind and are highly motivated to stop smoking, but some people have pretty low motivation. What clients do you mostly get?

P_b: We mostly get people who are, who are highly motivate, who are motivated, if, if, if the, if they... made their first, you know we... they've approached... it tend to be they would approach us to ask about it and to ask about stopping smoking, so they've decided that they want to stop, so that's the motivation that they have and then we can then tell them about the program or offer the program. I think if we then started, I think maybe, if you're talking about how we target people, if we're targeting people just in a, 'you're thinking in stopping smoking' then maybe they wouldn't have high motivation, because we're bringing it up, they haven't thought about it. Where as the people we target are the ones who are speaking to us, so they'll already have the motivation.

In: Yeah. Do you think you would use the same approach for each case?

P_b: No.

In: No..

P_b: No. So obviously if, if, if we're bringing it up then it would be a different approach, because you would have to go through that the... you know the ... Where they're in different mind sets, that one there, but this is as I say, we tend to speak to people who have made the decision that they want to stop and then we offer to help them stop.

In: Do you think the client remembers all the information you give them?

P_b: No, no, absolutely not.

In: Do you think that's a problem?

P_b: I don't think anybody remembers everything that anyone tells them in any walk of life, it's. You have to, you have to, you give them the information and then we're seeing these people on a weekly basis so we can drip feed and we can, you know, we can reiterate the most important points when we're, we're supplying the next instalment because, you know, when they come back we're always asking how they're get on, you know how they're finding it, that sort of thing. And if they're struggling or finding it difficult then we can explore more and see if it's, if it's just the motivation or whether it's something that, you know, they're not using the products properly, but we do try to give advice, but it's so much advice and it's such a lot of information that they're getting.

In: So do you give them booklets or leaflets about what kind of..?

P_b: Not normally, we, we've got the, the booklets and things that we have are, I think, a bit out of date. So, we don't normally give them, we give them the, the product, we always give them the product that they're using, we always makes sure they have got the patient information leaflet for that, so the booklet there, we would never start them without that. And we would always explain how to use the product as well, so we would give them the written information and we would verbally tell them as well.

In: Are there any of your clients that have tried to stop on multiple occasions?

P_b: Yes.

In: Yeah. And do they... come back here?

P_b: We've had people come back and depending on if, if, if they drop off the system and come back straight away, we would have to assess, because, I know, I thought to begin with we've had to wait for 6 months before they can start again on the program, but it depends on why they've stopped and what their motivation is, you know, we've had people who, you know, have maybe had a bereavement or a stressful period and have started again, but then sometimes, you know, then that they're really motivated now. Is it fair to, to say to these people 'no, you have to come back in 6 months' when they've just had a blip with something and they're really motivated so it would, it would depend on their circumstances. If we have people who've just fallen off and never come back and have given us no reason and then they've just said it didn't work for them then we wouldn't take them straight back on without giving them some additional advise or, or tell them that they need additional support through the Lothian stop smoking.

In: Yeah. So you would change the, you would change the approach then?

P_b: Yeah. If we've had, we've had a few people that have dropped off and maybe started again and then dropped off again and then the, at the second time they come back, we've just given them the details of the Lothian stop smoking clinics and said to them, you know, 'you're really looking for additional help. This program is not working you. You've tried it three times and it's not working', so we would do that.

In: Yeah. OK. Lets go on to who delivers the service and what training everybody has. So, you are one of the persons that..

P_b: Yes.

In: How are you trained?

P_b: Delivered... It's pharmacy led so it would be the pharmacists who would do the consultations and the training I have is that, well, as part of our CPD (*Continuing professional development*) is that we keep up to date on all knowledgeable matters, so for me stop smoking is, is something that I need to be

on top of, so I've been to the stop smoking training nights and things that have been run by Lothian, reading...

In: Giovanna for example?

P_b: Yes. I have, so been to a couple them in Edinburgh and one wherever... But been to, been to them and then other than that it's just checking the community pharmacy Scotland website and reading the journals and checking and look, the drug reps that come in from the, the, with the, you know with the, new products and things and checking the formularies and things like that, so just keeping up do date.

In: How are the support staff trained compared to you?

P_b: Our dispensers would tend to, they would attend the meetings that I went to in the stop smoking, they've attended as well. So they've, they've had that as well and then they would have, we also.. As a company, the company give us like inhouse trainings so we've got like 30 minutes tutorials and there is always a stop smoking one in the year as well, we've got e-learning so there is a stop smoking on e-learning as well so we've all done them.

In: How much responsibility, responsibility is delegated to the support staff regarding the..

P_b: It would just be planned in with their normal training. They, they, they... Take the nights that we have attended, that was up to, you know that was, they volunteered to attend, because it was, it was relevant to their work, but they're not forced to do that, and their e-learning would be built in that and that would be planned in for them.

In: Does the clients see the staff... the same staff member every time they visit or?

P_b: No. We've got three base... three regular pharmacists, so we would tend to have, you know, one of the three of us, would, would speak and it depends on the day that they come in, you know, I do quite a few on a Sunday and that, I work every Sunday, so I see the same people every Sunday and I think that really helps the fact that they're seeing the same, the same person. But, we can't guarantee it.

In: Do you use the support tracker sheet that you have..? The one...

P_b: We got the, the... No. We don't use the NHS one. We devise a store one based on the NHS one, so we do have a 12 week sheet that we, we can fill out and mark, have they collected it, what, what have they collected, have there been any changes, have we claimed the 25 pounds and that kind of thing, so we, we devise one ourselves.

In: What do you think is the importance of recruiting clients to this service in relations to the other services the pharmacies, the pharmacy, delivers? Like diabetes and blood pressure monitoring...

P_b: Oh, we don't do blood pressure and we don't use diabetes testing, so we do, so the, the... I think it's a great service..

In: The job..?

P_b: We do flu jags. I think this is a great service, you know, I think for every one that drops off if we got one that goes through our program and stops then it's a great, it's a great achievement and you just feel such a sense of satisfaction that you've helped somebody.

In: Yeah, you do.. Do you have any company or personal targets to achieve?

P_b: No.

In: No..?

P_b: No.

In: And you felt a professional satisfaction when a client quits..?

P_b: Oh yeah. Yeah. Aha.

In: Is the success celebrated with either the client or the rest of the pharmacy team?

P_b: It's not something that. It... If, if somebody said at the time then yes, you know I mean we have people that have stopped smoking with us and we, we usually, we've got a customer satisfaction forms and we would usually ask them to give us some feedback on the service that they've received over the 12 weeks and they can go online or phone in and just give us some comments on it, so that's great if, if they do that. And we've had people that have said, you know, it's just been, you know, I've had, I've had somebody say to me and you know, 'I couldn't have done it without you' and, and that makes you feel fantastic, so when it works like that then it's great.

In: What's the most difficult barrier to overcome when delivering the smoking cessation service?

P_b: The paperwork and everything involved with it. I find it really hard work with the, the paperwork, the month then claiming, because we have to go through the folder that we keep all the forms in and we have to check whether they're in month 1, month 2, month 3 and then what we would do at, at the end of the month, is we would go through the folder and anybody that has dropped off the service, you know, if they've not come back, that's when we would pick up that they've not come back and that's when we then have to phone them and check, because if, if it's within, within the first 4 weeks, we would have to phone them and say, you know, you've, you've, you've come off so the paperwork and the administration of the service I think is, lets it down. It just takes such a long time.

In: Do you have any suggestions on how to improve the smoking cessation service?

P_b: It would help if anybody that drops off the service... It would help if I didn't have to contact them, because we contact at 4 weeks and then you contact at 12 weeks and 12 months, but because if they drop off I understood that we, that's within the 4 weeks, then that would be part of our remit as to find out is, to say, so, we have to phone them up and, and just or contact them, how they've asked to be

contacted, and just say 'you've not been back', you know, 'have you stopped smoking' to get to find out whether it's a pass or a, or a fail and the majority that's just, you know, I mean, for every one that says 'oh, no, you know, I manage fine after week 1 and I've stopped completely', we'll have 50 that say 'oh, no, it just didn't work for me' or, you know, 'no, it's not their time to stop', but, so the, so the workload involved in that is, you know.

In: Is there anything else you want to say about the smoking cessation service, that I haven't asked you?

P_b: For me I'd say for me the administration part of it, the fact that we have to fax, you know, have to contact them at 4 weeks and we have to... Our fax machine isn't in the dispensary so when we do our 4 weeks review, now that patient still live and with us, we then have to take that form, we have to take it up to office and fax it through and then come back and put it back in the file, so that's time consuming and, so for us that's just, because, just the, you know, the admin, you know, the fact that, you know, if it's in the dispensary then it would be great, that's just personal, that's just, our hard luck, but it just takes time to do that, and it's I say month end processing thing of it, where we have to go through it and, and, and get and tally all up, it's just, it's, it's very time consuming so that's, that's what I'm not very, very keen on. And the other thing with it is that we don't always do the carbon monoxide testing. We would do it, if customers were very specific about it. It's not, at the moment, it's not, I think it's good practice, I think it's, it's, it's, we can, in Lanarkshire, I think they brought it in that you had to do it and it's not, you don't have to do it in Lothian, so, because you don't have to do it, we don't always do it, so either, if it's something that you want to do, I'm looking really for guidelines on, you know, whether we should, whether we should be doing it, if it was part of, of the program, if we had to do it then we would do it, but at the moment we don't always. And the other thing that I don't, that I'm always unsure of is, at the 4 week review and you ask them if they've had a cigarette in the last 2 weeks. I've had people that have said 'Yeah, I fell off the wagon once', you know, 'I've had a night out I had some alcohol, I had a cigarette, I regretted it the next day, I've not had any ever since', now technically that's a fail, because they've had a cigarette in their 2 week period, but I wouldn't kick them off the program for that, because I think, you know, it's someone off, that's fine, but then I think, well is that right, is that, that, wrong, you know, it's different to somebody that would say 'I'm still having one a day, but I've cut it down from 20, I'm still having one', because that's a fail, because they've not stopped completely, but they think they've done really really well and they think they are, you know, that they're compliant with the program when, to all. In effect it's yes. No, so that's, that's what I would like as well is maybe some clarity or maybe some leeway, you know on somebody that's maybe had one episode were they've been having a drink and had a couple of cigarettes on one night and, and, and that's it as opposed to somebody who's maybe not given up, you know, their favourite cigarette after their dinner at night, so I would like some more on that.

In: OK. Thank you very much

Interview with Pharmacist C**Pharmacist (P_c)****Interviewer (In)****In: So, lets start off with the location of the client consultations. Is it here (private room)?**

P_c: It's in this room. Yeah

In: So not in the private area?

P_c: Well, I would say this was private, closed doors, there's not much more private you could be really in a community pharmacy.

In: Do you notice anything about the noise levels?

P_c: Noo. Not so much. Not towards, not that would be a distraction.

In: And the client hasn't complained about the..?

P_c: No. I mean usually, like, I say the curtains is shut there, there's, you know, it's a bit better than some of the areas that you can get in, in some pharmacies, but not ideal, I mean obviously better to have like proper enclosed, closed rooms, but, you know, it's, you know, we're not back, this backing on till, back off space, you know, we're not really backing on to anything, so it's still fairly private.

In: Recruiting and approaching clients. How do you recruit clients to the service? Do you approach them or do they approach you?

P_c: Most times it's they approach us. Once or twice if they're coming in buying NRT, then you might say to them, you know, there's a free service in the NHS, but usually it is customers coming asking to be signed up.

In: Yeah, but if you approach them, how do you raise the issue of smoking?

P_c: I mean it depends. If... I mean if they're standing looking at all NRT products then you kind of, you know, that they're obviously smoking, sometimes I will put a little sticker on a bag saying 'is the patient smoking', you know, if they're getting lots of types of hypertensive medicines, things you know, just as a precaution, but I mean 9 times out of 10 it is, what, way more than that is the patient that comes in.

In: If you get a prescription for a chronic medication with... that's smoking related, would you actively recruit that patient?

P_c: Well, the only things you would tend to get are NRT replacement products in which case somebody is already.

In: Yeah, but if a patient has a prescription for a COPD medication...?

P_c: Yeah, well that's, you know, that's what I am saying, you know, some of them you will put a little sticker on it saying have you heard about the service, you know.

In: OK. What happens before the consultation... consultation takes place?

P_c: Usually, they're, well to be honest, they are seen fairly quickly, so sometimes we will get them to fill out the dataset form beforehand, but usually you just have them to sit and wait until myself or other pharmacists is in, can come in to, to do the interview.

In: OK. So. You can see them there and then?

P_c: Not always. Sometimes you're saying, you know, 'we don't have the space', it's quite often they come in a Saturday, don't have the time on a Saturday to do it, we're only open for a few hours, so you'll say to them 'well, can you come back in another day when there's more people in'. But a lot of the times, they just get seen fairly soon after they come in.

In: OK, and who does, does this. Is the... does the support staff do it as well?

P_c: I've got a preregistration pharmacist, she leads it, she does a lot of it, because, you know... we kind of taught her to do it fairly well. Myself, the initial consultation should be a pharmacist, but if, you know, I let the pre-reg do it because you know she near enough is and then any kind of follow up visits, I've got trained ACT (*Accredited Checking Technician*) who does the follow ups.

In: OK. Do you think your process for recruiting clients to the service could be improved?

P_c: Recruiting, yeah. Because, you know like I said, it's not something, we're a busy shop so we don't really have the time to, you know, you're thinking, oh need to do that, need to recruit that, need to recruit that, it is more people that come in asking for the service, so yeah. Obviously yeah, we could be doing a bit more, in particularly when CMS (*Chronic Medication Service*) actually starts properly, you know, we'll, it'll be easier. Also like them, I might get an ACT so I'll have a lot more time to actually spare to come in and speak to patients. So yeah, in theory, you know, we should be recruiting more. Yeah.

In: The types of smoking clients you get. Could you maybe describe your clients? If they're pregnant women, people on medication and so on.

P_c: It's a complete mix of people. We don't tend to have many pregnant people come in. Why that is, I don't know. But I... Most of them just random, random people. There's no set definition. I would say probably under the age of 45, more than over that age. Elderly patients, I think, we get a few, but we get most of, most successful cases with people that are under 45, I would say. But there's no set criteria, it's just whoever walks in and says usually that they're willing to quit.

In: OK. Some people have already made up their mind and are pretty motivated to stop smoking, but some are... have pretty low motivation. What clients do you mostly get?

P_c: Mostly motivated people. They are determined that they want to.

In: And how quickly can you tell which category they fall into?

P_c: Probably usually when you're sitting doing your consultation, because you know you're asking for quit date and some of them will go 'I'm not sure', you know, you need to like kind of pin them down to ask 'are you, this is, you need to have a date in mind', so usually fairly quickly you'll know what their, what their motivation is came from, but yeah, yeah.

In: Do you use the same approach for each case, do you think?

P_c: No. I would... You would tend to mould your response as to how their, what their behaviour is. Yeah, you know, I'm trying to think of specific examples, like I mean it's a majority of people have made up their mind in wanting to, you know, so it's quite, well, yes, this is where they're wanting to quit, this, if they got this, you know, if they've got one cigarette left kind of thing, they're quite determined, because there's very few people that come in and not wanting to quit. You would maybe, kind of, just say to them, you know, 'motivation is a key to success here, so you need to, if you're not too sure then', you know, 'we can set you up, but if you're not all that sure about quitting, is it the right time for you', that kind of thing.

In: Do you think the client.. the client remembers all the information you give them?

P_c: Usually. Yeah. Given the area where in it's, you know, kind of, working class to lower income status states, so, you know, there's maybe some edu..., you know, educational issues there that they can't absorb information maybe as readily as one of the more affluent areas in Edinburgh. But, yeah, we would, we try to keep things as simple as we can, so you know, again, it's, you know, you mould your response to whoever you're seeing, retention wise, I would, I mean, yeah, it's not many times when they have to come back to us and ask again where, you know, we get quite a lot of information, but, again, mould it to..

In: Do they get any leaflets or booklets?

P_c: No, because I don't think we actually have any, so maybe, some sort of knowledge away, in order, leaflets and things, like that would be an idea, but no, we tend to just give, you know, advice to come in whenever you want and just give, give the advice.

In: Do people with unsuccessful quit attempts come back?

P_c: Yes.

In: And do you change your approach then or is it..?

P_c: Yeah. Well. Not as much the approach, just like, what you can prescribe kind of thing, so asking why they thought it's been a failure, is a pretty good question to ask and see what you can do, what you can prescribe differently to see if that will help and then just say, you know, obviously 'we're

here, you can come in any time if you're struggling'. We've had a couple of kind of failed attempts. There's, the problem is the, you know, our guidelines as I say that you can only have it every 6 months, OK, in pharmacy, so you know, they, they come in, they get their first week, they try it and something happens, they go away, they come back in about 2 months later and we can't actually redo it, so we have to refer them on to other services, so it's just a bit strange why you can't do it again, when, sooner than 6 months, but.

In: So they have to wait for a period of time before they can..?

P_c: From to get from us.

In: Yeah.

P_c: Yeah. But, obviously they can go to the GP, they can go to the smoking cessation clinics, but it just seems a bit strange why there's that 6 month kind of.

In: Let's go on to who delivers the service and what training everybody has. Who's delivering the smoking cessation service?

P_c: Myself plus pre-reg pharmacist do the initial consultations and then there is ACT who does the, well, any of us can do the reviews, the 4 week reviews. She's went to smoking cessation...[interruption] Out of hour services I try to play the part. They, the CPD courses on a, so everyone went to the property and I think it's McNeil offered quite a few services, so Lloyds have kind of purposely had a few evening sessions.

In: Have you accessed any of support offered by, by Giovanna DiTano, do you know...?

P_c: Yeah. Giovannas, it's her that's, you know, because obviously she's a Lloyds pharmacist, so she's, it's her that sets up all these things so yeah. xxx (pharmacist or pharmacist technician) has been to quite a lot of them.

In: Yeah, OK. And you mentioned the sponsored training as well.

P_c: Mm.

In: Yeah. Have you contacted Giovanna for specific training or help?

P_c: No, because she has done fairly regular meetings for Lloyds, so, you know, we've not had to really, it's been, you know, every 6 months or so, there's one sort of evening program in, you know, quite often there's a few people that will go to it ... But, xxx (pharmacist or pharmacist technician) has been to the most so and she's the highest qualified, so that's why, I feel quite confidently, she can do the checks up.

In: Yeah, OK. Does the client see the same staff member every time they visit?

P_c: No. Most times it would probably be, probably the pre-reg pharmacist that they see, but it depends who's, basically, who's free, you know, who's got the least time of work right in from them, so it can be different members of staff that they see.

In: Do you think this could be important?

P_c: Yeah. Obviously, you know if they see the same person they'd be able to chat a bit freely to them, so we do try as much as we can, but again, there is a time restraint, you know, we, you know, people have times off, you know, there's various, other reasons so it can't be the same person every time.

In: Do you use the support tracker sheet?

P_c: No.

In: No.

P_c: No. They don't get printed.. (laugh).

In: What do you think is the importance of recruiting patients to this service in relation to the other services that the pharmacy delivers?

P_c: What the smoking service or compared to, in relation..?

In: Yeah, compared to, I don't know if you're doing flu jabs or...

P_c: Yeah, yeah. Well, I mean they are all important, so this one obviously has a quite large impact on NHS resources, so the less people smoke, the better off the NHS is, so obviously it's quite an important one to try and you know as much as you can. I would say that this is probably the most important reason.

In: Yeah, I just wanted to see if you have a special, especially strong commitment to this stop smoking service.

P_c: Regarding the services, I mean, we don't do flu jabs, so you know, gives us a lot more time, so we do quite a lot of NRT patients, but, yeah, there's no specific reason, we wouldn't highlight that as what we must do, that, and let other services slide, but we realise it's an important one, so.

In: Do you have any company or personal targets to achieve?

P_c: No. Obviously just as much as you can do because there's money, but there's no set target.

In: How do you feel when a clients, when a client quits?

P_c: Quite good.

In: Yeah, you do?

P_c: Yeah, I mean success rates, we don't really, we don't see all the success, because, you know, quite often they'll just not come back and then, if that's because they've failed or because they've quit

and are successful. Sometimes we don't know. So it would be nice if we could find out, because I think the forms go to NHS, their office and somebody there is suppose to chase up success rates, maybe an idea to get that sent back to us to see how am I, percentage wise, how many was actually a success... The data they've collected.

In: Is the success celebrated with either the client or you mentioned that...?

P_c: Yeah, well, you know, we'll, we'll say 'good, well done' kind of thing, you know, we'll have a nice conversation about it.

In: But within the rest of the pharmacy team, do you celebrate?

P_c: Well. We'll, you know, someone will come through and go oh that's them, they've quit and we will go 'oh, that's very good' and then we'll move on to the next 20 odd thousand others, you know (laugh).

In: Yeah, but do you think this would encourage the staff to deliver the service better?

P_c: Ah.. Possibly. Yeah, you know, everyone gets a good feeling from it, yeah. It's not something I've ever thought of doing before, you know, so we could do, yeah.

In: What's the most difficult barrier to overcome when delivering the smoking cessation service?

P_c: Probably the paperwork. You know, the forms that you have to fax over within... after the 4 weeks. That can be a bit, you know, I think it sometimes can be forgotten to do, so then you get a bundle of them, so the paperwork is a bit, kind of, a bit time consuming I would say, it might be a better way to do it whether that's an online system, you know, quickly filling out their details and there we go, that might be a better, you know, I, you know it's a some sort of database that you just kind of log in, you know, same as CMS, log in to it, get patients details up, that's your 4 week review, click the button as opposed to manually fax things which takes up a lot of time, but apart from that, you know, I think it's a... It's more of a basic service compared to what you can get from, you know, smoking cessation clinics where it's a lot in depth, because that's all they have to do, you know. The only other thing I have is the smokalisors. We're suppose to be..

In: What do you...?

P_c: You know the, the machines that check their carbon monoxide level. Ours is suddenly stopped working, so who do we go to sort that out, I don't know. I'm assuming NHS stores or some sort, but yeah.

In: How often do you use them?

P_c: It's suppose, well, every, you know, every time you have a consultation, so you know, we do, I'd say about 4 to 10 consultations at least a month, so every time you're supposed to use that, you're

suppose to calibrate it yourself, but we don't actually have the material to calibrate it with even though we've ordered it so yeah that's a bit of a issue there. Hit me.

In: Back to the...

P_c: Yeah, back to the point (laugh).

In: You have mentioned time as one, as one barrier as well.

P_c: Yeah.

In: Has there been any language problems with the client?

P_c: Not often.

In: No. And you wouldn't say lack of confidence or knowledge is a barrier?

P_c: No.

In: How about attitudes and beliefs..?

P_c: No.

In: Do you have any suggestions on how to improve the smoking cessation service?

P_c: So like not a paper data sheet set, something online would be better. You know, leaflets, you know, just a bit more kind of, you know, the same website, you know, the same site you could have, well, I mean leaflets and order that, I mean, we've got the, we've got like a few things, you know, like that there which tells how many smoke kind of thing but, yeah, so, just basically all in one kind of site would be ideal I would say.

In: Is there anything else you want to say about the smoking cessation service, that I haven't asked you?

P_c: Think that's quite, quite enough.

In: Thank you very much.

Interview with Pharmacist D**Pharmacist (P_d)****Interviewer (In)****In: So, lets start off with the location of the client consultations. Is it here (private room).**

P_d: Yeah, in one of the consultation rooms. Yeah.

In: So not in the..

P_d: No, not out in the shop. We have them in a private consultation room.

In: Do you notice anything about the noise levels?

P_d: It's quite. I mean it's not completely sound proof, but you know, it's better to take into, into, into the consultation room, because there's less, I mean it's a very busy pharmacy. So there's less hussle and bussle if we take them in here obviously, it's quite, some people find it a quite private thing as well to talk about, so yeah for noise, for noise purposes it's better to do it that way.

In: So none of the clients have ever complained about the noise level?

P_d: No, no.

In: Recruiting and approaching clients, do they approach you or do you approach them?

P_d: We tend to let them ask about it themselves, you know, we have got a sign in the window to say that we do it, so we do get quite a few people asking about it, so at the time we'll go out and speak to them and explain a bit about how it works and if they want to make an appointment we'll do that then and ask them to come back.

In: If you approach them, how do you raise the issue of smoking?

P_d: It's not something that we tend to do, we don't really tend to go out and ask anybody if they smoke, I mean it's, if, unless we're having a consultation with someone about something else and they bring up the fact that they're a smoker then we might mention, you know, it's something you want to think about, would you do a smoking cessation group here if you want to, if you want to come in, so yeah, if they, if they bring it up themselves and say that they are a smoker and maybe thinking about stopping we would then give them the information but it's not something we tend to, we don't tend to go say to them, you know, 'do you smoke?'.

In: So if you get a prescription with a chronic medication for a smoking related illness, you wouldn't actively recruit that patient?

P_d: No. Unless. No, we do speak to people about CMS (Chronic medication Scheme), so again that's something that might come up there and it's definitely something we would mention within the CMS consultation that, that they can come to us for that, but if it was just an acute prescription and they

were coming in for something, it's not something we would, personally we would tend to do and we wouldn't really come out and say 'do you smoke?' and, and 'we can help you' and things like that, because... I think some people might feel as if that's, you know, not quite appropriate for them to be going into pharmacy in, in bombarding straight away with 'oh, you're obviously a smoker, do you want to come to our class', we would rather have a conversation with them about it and say 'if you need help, then come us'.

In: What happens before the consultation takes place? Is it like a brief intervention first?

P_d: Yeah. I mean usually they'll ask the girls on the counter about, you know, how, how it works or something like that and sometimes the, the front shop staff will explain to them a bit about the service and then say to them 'do you want to make an appointment?', because it is a busy pharmacy, we don't always have time to sit down with them straight away, so we will tell them to come back either later that day or, you know, make an initial appointment with them at, at the time.

In: So... Other members of staff can make an appointment?

P_d: Yeah, or they'll usually mention to us to come out and make the appointment, because we know who we're seeing and we know how to manage, how we need to manage our time, so they'll basically speak to them about the service and explain what they can and then ask us to come out and speak to them a bit further if they want to know more.

In: So it's not usual to take them there and then?

P_d: No, we do, we do try, I mean if we're quiet and someone is desp, you know, desperate and they're very keen to start right then, we will try, especially if they're not very local, don't want to send them away and tell them to come back again, so we will try, but as I said, it's a bit busy and there's no specific times in here where it's, where it's seems to be quiet, so if we can ask them to come back at a more suitable time then we will do that, but again if it's more suitable for them to see them at that time, we, we try to do that.

In: Do you think your process for recruiting clients to the service could be improved?

P_d: Possibly, I mean, ideally it would be great to sit down with them at the time, you know, as soon as they're asking about it, sit down with them, get their information and, and their background and set a quit date then that would probably be the ideal situation. I mean the way it works, it does seem to work quite well, we do get the odd person not turning up for the first appointment in which case, you know, sitting down with them in the first place would help probably, but, I think the way it works, you know, it does work quite work well, but as I said ideally it probably better that we would see them straight away, it just happen, the time to do it and not having to ask them to come back again, because obviously it can be, you know, they've got their own life as well and things like that, so... I think it

does work quite well, but maybe could be improved slightly if we could see them straight away... in an ideal world.

In: I want to ask you about types of smoking clients you get. Could you maybe describe your clients?

P_d: We get a real mixture, we've had quite a few young patients quite recently and we don't get, tend to get, you know, very elderly people so not usually over kind of maybe 65ish. I would say it's usually around, you know, between 40-65 if I could say that, but I mean they usually have got, you know, health conditions as well, most of them do say that it is for their health that they want to quit so there kind of getting to that stage where it is starting to take their toll on their body and, so mostly that sort of age group, but as I say recently we have had quite a few young patients as well.

In: Is that people on medication or with a medical condition?

P_d: The young patients?

In: No. The 40-65.

P_d: Usually, I mean a lot of them are on medication, especially, you know, inhalers and things like that and they find that their breathing is starting to effect them quite a lot. ... Other people can be on absolutely no medication at all and just feel it is time to stop before anything does happen, but yeah, a lot of them are and have been advised by doctors or so to stop smoking so they'll come to us for help.

In: Some people have already made up their mind and are pretty motivated to stop smoking, but some people aren't that motivated. What clients do you mostly get?

P_d: I mean most people, because they're approaching us they're quite motivated anyway to do it. Some people, it's more difficult to get them to see, you know, it's about stopping rather than cutting down, so, but apart from that, I think most of them are quite motivated at least for the first few weeks and you know, you do, they do hit us, hit after a few weeks, they seem to hit a bit of a wall and think 'can I do this?', but I mean a lot of them are very motivated from the start I would say, because as I say they're asking us about it and they actually want to come where as if, I think if we were going out and approaching people they might feel that it's not really their choice to stop, because we're, we're saying to them, you know, you maybe should, but yeah I think, I think most of them are motivated when we sit down with them and they have an idea of what sort of things that they want to use as well to help them stop.

In: But do you think you would use the same approach for each case?

P_d: No. I think it's. You can judge quite quickly how, how someone is going to cope with, with stopping. Especially asking them, you know, have they stopped before and how have they managed to do that so someone that have managed to stop before for a significantly length of time, I think you'd deal differently with them than someone who's, you know, it's their first time stopping and they've

been smoking 40 a day for 20 years, it's, you know, you're going to have to treat them quite differently, because they have different needs as well as, you know, NRT needs didn't support as well, and they need, I think they need a lot more support and more encouragement if it's, if it's their first time stopping.

In: Do you think the client remembers all the information you give them?

P_d: I don't, I don't think we really overload them with information; we tend to just give them the kind of basics and you know, any sort of literature that's going to help them in, that they can read it home and refer to things like that...

In: So you have leaflets and booklets?

P_d: Yeah. Yes. Just about, just to give the patient a way to have a look at things to help them when they have cravings and things like that. We have information on like the spray and things like that we can just give them, because sometimes I think it's a bit difficult showing them how to use things and that they might forget that when they get home, so it's quite useful to have little bits of information to give them away to show them how to use the NRT products and things like that, but as I say I don't think we completely overload them with information, I think it's more about just getting them set up and explaining to them that, you know, it is trial and error at first, trying to find out what is going to work for them and that their open with us when they come back as well to tell us how, how they have got on, if they've found anything more difficult than, than they thought.

In: So you have clients that have tried to stop on multiple occasions?

P_d: Yes. We've had, we've had a few recently that have come back to us, maybe after 6 months or so and just feeling disappointed with themselves, because they've managed to do so well and they've, they've come back, but I think that's a good thing that they chosen to come back to us, because they know that they can do it here. And that they rather come here than, than go somewhere else as well, so it obviously worked for them.

In: Do you think you change your approach then when they come back?

P_d: Yeah. I mean I think it's more about finding out what made them go back to smoking at that point and anything else that they might want to try differently this time, I mean some, I've got a lady at the moment actually who, she has stopped at the beginning of this year and only started smoking about a month or two ago but decided she didn't want to smoke so she has come back to us and she's doing really well, but it's about again, it's about just try to find out what caused her to start smoking again and she really doesn't want to be smoking, but so it's trying to get to the bottom of that and so it's slightly different dealing with someone like that who's stopped quite recently, because they still are motivated and they definitely don't want to go back to smoking, so I think it's a bit different.

In: So they have to wait for a period of time before they can enter the service again?

P_d: I mean it. I, I think we'd always kind of had in our heads 6 monthish, you know, just to make sure that they are ready to stop again, but if someone wants to come back to us within 6 months, I don't think I would turn them away and say 'you know you have to keep smoking for another 2 or 3 months before we can see you again', you know, if we feel they are ready to stop, I definitely, I definitely wouldn't turn them away and anyway say you know 'come back to us in 3 months or so'. I think it's important if they're ready and their motivated again to do it, sitting down and chatting to them and finding out, you know, 'do you definitely want to do it again?' and seeing how they get on is important. I don't think we can send them away at that point.

In: OK. Let's go on to who delivers the service and what training everybody has. Who is delivering the stop smoking service?

P_d: It's the pharmacists mainly. I know a lot of places that the dispensers do it, but here it's, it's the, the pharmacists that sit down with them in the initial consultation, and we follow it up every week as well, so we're, we're the ones that, that deals with it.

In: And how are you trained?

P_d: Just from local run training events so through NHS Lothian and, and things like that.

In: So you know about Giovanna and her events?

P_d: Yeah.

In: You've gone to them?

P_d: Yeah, yeah.

In: Yeah, OK. Have you been to any product sponsored training?

P_d: I haven't, no, I mean I know they are run and we do get the letters here, but I haven't personally been to those. I know another pharmacist has that works here.

In: Have you ever contacted Giovanna for specific, specific help?

P_d: Yes, just, just to do with, you know if we've had young clients come in that, that want, that want to stop, because we weren't 100 percent sure what, what age that we can do it for so things like that and when we've had patients come back within 6 months, I think we've phoned up before as well to say like 'Can we do this..?' and things like that, but yeah.

In: Does the client see the same staff member every time?

P_d: Usually, yes, unless, unless one of us are off on holiday or, or you know something like that, but we usually try and tend to see the same patient, because I think if they get to know us in the first consultation, it's maybe a little bit easier for them to talk to us and be more honest with us, if they see

the same person you get to know the patient as well, so we do like to see the same person every week, but if not I mean the patient is usually fine about seeing someone else as well.

In: I have to go a bit back. Does the, do the other pharmacists, do they have the same training as you?

P_d: Yes. Yeah.

In: Yeah, OK. Do you use the support tracker sheets?

P_d: Yes we do, yeah.

In: What do you think is the importance of recruiting patients to this service in relation to other services the pharmacy delivers?

P_d: I mean obviously this has a rolling effect with, with other things as well, so as I say, if we're speaking to people about either, you know, minor ailments or if they've had a cough or chronic cough or something like that then it's something that we can then take forward and say, you know, 'we do the smoking cessation', CMS as well, if they have long term medicate, medical problems then we can suggest to them, you know, if you are a smoker this would help you as well, so I mean offering this service helps us to link in to other things as well as hopefully improving the patients, you know, long-term life and long-term health as well, so, they, I think they all work together in a way these kind of services, but the smoking is a very important one to offer here.

In: Do you feel a strong commitment to this service?

P_d: Yeah. Yeah, I do. Just for the reasons of, of, I've said really it does make a big difference to people and when, when you see how, how good they feel about themselves when they've done the full 12 weeks, you know, it's, it's good to offer that service I think.

In: Do you have any company or personal targets to achieve?

P_d: No, not really, no, but, I mean we don't have any, any targets. As I said it's just a case of when people ask and when they are ready to do it. I mean we don't have targets so that we have to come out and push and say 'no, we need to get this many patients this month', it's more a case of just letting the patients come to us and, and see how much we can help them really.

In: And you mentioned how you felt when a client quits?

P_d: Yes.

In: Like a professional satisfaction?

P_d: Yeah, definitely. I, I mean I think it's more from, from their satisfaction as well, you know, the fact that they feel good about themselves, they've managed to do it, because in the beginning they do usually doubt themselves and think 'I'm not sure if I can do it, it's going to be really hard' and I think

once they've really got their first couple of weeks out of the way and think 'right it's okay, I can do it now', especially the ones who get to week 12 and, and that's, you know, they've completely finished, yeah, I think, it is kind of feel good thing for yourself, but also to see how much of a difference it's made to them and hopefully they'll continue to make to them, it's good to see.

In: Is the success celebrated with either the client or within the pharmacy team?

P_d: I mean a part from kind of vocal praise really, really to the client, that's, that's really, that's really it and you know we will say to them, because most of them are patients here so we will see them quite often as well, we usually, you know, if we would see them coming in the shop, we will ask them 'how are you getting on?' and most of the time hopefully they're still stopped smoking and, and you know give them a little bit more praise again and say 'how are you feeling', but I mean equally if they come back and say 'I've started smoking again', we say to them 'well, any time you're ready come back to us, so I mean there's not really any sort of celebration pharmacy wise, I would say, I mean there's no as I again, again there's no sort of target, so there's nothing, no targets to meet, but at the time we'll give the patient praise.

In: Yeah, but do you think doing this would maybe encourage the staff to deliver the service maybe better?

P_d: Yeah, yeah definitely. I, I, it's a completely different thing when you see someone right the way through the 12 weeks as to seeing someone for maybe 3 weeks and never seeing them again, so yeah definitely does encourage you and you can take experiences from, from those 12 weeks that you've spent with one patient, you know, how have they've coped with it and maybe share some of that with other patients as well to try and encourage them.

In: What's the most difficult barrier to overcome when delivering the smoking cessation service?

P_d: I think... In this pharmacy in particular probably time. I mean it is not alwa... As I say it's, it's... There's never a time where we can say we can definitely make an appointment here and we will have time to do it, I mean we always endeavor to make, to, to see people when we make an appointment with them and, but again it, it is just time, you know, getting the time to sit down for the first half hour or, you know, for the first consultation and making a time that's convenient for the patient as well to come back to us so that it fits in with, with our schedule as well. It's probably the one thing that, that is more difficult than anything else.

In: So you don't think lack of confidence or knowledge is, could be a barrier?

P_d: No. I mean think we're, we're all quite aware of, of you know, we all have our own little thing we like to speak to them about and we all have our own experiences with different patients so I think knowledge wise, you know, it's good to always keep your knowledge updated and to go more training

events and things like that, but I think at this moment we're all quite confident in delivering the service.

In: Have there been any language barriers with the client?

P_d: We have had some foreign patients before and it can be difficult, but it's not, you know, they wouldn't come in themselves anyway if they can't speak any English, we've always either had someone with them who could speak a bit better English, but that again that doesn't really tend to be too much of a problem, it's just more a case of breaking things down a little bit easier, trying to find out if they understand everything that you've said so just going over things a little bit more than you usually would maybe...

In: Do you have any suggestions on how to improve the stop smoking service?

P_d: No, no, I think, I think it does work quite well. I wouldn't say there's anything in particular that, that we think, you know, needs to be any better, the sheet definitely helps, you know, for filling all the information that gives you a pathway to start and I think, but I think everything else works quite well, so I wouldn't say anything springs to mind that needs to change.

In: OK. Thank you very much

Interview with Pharmacist E

Pharmacist (P_e)

Interviewer (In)

In: Let's start off with the location of the consultations. Do you usually have it here (behind the dispensing counter)

P_e: No. Front (in the shop)

In: Front. OK. What do you think about the privacy, is it..

P_e: I've got consultations room and if they need more privacy I could take them there, but most of them I've had no issues with, because most of the consultation takes place or contact with patients takes place on that side (in the corner of the shop), so that side is more private, right, but I've not had any issues of, you know, if they feel, you know, they need more privacy and then, but that's no problem with the idea of clients going into the consultation room, but I've had no issues with that at the moment.

In: How do you recruit clients to the service? Do they approach you or do you approach them?

P_e: Through... Some patients on CMS or people that I know have a problem with smoking I would approach, but majority approach, approach me and say 'I want to stop smoking'

In: And how do you. If they approach, if you approach them how do you raise the issue of smoking?

P_e: It could come as a result of, you know, coughing, they can come in for cough bottles, it can come as a result of, you know, I'm doing their prescriptions and you know, could I, because it's a small community you can, I kind of know or they've mentioned in the past and, but they haven't done anything about it so it's prompting to say 'listen, when are you going to do something about that', you know.

In: So if you get prescription with, like, medication for a smoking related illness, you would try to recruit that person?

P_e: Especially if they are asthmatic or COPD. I have some patients that have COPD and they've tried, but they've, you know, often, you know, they've not, they've missed coming for the program and they come in and go (gasping for breath) breathless and I go 'listen, going to start again, try?' and then.

In: What happens before the consultation takes place?

P_e: If they've been on the service before I don't need to give them a booklet again on how to stop, how to stop smoking and stay stopped, but if it's a first time then I will give them the booklet to have a read and consider come back to me when they're ready.

In: So. But. Do you do at first like a brief intervention and talk about smoking in general before you set up an appointment?

P_e: I'm thinking of a typical scenario. Someone comes in who's, you know, COPD, I know they smoke, they have a history of smoking, I explain how stopping smoking, how it effects, you know, the benefits to their COPD, not that it stops, you know, but it delays the progression, you know, of the, of the disease and after explaining that and that, it then makes them breath better, they can go for exercises and other things like that, I can then give them the booklet to read so yeah I talk about and I talk about the products that are available and that they can use, get them to come to the...
[Interruption]

In: So you can see them there and then if they come to you?

P_e: Oh yeah, definitely.

In: So they don't have to make an appointment?

P_e: Oh no. No, no, no. (laugh)

In: OK. Can the other members of staff see them and set up?

P_e: Yes. Some, I still need to, because I've got new members of staff, I still need to get trained, but majority, yeah, they can take a woman of that level, they need to give them the booklet first and stuff like that, yeah

In: Do you think your process for recruiting clients to the service could be improved?

P_e: Oh definitely. Everything can be improved (laugh)

In: How do you think it could be improved?

[Interruption]

P_e: Where were we at?

In: Recruiting clients to the service and how it could be improved?

P_e: How it could be improved... (Exhales to think over the question). Through majorly I can, I, in a way we could be improved is through when patients bring prescriptions from the surgery, right, you find that, what I've discovered is some do not know that there's a 12 week program and once they get the first 4 weeks and they feel fine, they don't see through and repeat, kind of go back to the doctors and co... I think it is an inconvenience so they forget all the things, can't be bothered so from that point I can intervene and recruit them into the service, yeah. So that's from where it can be improved, yeah.

In: I want to ask you about the types of smoking clients you get. Can you describe your, your clients?

P_e: Can I describe, in what way?

In: If they're young, old, pregnant, if they have a medical condition maybe or.

P_e: OK. OK. Most of my clients are young. I've had some old age pensioners, but majority are young, majority are working, not pregnant, if they are pregnant I send them to the, to the clinic in xxx, yeah, I refer them, but majority are young, a few old age pensioners, but majority are young.

In: Some people have already made up their mind and are pretty motivated to stop smoking, but some people aren't that motivated. Which clients do you mostly get?

P_e: Recently, half and half, because people come and go, you know, 'I'm ready to stop right now, I've done it before, I want something today' and then you just kind of say 'listen, give it a few days to have a good think about it' and some that I think are not serious, I find that within the first few weeks they've, they've stopped smoking, they've quit totally and they see the 12 weeks through, but some you think 'oh, they've come in desperate, they've made up their mind', they fall by the wayside, so you can't really judge, I say 50-50.

In: Yeah. Do you use the same approach for each case?

P_e: Yeah. Same approach. Definitely.

In: Do you think... that's a good thing to use the same approach or... (Interviewer struggling to find the right words)?

P_e: You know, because... I understand what you are saying, but all I'm saying is how do I know... (laugh). You can only give them the benefit of the doubt that they're serious, they've said they're read... the mind is made up like they've said and you give them the same opportunities so you will approach them in the same way, but along the line, a few times always tells who is, who is really or who gets stressed, something happens and that every excuse, they're still smoking.

In: Do you think the client remembers all the information you give them?

P_e: No. I don't think so, but it's reinforced when they come back and you ask how they're doing and go...

In: You mentioned that you gave them the booklets?

P_e: Yes.

In: Do you think it should be more, like leaflets that you should give them?

P_e: Naa.

In: Are there any of your clients that have tried to stop on multiple occasions?

P_e: Oh yes. (laugh)

In: Yeah. Have they come back?

P_e: Yes. And that's why they are multiple because they keep coming back.

In: Do you change your approach then when they come back?

P_e: Oh definitely.

In: And how do you change it, do you think?

P_e: In a way that... First of all I say to them if, if, you know, failure is when you give up totally, but if you fall or you smoke, that is not the end of it, you can always come back and try again, so, you know, but I don't expect you to smoke, but if it happens that's not the end of the world, come back and you can start again, because most of the people that have successfully quit have failed a few times, you know, smoked a few times and quit the program a few times, but they kept coming back so when they come back, say the second time, it's like OK, 'you are really ready now?' and they go 'I'm ready' and I'm not saying that because it's like now you should be able to do it, but I've had someone leave it for about 3-4 times and how many weeks and I had to, really had to say to her 'listen, I hope you're not come to waste my time' (laugh). And it's like 'oh, I'm so sorry, I don't want to waste your time, I'm busy, you know, this has happened that has happened, but I'm serious this time', but no, she's still hasn't, she still quit again, so... (laugh) So yeah, I do change my approach, but...

In: Do they have to wait for a period of time before that can enter?

P_e: Before it used to be, I say it's 6 months or, but now I've been told, you know

In: It depends on the motivation of the?

P_e: Mm. Yeah. [Interruption]

In: Who is delivering the smoking cessation service here?

P_e: Me, mostly...

In: So not the support staff?

P_e: They do, they do support me, but yeah I do the most of the delivering

In: And how are you trained?

P_e: Oooh. I've been trained many times over, in Glasgow, been trained, gone for meetings in xxx, I think last year.

In: Do you know Giovanna?

P_e: Yes.

In: And have you gone to her nights?

P_e: Yes.

In: Yeah. OK. Have you been to any product sponsored training, like McNeils,

P_e: Hm.

In: McNeils?

P_e: Not McNeils, but I've been to, I think Pfizer sponsored, that's for Champix, but in this health board I'm not registered to prescription, I was in the last health board.

In: Does the client see the same staff member every time they visit?

P_e: No.

In: Do you think this could be important?

P_e: If. Because they're trained, shouldn't make a difference, except the patient are fussy but it shouldn't make a difference.

In: And do you use the support tracker sheet?

P_e: Yes.

In: What do you think is the importance of recruiting patients to this service in relations to other services the pharmacy delivers?

P_e: I need to understand that question.

In: Yeah, because, I don't know if you have flu jab services and

P_e: We used to, I did one last year, aha.

In: Minor ailments. Do you feel a strong commitment in delivering the smoking cessation service?

P_e: Yes. I do. As a colleague it's important. I, I think I have more patients on minor ailments and smoking is next before flu jabs where you find that it's, most of the time when they're coming to you there's a need and just as a pharmacist you want to meet that need, you want to as a health care professional just help them get, you know, maintain better health, so yeah, it's very important, I'm committed to that.

In: And do you have any company or personal targets to achieve?

P_e: Not at the moment. No. I'd probably get there, but not at the moment.

In: How do you feel when a, when a client quits?

P_e: Oh. I feel very happy. Because they come and say... and then they recommend other people, because I've had people recommend their colleagues at work, recommend their friends, they say 'oh. Go there. ', yeah, yeah, they're very helpful, they are looking, yeah, I quit smoking using them' and yeah. I think a lot of come through recommendation.

In: So is the success celebrated with either the client or the rest of the pharmacy team?

P_e: Oh with the client.

In: And how is it celebrated?

P_e: Oh 'well done', yeah, 'well done', sometimes a pat on the back and sometimes a hand shake and they have, we've been used unofficial (laugh), the client, I thought what am I going to do, because oh she used to smoke like 80 or something and today she got one 'oh... she's free' I said 'the driver should carry her as, has she ever had a man carry her and swirl her around, oh it's made her world, she's never been the same'. [Interruption]

In: What's the most difficult barrier to, to overcome when delivering the service, do you think?

P_e: The most difficult..?

In: Barrier.

P_e: Barrier to overcome in delivering the service...

In: Is it time or?

P_e: Doesn't take much time, no, it's a collating the prescriptions at the end of the day and sending the, the paperwork, I think that's the most tormenting bit of it. Make sure I get paid for what I do.

In: So not lack of confidence or knowledge?

P_e: Oh no.

In: No. Not noise levels [interruption].

P_e: What?

In: Noise levels.

P_e: Noi?

In: Noise.

P_e: Noise levels.

In: Yeah, that's not a barrier?

P_e: Oh no. No, no.

In: Has there been, has there been any language barriers with the client?

P_e: Once. A polish gentleman who didn't really speak English and we had a bit of a challenge communicating but we got there in the end there. [Interruption]

In: Do you have any suggestions on how to improve the smoking cessation service?

P_e: No. No. Only, the only, the only way I feel it could benefit the patients is for pharmacists to be able to prescribe Champix in xxx. It will be beneficial.

In: Is there anything else you want to say about the service, that I haven't asked?

P_e: No.

In: Thank you very much.

P_e: OK, thank you!

Interview with Pharmacist F**Pharmacist Technician (P_f)****Interviewer (In)**

In: So lets start off with the location of the client consultations. Is it here (private room)?

P_f: Exactly here.

In: So do you always undertake the consultations here?

P_f: Yes. Always.

In: And you don't notice anything about the noise levels?

P_f: Well, what do you mean, noise, background noise?

In: Yeah. The client hasn't complained about noise levels?

P_f: No, definitely not. Well, you can hear for yourself. You can hear that there are some things going on, but no, that's noise. That's the base of the standard, I would say.

In: How do you recruit clients to the service?

P_f: Well, we have advertisement just on the main door and often they are referred from the local surgery where they've been. They, they're not, the service is not advertised on the surgery, but the receptionist have been told directly from us, we collect on a daily basis prescriptions from them and we've offered the service so, but because apparently from NHS Lothian, the GP can't prescribe any nicotine replacement products anymore. We've offered the service on an interview basis one-to-one basis, so that's what we are doing.

In: Do the clients often approach you?

P_f: Yeah. Well, not necessarily me in person, but a person involved in the pharmacy premise, yes, definitely, everyone has been trained to introduce the service, what it involves and how long it's going to last, cost and everything like that.

In: Do they have to set up an appointment first or can you take them there and then?

P_f: Well, we can take it in first place, a, a, the initial appointment if we have the trained staff available which generally means from 9 till half 6, no half 6, 6, from 9 to 6 on a week days, not on a Saturday, not on a first hour opening from 8 till 9 and not from 6 till 7. The staff involved that is working on the time in the pharmacy is not been trained to that, beside it's the end of the day, we prefer to carry on with our duties rather than, yeah, been, you know, caught behind with this sort of service, if it's an emergency we can do it rather myself or, but seldomly happens, we always ask to stick to the time range, 9 till 6 week days.

In: OK. So the support staff they can also see the clients?

P_f: Yeah. You mean on first place or generally for the appointment?

In: Yeah generally?

P_f: Generally I tend to do the first appointment myself and then they tend to do the up-to-date although the checking technician also do the first appointment, the initial appointment ourselves.

In: If you approach the client and want to recruit him, how do you

P_f: offer the service?

In: Yeah.

P_f: What I propose. Well, generally it happens because it's still quite a lot of folks that are asking for nicotine replacement products to be purchased over the counter, at that option, at that moment, I, I offer the opportunity, the option to sign up with the smoking cessation clinic with us, I tell them there is a one-to-one interviews stated on a weekly basis, possibly on the same day of each week and it will last 3 months, it's cost-free, they can have, they can try all the nicotine replacement products they want but generally I'll explain the procedure, tend to give nicotine replacement a, a patch to, you know, to release the nicotine slowly to cut the cravings and some other product they would prefer to cut the urge to smoke. Also suggest that whatever, we have it available.

In: If you get a prescription with chronic medication for a smoking related illness, would you, act, actively recruit that..?

P_f: Well, chronic medication prescription, I haven't seen.

In: Like COPD maybe

P_f: Alright, well, generally these patients have already been tagged from the GP and I'm sure they've already sign a list once or twice on classes offered from the local surgery, this would generally happen. For the future, we might offer, but generally COPD's are already tried, have already tried with the Nicotine replacement products and they have either quit or the doctors are not happy to prescribe them inhalers like salbutamol, immediate relief inhalers, because they have not trying to, they need to show they've done an effort to sign a smoking cessation clinic either other surgery or other, prem, other pharmacy, do you know what I mean. So, if I see a prescription we don't tend to offer the service to that, no. The answer is no.

In: Do you think your process for recruiting clients to the service could be improved?

P_f: I think it could be advertised a bit more. Frankly, it is a bit time consuming as a service and currently we have on average 5 or 6 patient at least on month 1, now it's the lowest of the year. This is December and we have 4 currently, but, but generally we expect to have quite a jump up to 6-10, last year was 13 and obviously gradually just only I would say 30 percent carry on to month 2 and 10

percent would go forward to month 3. I'm sorry to stress that it's not because their quitting smoking, just because they just cannot cope without cigarettes, so there's another option that you need to consider is now came into force which is the electronic cigarettes which cannot be prescribed under the NHS, because it's not been scientifically proved as to be efficient, but more and more people are buying it, thinking they can cope through their willpower and this electronic substitute, they can go through it, so we are selling loads of that and that's why we've had a decrease in patient using this sort of nicotine replacement standard products, patches and stuff, patches don't seem to be particularly appreciated from the folks. So can be advertised absolutely, but also if you really want to give it a kick, give it an improvement, you also have to introduce these new technologies whether they're efficient or not is not up to me to distinguish, but people are interested in them so they don't see the point of having patches and mints, lozenges, loads of just, one gives a hiccup, one gives a skin irritation, one comes off when they go for a shower when you can have the fantastic electronic cigarette while at the cinema watching a movie so if you can, if they can enlarge, if it's been scientifically proved that they are efficient you help to tackle the cravings or the nicotine dependency, yeah, absolutely.

In: I want to ask you about the types of smoking clients you get. Could you describe clients from this list (showing the different categories)

Pf: Yeah, absolutely. Definitely (pointing at socio-economically deprived groups). Should I give a priority among them or?

In: You can just give them a percentage.

Pf: Right. I would say pregnant women and people on medication or who have a medical condition are pretty much equivalent. Slightly more request from young people, let's say 10 percent, 20 percent, very many are socio-economically deprived groups obviously, I would say, maybe 70 percent, 10, 10 % (pregnant women, people on medication/who have a medical condition), 20 or that, 20-30% (young people).

In: Some people have already made up their mind and are pretty motivated to stop smoking, some people haven't that, don't have that motivation. What clients do you mostly get?

Pf: Mostly I would say, they've, they are not motivated yet, they find, which is unusual, but they tend to find quite helpful the fact they need to attend on a weekly basis in here and that they get smokingalised (referring to carbon monoxide monitors), they like to see this traffic light going down and yes, that's apparently the main motivator factor and the fact that it is for free, all the folders are given for free so these are the motivation that we give to them and they are quite, well, ready to accept.

In: And how quickly can you tell which category they fall into?

Pf: Well, I would say... within 2 or 3 weeks you can clearly say whether fully motivated or they just doing an attempt because either they are being told so or just because they want to give it a go. Personally I would say you can see it from the first appointment, but I don't want to be judgemental so everybody can have their different, you know, have different motivation. General motivation that I even know before they are even walking in so it's not me to judge them as I said. I would say within in the first 3 weeks you know whether they're going to persevere or if it's no point. In fact by the end of the first month we always tell them there's no point in you to come in here because you clearly still smoking and, and, or, they kind of lying, they kind of go opening on to the devices, any sort of excuses. At that point we point out to them they can only have two chances through out the year so it's better to hold on this and try again later in the year or by a new years resolution any other options so...

In: Do you think you use the same approach for each case if their motivated and not motivated?

Pf: I would say so yeah. It's, it's just a standard one, I mean we've all done the same training, training course two years ago and realistically we are a busy pharmacy. Me or any of the other technicians have certain time, we need to stick to certain time, so the one, on one interview is a good opportunity to know better the patient, but motivation, you know, it's willpower mainly if you really want to quit you will succeed, we give you the help, anymore than that we don't do it for you.

In: Do you think the client remembers all the information you give them?

Pf: Most of them although yeah for any circumstances they change. As I said before, stick to the range of hours we can offer the service or stick to the same day, but they don't tend to follow this. They try to most of the time, we see 70-80 percent would do, 20 percent is just randomly, they forget to, they've been busy, they've went out. I mean any sort of excuse you can imagine of I would say yeah.

In: Do people with unsuccessful quit attempts come back?

Pf: Yes, they do, but it's a very, very small percentage.

In: Are there many come, that have stopped on multiple occasions and come back?

Pf: Well, there is people that try. If they stop, they stop for a few months then they come back. When they come back I have to admit they don't use the whole 3 month program. Generally within the 1st month, month and a half, they've quit again, but they tend to come back again so they tend to, well yes, few months, I would say, off the cigarettes then for whichever reason happen in their lives, which one of is Christmas stress, job related, they tend to start smoking again, then it is easier for them to quit, because they use the service, because they already know how to motivate themselves, but yes. It's very likely they are going to be back for a third time and a forth time again.

In: How do you change your approach when a client with a failed quit attempt comes back or is it exactly the same? (Missed question at the interview. Interviewer called up the pharmacist to get an answer to it)

I wouldn't change it, we will use the same standard approach again.

In: So you take them through the same exact procedure then? (Missed question at the interview. Interviewer called up the pharmacist to get an answer to it)

Yeah. Exactly the same procedure.

In: And you said that you could only take them two times a year?

P_f: Well, that's initially what we were told from the NHS that they can register for the service the same patient only twice a year, obviously this cannot be really controlled fully, be fully controlled because if they go to any other chemist they can... that offers the service, they can register with the same, but that's what we are initially told. We give two opportunities per year.

In: So it doesn't depend on the level of patient motivation?

P_f: Well, there's motivation and there is a response. As we always said when do we offer the service, it's a time consuming job, we are happy to offer this service. If you don't comply to the rules within the first month, month and a half, we need to stop the service, you can offer, you can be offered the same service again within the same year another, another time. After that you need to skip one year so the approach that we follow yes, well, I would say yes, it's just the same, it's a standard that we apply to everybody regardless of medical condition, social condition, yeah.

In: I want to ask about what training everybody has. Who is delivering the smoking cessation service here?

P_f: Right. So it's me and all of the technicians involved, so there's me and there's a third technician, one checking technician. And the training, god, I don't even remember when that was, that was 2007/08 or something, we just went to the evening trainings all of us.

In: With Giovanna?

P_f: That was quite a few years ago, I don't remember, I don't remember the name, it was one of these group meetings.

In: Yeah. It's probably Giovanna DiTano.

P_f: If I remember properly, I might be wrong though, my one was on King Manor Hotel down in Portebello one evening, you know they tend to do on areas, so my one was in that venue, You have to ask everybody where they did their training, because I don't remember. Some people came from other pharmacy one of the girls that's joined us is from Boots in xxx, and checking technician used to work in another chemist one year ago so everybody got different background per se. Everybody is trained, we can go, we can offer alternative, we have, I don't know, reaction to some products they don't like, they know how to swap it, but everything is checked with me even if I am not carrying out personally the interview before giving a product, before signing a prescription, everything is double checked from myself or the pharmacist in charge.

In: How much responsibility, responsibility is delegated to the support staff? You said that you took the first consultation

P_f: Generally yeah.

In: And they take the follow up?

P_f: Yeah. How much responsibility...

In: Yeah

P_f: I mean... I don't seem to understand completely. I mean the follow up if you mean at the end of the process after the three month to chase up the patient, that is the worst part, we tend to do it but most of the time you don't get reply, either by e-mail or by phone so most of the time is follow up you will see on our forms I have in here (showing MDS form with lost to follow up box checked off). I'll be frank with you, this is probably about 80 percent, very high yeah.

In: OK. Does the client seem same staff member every time they visit?

P_f: No. They tend to if they prefer to, if they have the time to wait for the same patient, but if for the same staff, but not, I would say no. It's absolutely random.

In: Do you, do you think this could be important?

P_f: Well, it might be important for ethnical reason, reasons, I mean we have, one of the girls which is from xxx, well her family is from xxx, she was born here, the other lad is from xxx, they speak fluent xxx, I'm xxx, so we have a bit of language skills that we can use, we now and again use, but apart from that I would say no, because no, most different, I don't see anybody asking for specific persons, all the staff to carry out this service.

In: Do you use the support tracker sheet?

P_f: This one (showing the NHS support tracker sheet)?

In: Mm. OK. We have to just go on. What do you think is the importance of recruiting patients to this service in relations to other services the pharmacy delivers?

P_f: Right. Try to be more clear to me please, I don't understand.

In: Yeah. If you. I don't know if you deliver flu jabs... comparing to minor ailments... Do you feel a strong commitment in delivering this service?

P_f: I wouldn't say a strong commitment. We offer the service because it's part of our commitment, but it's not more or less than anything else. You have to realize that flu jab is just for a short period of time and gives you money straight away. Smoking cessation is been on and it's much more time consuming. Minor ailment service, I don't even call it a service frankly, I mean it's alright, it's on, it's the NHS that decided for it, so we offer the, frankly it annoys, it's just to reduce the workload of the

surgery for, but there's, I would say there's bit of abuse that service especially for patient from deprived economically areas, patient on magic green stuff, they are the main user of this service, it is usually for, for infant as well, children, but they don't use flu services and use the smoking cessation so there's no relation between the two sorts of service.

In: Do you have any company or personal targets to achieve?

P_f: For the smoking cessation..?

In: Yeah.

P_f: We just have, I don't think, not lately, no, we are, we've been told to crack on with it, but I think we're doing pretty well on it, we don't say no to anybody that offers, that comes in here and try to join the service with us, so we're just a bit strict in terms of rules as I said, we have certain distinct, as I say, if they don't comply to our rules that... [Interruption]

In: When you have a successful, client with a successful quit, is the success celebrated either with the client or within the pharmacy team?

P_f: Well, not necessarily celebrated, but lets say it's not so rare, but if it's a regular customer because you need to think that most of the time especially in this area there are folks from the surrounding buildings offices, so they tend to join for the chemist just for that period until they're on the smoking cessation otherwise they are not on any other medication. This is the main target that we around here, so if they pop in again, they're still off, they still smoke, still have cravings, you know you're a smoker for at least 10 years after you quit just a word, but not celebration I would say, no.

In: But do you think it could encourage the staff in delivering the service better?

P_f: To offer celebration?

In: Yeah, to have an official celebration with the client or within the pharmacy team?

P_f: (laugh). I would say no, but which reason, I don't know, I don't know. I, I. I know it's, it's important, but yeah, I think the patient would be the one who has to celebrate for himself. We're just offering support so for us it's no must to celebrate. It's okay, we have done our part, but no, I would say no.

In: What's the most difficult barrier to overcome when delivering the smoking cessation service? You've mentioned...

P_f: The follow-up certainly, the follow up certainly, regardless of all the contact method you can have, e-mails, coming in, or, mobile number, follow-up, but it's definitely the main barrier, to discover where they maintain, the abstinence for longer and, no, I would say, the barrier is, well you need, it has to be investigated within the social habitant of the patient, more, the majority of those that succeed in quitting smoking is because they belong to group or within in partner or within family that's another

member that join the same service or quit recently or they've changed some way their social habits like, they're on... they go less often to say the pub, I'm sure that things that public smoking ban in, took place in Scotland, that has given a good kick, but realistically has to be more a social motivation, change of friends for a while, not going to the same routine with folks in the pubs or if both the partner are smokers, both of them has to quit if one of the two doesn't it's them or not now that's going to succeed..

In: Do you have any suggestions on how to improve the smoking cessation service?

Pf: As I said, yeah can be advertised a bit more frankly and I think if you really want to be smart you can advertise it in supermarket where you sell most of the cigarettes, I've never seen them, even if you have the pharmacy beside the kiosks that sell cigarettes it's not advertised. And I don't know whether, I don't have telly, so I don't know if it's advertised on television or anything like that not even locally, is it?

In: Yeah

Pf: In terms of training I would say no, but I don't know whether older pharmacists that are in involved in your study answer in this way, but I don't why all the pharmacy are offering this service because if you're in the independent, small and you're just one chemist with one assistant, how many can you take on board? As I said we are in a strategic position here because we are in-between two, two or three surgery, local surgeries and they refer the patient to us now, so more than the advertising locally to the surgery or anybody else worth amount, I would think that anything less you can do for this I'm afraid. OK, it's free, you get all the products, you kind of enlarge the, the products if you reckon yes, this electronic cigarettes or any new technology may be introduced, yeah, these are all things that can improve the service, but I don't know how much uptake this actually will have.

In: OK, Thanks.

Pf: No worries.

Appendix 9 – Questionnaire

Management of the Stop Smoking Service: Characteristics of Community Pharmacies

Pharmacist questionnaire

This survey has been designed to try and assist the NHS Lothian Public Health Directorate to gain a clearer understanding of the factors which impact on the success of the NHS community pharmacy Stop Smoking Services.

Thank you for taking the time to complete this survey. It will take approximately 5 minutes. Please answer the questions as accurately as possible. Your views are very much appreciated.

Section 1: General	
<i>Please write in the box.</i>	
Q1. How many years pharmacy experience do you have?	
Q2. How many of your pharmacy staff deliver the Stop Smoking Service at your pharmacy?	
Q3. How many pharmacists are working at any one time in your pharmacy?	
<i>Please tick off one box.</i>	
Q4. What type of pharmacy do you work in?	Independent
	Small multiple
	Multiple
Q5. The stop smoking service is most frequently available at the following time	During pharmacy opening hours
	Only during week days
	Only by appointments
<i>Please tick off no more than 2 boxes.</i>	
Q6. Which age range do your Stop Smoking Service smokers fit mostly?	12 - 19 years of age
	20 - 35 years of age
	36 - 50 years of age
	51 - 65 years of age
	65 years of age or older

Section 2: Recruitment and consultations					
<i>Please tick off box as an approximate proportion.</i>					
1 = 0-20% 2 = 21-40% 3 = 41-60% 4 = 61-80% 5 = 81-100%					
Of the smokers registered for the smoking cessation service, what proportion is recruited through...	1	2	3	4	5
Q7.1 Self-referral?					
Q7.2 Staff members' awareness that the client is a smoker?					
Q7.3 Referrals from local surgeries?					
Q7.4 Referrals from Chronic Medication Service?					
Q7.5 Other areas?					

Date



Management of the Stop Smoking Service: Characteristics of Community Pharmacies

<i>Please tick off box as an approximate proportion.</i>					
1 = 0-20%	2 = 21-40%	3 = 41-60%	4 = 61-80%	5 = 81-100%	
1	2	3	4	5	
Q8.1	What proportion of smokers from whom you smell smoke do you try to engage with?				
Q8.2	What proportion of smokers who present with a prescription for a smoking related disease do you try to engage with?				
Q8.3	What proportion of smokers who purchase nicotine replacement products do you try to engage with?				
Q8.4	What proportion of smokers recruited to the Stop Smoking Service already picks up prescriptions at your pharmacy?				
Q8.5	What proportion of all your initial consultations are held in the consulting room?				
Q8.6	What proportion of all your follow up consultations are held in the consulting room?				
<i>Please tick off one box.</i>					
1 = < 5 minutes	2 = 5 - 10 minutes	3 = 10 - 15 minutes	4 = 15 - 20 minutes	5 = > 20 minutes	
1	2	3	4	5	
Q9.1	Approximately how long does your initial engagement last?				
Q9.2	Approximately how long does your initial consultation last?				
Q9.3	Approximately how long does your follow up consultation last?				
<i>Please tick as many as apply.</i>					
1 = Medicines counter assistant	2 = Dispensing Assistant	3 = Pharmacy Technician	4 = Pre-registration Pharmacist	5 = Pharmacist	
1	2	3	4	5	
Q10.1	Who is actively engaged in the initial engagement?				
Q10.2	Who is actively engaged in the initial consultation?				
Q10.3	Who is actively engaged in the follow up consultations?				

Section 3: Approach					
<i>The following section is from strongly agree to strongly disagree. For each of the following statements please tick the box that most closely matches your personal opinion (one tick per statement).</i>					
1 = strongly agree 2 = agree 3 = neither agree/disagree 4 = disagree 5 = strongly disagree					
When a smoker loses motivation during the program, the responsible staff member would...					
1	2	3	4	5	
Q11.1	Use the same standard approach				
Q11.2	Try to find the reason for the client's loss of motivation				
Q11.3	Tailor their approach towards the smokers feelings				
Q11.4	Change the management of the smoker to a different member of staff				
Q11.5	Change the client to other NRT products				
When a smoker with a previously unsuccessful quit re-joins the service, the responsible staff member would...					
1	2	3	4	5	
Q12.1	Use the same standard approach				
Q12.2	Try to find the reason for the smokers relapse				
Q12.3	Tailor their approach towards the smokers feelings				
Q12.4	Change the management of the smoker to a different member of staff				
Q12.5	Change the client to other NRT products				

Date

Management of the Stop Smoking Service: Characteristics of Community Pharmacies

Pharmacist questionnaire

Section 4: Training and carbon monoxide monitoring					
<i>Please tick as many as apply.</i>					
1 = NHS Smoking cessation events	2 = Sponsored training events	3 = Employment training	4 = E-learning (e.g. Raising the issue of smoking)	5 = Further reading	
Q13. How are pharmacy staff trained?					1 2 3 4 5
<i>Please tick off one box</i>					
1 = Quarterly	2 = Twice a year	3 = Annually	4 = One-off training	5 = Never	
Q14. How often are pharmacy staff trained?					1 2 3 4 5
<i>Please tick off one box</i>					
1 = Once	2 = Twice	3 = Three	4 = Four or more	5 = Never	
Q15. How often per quit attempt is the smoker monitored for carbon monoxide?					1 2 3 4 5

Section 5: Success					
<i>Please tick off box as an approximate proportion.</i>					
1 = 0-20%	2 = 21-40%	3 = 41-60%	4 = 61-80%	5 = 80-100%	
Q16.1 Of all your successful attempts, how many are from 1 st attempts					1 2 3 4 5
Q16.2 Of all your successful attempts, how many are from 2 nd attempts					
Q16.3 Of all your successful attempts, how many are from 3 rd attempts					
Q16.4 Of all your successful attempts, how many are from 4 th attempts or further attempts					

Section 6: Miscellaneous					
<i>The following section is from strongly agree to strongly disagree. Please tick the box that most closely matches your personal opinion (one tick per statement).</i>					
1 = strongly agree 2 = agree 3 = neither agree/disagree 4 = disagree 5 = strongly disagree					
					1 2 3 4 5
Q17. Our pharmacy tries to have the same staff member with the smoker throughout the whole program					
Q18. The NHS support tracker sheet or an alternative tracker sheet is used during the follow up consultations					
Q19. Staff members try to encourage smokers who have lost some motivation to complete the program					
Q20. Our pharmacy set up appointments for follow up consultations with the smoker					
Q21. Our smokers come randomly for follow up consultations					
Q22. Our pharmacy provides information about other support options like the <i>Smokeline</i> telephone helpline and the specialist NHS smoking cessation services					
Q23. Our pharmacy provides smokers with written information material such as booklets or leaflets					
Q24. The stop smoking service is highly prioritised in our pharmacy					
Q25. I would like feedback on success rates for my pharmacy					

Date



Management of the Stop Smoking Service: Characteristics of
Community Pharmacies

Pharmacist questionnaire

Thank you for your contribution. Please return this
questionnaire by faxing 0131 465 5494.

Date



Appendix 10 – Cover letter

Lothian NHS Board

Waverley Gate
2-4 Waterloo Place
Edinburgh
EH1 3EG
Telephone 0131 536 9000
Fax 0131 465 5494



www.nhslothian.scot.nhs.uk

COLINTON PHARMACY LTD
46A BRIDGE ROAD

Date 8th February 2013
Your Ref
OurRef AM/tb/34/2186

EDINBURGH EH13 0LQ

Enquiries to Aileen Muir
Extension 35445
Direct Line 0131 465 5445
Email aileen.muir@nhslothian.scot.nhs.uk

Dear Colleague

CHARACTERISATION OF COMMUNITY PHARMACIES DELIVERING STOP SMOKING SERVICES WITH REFERENCE TO THE NUMBER OF QUILTS AND QUIT RATES

We invite you to take part in a survey about factors that may impact on the success of the NHS stop smoking service in community pharmacies. The outcome from this survey will be used to help improve service delivery and potentially stop more people from smoking. In order to do this, we would like to invite a pharmacist to complete the enclosed questionnaire.

Your participation will take approximately 5 minutes of your time and your practice might lead to a better understanding of what characteristics are important in delivering the Stop Smoking Service. Please send the completed questionnaire by fax to 0131 465 5494 before 25th February 2013.

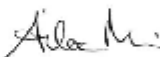
Your response will be treated anonymously. The questionnaire is numbered in order to ensure this. This number will solely be used to link the questionnaires to success rates provided by the NHS board.

This project is a part of a student's MSc in pharmacy at University of Tromso, Norway and the results will be published which can be available on request.

If you require any further information, please do not hesitate to contact me or my supervisors. Thank you in anticipation for your contribution.

Yours sincerely


KRISTIAN MORTENSEN
Master Student in Pharmacy
Tel: 0131 537 1212


AILEEN MUIR
Consultant in Pharmaceutical
Public Health



Headquarters
Waverley Gate, 2-4 Waterloo Place, Edinburgh EH1 3EG

Chair Dr Charles J Winstanley
Chief Executive Tim Davison, Interim Chief Executive
Lothian NHS Board is the common name of Lothian Health Board

Appendix 11 – Reminder

Lothian NHS Board

Waverley Gate
2-4 Waterloo Place
Edinburgh
EH1 3EG
Telephone 0131 536 9000
Fax 0131 465 5494

www.nhslothian.scot.nhs.uk

Date 27th February 2013
Your Ref
Our Ref AM/fb4/2021

Enquiries to Aileen Muir
Extension 35445
Direct Line 0131 465 5445
Email aileen.muir@nhslothian.scot.nhs.uk



Dear Colleague

CHARACTERISATION OF COMMUNITY PHARMACIES DELIVERING STOP SMOKING SERVICES WITH REFERENCE TO THE NUMBER OF QUILTS AND QUIT RATES

We recently sent you a survey questionnaire on the 8th February 2013 about factors that may influence on the success of NHS community pharmacy stop smoking service. We would appreciate if a pharmacist would take 5 minutes of his or her time to answer the questionnaire and return it by fax to 0131 465 5494 by 7th March 2013.

It is very important that we get as many replies as possible to evaluate how we can improve the Stop Smoking Service and potentially stop more people from smoking.

We would like to remind you that your response will be treated anonymously. The questionnaire is numbered to allow your responses to be linked to success rates provided by the NHS board.

Thank you very much for your time.

Yours sincerely

Kristian Mortensen

KRISTIAN MORTENSEN
Master Student in Pharmacy
Tel: 0131 537 1212

Aileen Muir

AILEEN MUIR
Consultant in Pharmaceutical
Public Health



Headquarters
Waverley Gate, 2-4 Waterloo Place, Edinburgh EH1 3EG

Chair Dr Charles J Winstanley
Chief Executive Tim Davison, Interim Chief Executive
Lothian NHS Board is the common name of Lothian Health Board

Appendix 12 – Letter to managers**To managers**

Project title: Characterisation of community pharmacies delivering stop smoking services with reference to the number of quits and quit rates

We have recently sent out a postal survey about factors that may impact on the success of the NHS stop smoking service in community pharmacies in Lothian. The outcome from this survey will be used to help improve service delivery and potentially stop more people from smoking.

We would appreciate if you encourage your staff within Lothian to complete the questionnaire. It should take no more than 5 minutes to complete it.

This project is a part of a student's MSc in pharmacy at University of Tromso, Norway and the results will be published which can be available on request. The survey has Research and Development approval from NHS Lothian.

If you require any further information, please do not hesitate to contact me or Giovanna DiTano

Thank you in anticipation for your contribution.

Yours faithfully,

Kristian Mortensen,
Master student in pharmacy

0131 537 1212

Gioavanna Di Tano
Lead Pharmacist Stop Smoking Service
Public Health
gditano@nhs.net

Research project about characterisation of community pharmacies delivering stop smoking services with reference to the number of quits and quit rates

Appendix 13 – Chi-square test – Gender and success

Gender * Having a successful quit Crosstabulation

			Having a successful quit		Total
			Yes	No	
Gender	Male	Count	498	603	1101
		Expected Count	473,5	627,5	1101,0
	Female	Count	562	802	1364
		Expected Count	586,5	777,5	1364,0
Total		Count	1060	1405	2465
		Expected Count	1060,0	1405,0	2465,0

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4,035 ^a	1	,045	,045	,025
Continuity Correction ^b	3,873	1	,049		
Likelihood Ratio	4,033	1	,045		
Fisher's Exact Test					
Linear-by-Linear Association	4,034	1	,045		
N of Valid Cases	2465				

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 473,45.

b. Computed only for a 2x2 table

Gender	PC1 (n)	PC2 (n)	Total (n)
Successful Males	258	240	498
Unsuccessful males	179	424	603
Successful females	303	259	562
Unsuccessful females	251	551	802

Appendix 14 – Chi-square test – Gender and pharmacy category

Gender * Being in specific pharmacy category Crosstabulation

			Being in specific pharmacy category		Total
			PC1	PC2	
Gender	Male	Count	437	664	1101
		Expected Count	442,6	658,4	1101,0
	Female	Count	554	810	1364
		Expected Count	548,4	815,6	1364,0
Total		Count	991	1474	2465
		Expected Count	991,0	1474,0	2465,0

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	,217 ^a	1	,642	,650	,336
Continuity Correction ^b	,180	1	,671		
Likelihood Ratio	,217	1	,642		
Fisher's Exact Test					
Linear-by-Linear Association	,217	1	,642		
N of Valid Cases	2465				

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 442,63.

b. Computed only for a 2x2 table

Gender	PC1 (n)	PC2 (n)
Males	437	664
Females	554	810

Appendix 15 – Chi-square test – Age \geq 35 years of age vs Age $<$ 35 and pharmacy category
Age * Being in specific pharmacy category Crosstabulation

			Being in specific pharmacy category		Total
			PC1	PC2	
Age	Greater than or equal to 35 years of age	Count	664	879	1543
		Expected Count	622,3	920,7	1543,0
	Less than 35 years of age	Count	327	587	914
		Expected Count	368,7	545,3	914,0
Total		Count	991	1466	2457
		Expected Count	991,0	1466,0	2457,0

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	12,558 ^a	1	,000		
Continuity Correction ^b	12,259	1	,000		
Likelihood Ratio	12,637	1	,000		
Fisher's Exact Test				,000	,000
Linear-by-Linear Association	12,553	1	,000		
N of Valid Cases	2457				

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 368,65.

b. Computed only for a 2x2 table

Age group	PC1	PC2	Total PC1	Total PC2
13-24 years of age	113 (3, 2-5)	207 (5, 3-8)	327	587
25-34 years of age	214 (6, 3-10)	380 (11, 6-16)		
35-44 years of age	241 (6, 3-11)	364 (11, 5-17)	664	879
45-59 years of age	294 (8, 4-16)	342 (9, 4-16)		
\geq 60 years of age	129 (4, 2-6)	173 (5, 2-7)		

Appendix 16 – Chi-square test – Age \geq 45 years of age vs Age $<$ 45 and pharmacy category
Age * Being in specific pharmacy category Crosstabulation

			Being in specific pharmacy category		Total
			PC1	PC2	
Age	Greater than or equal to 45 years of age	Count	423	515	938
		Expected Count	378,3	559,7	938,0
	Less than 45 years of age	Count	568	951	1519
		Expected Count	612,7	906,3	1519,0
Total		Count	991	1466	2457
		Expected Count	991,0	1466,0	2457,0

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	14,298 ^a	1	,000	,000	,000
Continuity Correction ^b	13,980	1	,000		
Likelihood Ratio	14,247	1	,000		
Fisher's Exact Test					
Linear-by-Linear Association	14,292	1	,000		
N of Valid Cases	2457				

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 378,33.

b. Computed only for a 2x2 table

Age group	PC1	PC2	Total PC1	Total PC2
13-24 years of age	113 (3, 2-5)	207 (5, 3-8)	568	951
25-34 years of age	214 (6, 3-10)	380 (11, 6-16)		
35-44 years of age	241 (6, 3-11)	364 (11, 5-17)		
45-59 years of age	294 (8, 4-16)	342 (9, 4-16)	423	515
\geq 60 years of age	129 (4, 2-6)	173 (5, 2-7)		

Appendix 17 – Chi-square test – PC1 vs. PC2 and NHS training events
Type of pharmacy * Having gone to NHS smoking cessation events Crosstabulation

			Having gone to NHS smoking cessation events		Total
			Yes	No	
Type of pharmacy	Pharmacies > 41%	Count	11	17	28
		Expected Count	15,7	12,3	28,0
	Pharmacies < 41%	Count	22	9	31
		Expected Count	17,3	13,7	31,0
Total		Count	33	26	59
		Expected Count	33,0	26,0	59,0

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	5,991 ^a	1	,014		
Continuity Correction ^b	4,775	1	,029		
Likelihood Ratio	6,087	1	,014		
Fisher's Exact Test				,019	,014
Linear-by-Linear Association	5,890	1	,015		
N of Valid Cases	59				

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 12,34.

b. Computed only for a 2x2 table

Appendix 18 – Chi-square test – PC1 vs. PC2 and frequency
Type of pharmacy * Trained quarterly, twice a year, annually Crosstabulation

			Trained quarterly, twice a year, annually		Total
			Yes	No	
Type of pharmacy	Pharmacies > 41%	Count	16	12	28
		Expected Count	12,8	15,2	28,0
	Pharmacies < 41%	Count	11	20	31
		Expected Count	14,2	16,8	31,0
Total		Count	27	32	59
		Expected Count	27,0	32,0	59,0

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	2,781 ^a	1	,095	,121	,080
Continuity Correction ^b	1,976	1	,160		
Likelihood Ratio	2,800	1	,094		
Fisher's Exact Test					
Linear-by-Linear Association	2,733	1	,098		
N of Valid Cases	59				

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 12,81.

b. Computed only for a 2x2 table

Appendix 19 – Protocol**Characterisation of community pharmacies delivering stop smoking services with reference to the number of quits and quit rates**

Investigator: Kristian Mortensen, Masters Student from University of Tromso
(Honorary contract with NHS Lothian)

Clinical supervisor: Aileen Muir, Consultant in Pharmaceutical Public Health, NHS Lothian and Honorary Research Fellow, University of Strathclyde

Academic supervisor: Moira Kinnear, Head of Pharmacy Education, Research & Development, NHS Lothian and Honorary Senior Lecturer University of Strathclyde

Collaborators: Anne Lorimer, Pharmacy Locality Co-ordinator, NHS Lothian and Giovanna DiTano, Smoking Cessation Facilitator.

Introduction

Cigarette smoking causes a wide variety of negative health effects such as cancer, cardiovascular diseases, respiratory diseases and reproductive effects (1). A report states that approximately 13500 deaths in Scotland in 2004 were caused by smoking related illness (2). It is established that community pharmacies can contribute to prevention of these diseases through its stop smoking service (3). This is a national service available from all community pharmacies as part of the community pharmacy contract core services (4, 5). It consists of the provision of a smoking cessation service comprising advice and supply of nicotine replacement therapy (NRT) over a period of up to 12 weeks, in order to help smokers successfully stop smoking. To fulfil contractual obligations, pharmacists must complete both a payment claim form and a minimum dataset form (5-7).

There is a national database to record smoking quit attempts based on reviewed minimum dataset forms and Public Health Service claims made for pharmacy based interventions contribute to the Boards smoking cessation HEAT target (8). The minimum dataset form is the means for capturing this information. The resulting data available for evaluation of this service are however, not directly linked. Data are available from practitioner services in relation to claims made for each patient who is provided with the stop smoking service (9). Data are also available from the ISD national database that captures the 4 week successful quits for each pharmacy (8, 10). While this information is monitored within NHS Lothian the data has not routinely been linked and the service can improve if a better understanding of what factors or characteristics impact on success rates of the service. NHS Lothian Primary Care Contracts have data about consultation areas available in premises which may inform characteristics that may be important in determining pharmacy success rates for this service (11). The outcomes of the study will inform the Pharmaceutical Care Services Plan which is a document that each NHS Board is required to produce annually, describing the pharmaceutical care services in their area and determining if any gaps exist in provision (12).

Aim

To describe the characteristics of community pharmacies delivering stop smoking services and propose a categorisation system based on these characteristics which can be used to test whether or not there is a link with these characteristics and the stop smoking success rates.

Objectives

4. To describe pharmacies in relation to numbers of stop smoking clients and successful quits.
5. To describe community pharmacies in terms of characteristics that may be related to successful quits
6. To propose characteristics of community pharmacy stop smoking service that may impact on successful quits.

Subjects and Setting

All community pharmacies are contracted to provide NHS stop smoking services to patients. Existing service data from the Practitioners Services Division relating to claims for each client seen, data on successful quits from the ISD database and prescribing data will be utilised by the investigator to describe the current service provision and success.

Methods

1. We will describe pharmacies in relation to numbers of stop smoking clients and successful quits

-
- 1.1. NHS Lothian Public Health Directorate have data recording smoking quit attempts based on reviewed minimum dataset forms and Public Health Service claims made for pharmacy based interventions. This existing data will be examined and collated to provide a description of pharmacies success at provision of stop smoking services.
 - 1.1.1. Description will include following categories.
 - 1.1.1.1. Low success rate
 - 1.1.1.2. High success rate (high number of patients)
 - 1.1.1.3. High success rate (low number of patients)
 - 1.1.1.4. Doing nothing (no patients)
 - 1.1.1.5. Lost to follow-up
 - 1.1.2. From this range, pharmacies will be selected to participate in interviews to explore their views about the service provided.
 - 1.1.3. Selection will be undertaken by the project team to ensure a broad range of pharmacies.
 - 1.2. Data will be used to set up and manipulate excel spreadsheets and online reporting database.
 2. We will describe community pharmacies in terms of characteristics that may be related to successful quits.
 - 2.1. A small number of qualitative semi-structured interviews with six community pharmacists will be undertaken to obtain descriptive information from the community pharmacies in relation to how they provide the stop smoking service and related factors.
 - 2.1.1. Thorough literature research will be done to prepare the questions asked at the interviews
 - 2.1.2. The questions will be discussed and agreed with the project team.
 - 2.1.3. They will address:
 - 2.1.3.1. Importance of recruiting patients to the service in relation to other services – commitment
 - 2.1.3.2. Who is delivering the service – support staff or the pharmacist – how are they trained, do they take responsibility

- 2.1.3.3. Are support services offered by the stop smoking facilitator accessed
 - 2.1.3.4. Existence of standard operating procedures
 - 2.1.3.5. Where do consultations take place
 - 2.1.3.6. Incentives – do you have targets to achieve? How do you feel when clients quit – professional satisfaction? Do you celebrate with the team?
 - 2.1.3.7. Type of quitters – do they approach you or do you approach them? Do you target those prescribed chronic medication for smoking related illnesses
 - 2.2. The interview schedule will be designed and then piloted with the Lead Pharmacist Stop Smoking Service who also delivers services from a community pharmacy (Giovanna DiTano)
 - 2.3. The approved invitation letter, participant information sheet and consent form will be posted to the selected pharmacies and 2 days later the lead pharmacist stop smoking service (GDiT) will call the pharmacy to discuss the project. She will then liaise with the investigator who will arrange with the pharmacist a suitable date/time for interview. The consent form will be collected at the interview.
 - 2.4. The student researcher will inform the participant that the interview will be audio recorded and transcribed with no recording of data that will identify the pharmacy or the pharmacists.
 - 2.4.1. The recording will be destroyed after transcription.
 - 2.5. Transcriptions will be structured into coding themes.
 - 2.6. Analysis and coding of views, understandings and experiences shared at the interviews will be done manually.
3. The results from the analysis of the interviews will be used to aid development of a quantitative postal anonymous questionnaire which will be sent to all NHS Lothian community pharmacies (182).
 - 3.1. Closed questions with statements where the responder uses an ordinal rating scale (i.e. agree/disagree) as well as a nominal scale (i.e. female/male) will be used in the questionnaire.
 - 3.2. A cover letter will be made for the questionnaire and reminder.

- 3.3. The questionnaire will be posted by mail to all NHS Lothian community pharmacies and answers will be faxed back to the Public Health Directorate.
 - 3.4. A reminder will be faxed to all to improve the response rate.
 - 3.5. A report for discussion with the project team about the results and findings will be prepared.
4. Characteristics of community pharmacy stop smoking service that may impact on successful quits will be proposed.
 - 4.1. Potential association between pharmacy characteristics and quit rates will be identified
 - 4.2. Data analysed will be used to draw conclusions about what characteristics that may differ between the most and least successful pharmacies.
 - 4.3. Further study will apply statistical analysis to confirm any association

Ethics

The South East Scotland Research Ethics Service has deemed the project not to require research ethics review.

References

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