



Working for a tobacco-free Scotland



Reducing Children's Exposure to Second Hand Smoke in the Home

A Mapping Survey of Smoke-free Home Initiatives in Scotland and England

March 2011

A Report by ASH Scotland

Prepared by

**April Shaw
Professor Amanda Amos
Dr Sean Semple
Dr Rachel O'Donnell**



LOTTERY FUNDED

Contents

Acknowledgements	3
1. Introduction.....	4
1.1. Aims.....	4
2. Methods	4
3. Mapping Scotland’s Smoke-free Home Interventions and Activities.....	6
3.1 Sample.....	6
3.2 Types of service intervention and activity.....	6
Table 1: Scotland’s NHS health board areas and smoke-free home interventions elements 7	
3.2.1 Pledge systems.....	8
3.2.2 Training Practitioners	8
3.2.3 Pre-school/Schools/Youth based interventions	8
3.2.3.1 NHS Shetland.....	9
3.2.3.2 NHS Ayrshire and Arran.....	9
3.2.3.3 NHS Forth Valley.....	9
3.2.3.4 NHS Highland.....	9
3.2.3.5 NHS Dumfries and Galloway.....	10
3.2.3.6 NHS Lothian	10
3.2.3.7 NHS Greater Glasgow and Clyde	10
3.2.4 Promotion of Home Fire Safety	11
3.2.5 Engaging with Credit Unions	11
3.2.6 Smoking cessation services.....	12
3.3 Target population.....	12
3.4 Location of delivery.....	12
3.5.1 NHS Greater Glasgow and Clyde.....	14
3.5.2 NHS Highland	17
3.5.3 NHS Shetland	17
3.5.4 NHS Dumfries and Galloway	17
3.5.5 NHS Forth Valley	17
3.5.6 NHS Fife.....	18
3.5.7 NHS Lothian.....	18
3.5.8 NHS Ayrshire and Arran	19
3.5.9 NHS Tayside.....	19
3.6 Funding and staffing	19

3.7	Toward National and Local Targets.....	20
4.	A Brief Overview of Selected SFH Interventions in England	21
4.1	Sample.....	21
4.2	Type of SFH intervention and activities.....	21
4.2.1	North Kirklees Smokefree Homes Project for Children with Compromised Respiratory Function	22
4.2.2	Bury Smokefree Homes Project	23
4.2.3	Smokefree North West – Take 7 Steps Out Campaign.....	23
4.3	Target population.....	24
4.4	Location of delivery.....	24
4.5	Monitoring and evaluation: evidence of effectiveness.....	25
4.5.1	North Kirklees	25
4.5.2	Bristol	25
4.5.3	Lincolnshire.....	25
4.5.4	Bury.....	25
4.5.5	Rotherham	25
4.5.6	Nottingham City	26
4.6	Funding and Staffing	27
4.7	Toward National and Local Targets.....	27
5.	Discussion.....	28
5.1	Interventions and activities.....	28
5.2	Partnership working	29
5.3	Population Targeting.....	30
5.4	Monitoring and evaluation.....	31
6.	Conclusion	31
	References.....	33
	Appendix 1: Smoke-Free Homes Mapping Questionnaire	35
	Appendix 2: REFRESH Research Board Membership.....	39
	Appendix 3: Curriculum for Excellence Health and Wellbeing Experiences and Outcomes.....	40
	Appendix 4: Scotland’s NHS health board areas and SFH target populations	41
	Appendix 5: NHS GGC Logic Model Framework.....	43
	Appendix 6: Scottish SFH Projects’ Budgets and Funding Sources	44

Acknowledgements

The REFRESH team would like to thank all the smoke-free home and tobacco control coordinators in Scotland and England who helped contribute to this report and completed the surveys. We also thank Lisa Jones at Liverpool St John Moores University for permission to adapt the North West mapping survey and Janet Wilson (Local Alliances Officer, ASH Scotland) and NHS Health Improvement Officers for help in identifying the initial contacts in Scotland on which this report is based.

The following members of the REFRESH project management team have contributed to this report:

Professor Amanda Amos, Professor of Health Promotion, Centre for Population Health Sciences, University of Edinburgh

Philippa Bonella, Director of Policy and Campaigns, ASH Scotland

Dr. Rachel O'Donnell, Policy and Research Manager, ASH Scotland

Deborah Ritchie, Head of Nursing Studies / Senior Lecturer, School of Health in Social Science, University of Edinburgh

Dr. Sean Semple, Senior Lecturer, Scottish Centre for Indoor Air Environmental and Occupational Medicine, University of Aberdeen

April Shaw, Senior Research Officer, ASH Scotland

Dr Stephen Turner, Clinical Senior Lecturer, Department of Child Health, University of Aberdeen

For Further information on the REFRESH Project or this survey please contact April Shaw (april.shaw@ashscotland.org.uk) or go to the REFRESH project website for further updates:
<http://www.ashscotland.org.uk/ash/7986.1819.html>

1. Introduction

ASH Scotland in partnership with the Universities of Aberdeen and Edinburgh has been funded by the BIG Lottery to deliver a portfolio of research to develop tools for professionals working with children and families to help them reduce children's exposure to second-hand smoke (SHS), particularly in deprived communities.

The REFRESH project aims to raise awareness of SHS exposure and its effects on children's health with practitioners who work with families and children.

1.1. Aims

The aim of this mapping exercise is primarily to report on the number and nature of smoke-free home (SFH) interventions in Scotland, and to highlight key interventions in England with a brief overview of nine SFH interventions in England. In addition this report reviews the methods employed by the SFH interventions and reports on any accompanying evaluations that have been conducted with the aim of identifying good practice and associated challenges in the delivery of SFH interventions.

2. Methods

The mapping survey sought to identify services or interventions targeted at reducing smoking in the home. The mapping questionnaire (see Appendix 1) was adapted from a previous mapping exercise conducted by the Centre for Public Health, Liverpool John Moores' University which identified and described service models in the North West of England (Jones et al, 2009).

Scotland's SFH initiatives were identified by contacting SFH coordinators identified through ASH Scotland's Local Alliances Officer and NHS Health Improvement Officers. English SFH projects were identified through the nine Regional Tobacco Policy Managers whose contact details are available on the Smoke-free England website.¹

The questionnaire was distributed during July and August 2010.

For each service, intervention or activity the following information was collected:

- name of service intervention and contact details
- aims and objectives
- a description of the service intervention delivered
- additional support elements to service provision
- other service providers working on the intervention
- sites where intervention is delivered

¹ <http://www.smokefreeengland.co.uk/>

- target population
- progress towards key local and national targets
- description of monitoring systems to measure effectiveness of the interventions
- outcomes from monitoring systems
- costs and sources of funding
- staffing structures

Questionnaire data was analysed thematically to provide a descriptive report detailing existing SFH interventions in each local authority area in Scotland and selected areas of England.

This report does not provide detail on all tobacco control activities in any one area, only activities specifically focussed on smoke-free homes. It is important to note that the data presented in this report is limited by the level of response from each area. Some areas provided in-depth detail on their SFH interventions while others were not able to provide all the information asked for in the survey.

3. Mapping Scotland's Smoke-free Home Interventions and Activities

This section describes SFH interventions in Scotland. The first part of this section details the activities currently undertaken to reduce children's exposure to SHS in the home. Further sub-sections include target populations, locations of delivery and monitoring and evaluation structures.

3.1 Sample

Information on the range of services, interventions and activities to reduce smoking in the home was received from 13 of the 14 (93%) health board areas in Scotland. Twenty-two surveys were completed and returned. Greater Glasgow and Clyde (GGC) returned nine completed surveys reflecting the work carried out in the various Community Health Partnership areas within the GGC health board area. NHS Forth Valley returned two surveys, one from Falkirk, and the other from the Culterhove area of Stirling.

Ten health board areas are currently delivering smoke-free home interventions. Four health board areas, Lanarkshire, the Western Isles, Grampian and the Borders areas report that they are still in the development stage of their smoke-free home interventions. However where definitive plans for development are reported they are included in this report.

The Orkney Islands is the only health board area in Scotland not currently undertaking any activity in regard to smoke-free homes due to capacity issues. The Orkney Islands are comprised of 70 islands and skerries; the largest of which has a population of almost 20,000. Staffing is limited to one part-time cessation coordinator and one part-time cessation advisor. With reduced capacity there is little scope for SFHI, although staff are committed to the SFH agenda.

3.2 Types of service intervention and activity

The respondents were asked to provide a description of their SFH interventions. The responses identified a range of activities designed to promote and deliver smoke-free homes in Scotland. Table 1 overleaf provides a service description for each health board area. Raising awareness of SHS in the home is carried out in all Scottish health board areas with the exception of the Orkney Islands.

Table 1: Scotland's NHS health board areas and smoke-free home interventions elements

Health Board Area	In Development	Complete smoke-free home Promotion	Stepped Pledge	Training for Professionals	Promotion of Home Fire Safety/ Fire safety Checks	Pre-School/ School/ Youth work	Raise Awareness
Ayrshire & Arran			Yes	Yes	Yes	Yes	Yes
Borders	Yes		Yes				Yes
Dumfries and Galloway		Yes		Yes		Yes	Yes
Forth Valley			Yes		Yes	Yes	Yes
Forth Valley (Falkirk)			Yes	Yes	Yes		Yes
NHS Fife			Yes		Yes		Yes
East Renfrewshire CHCP				Yes			Yes
NHS Greater Glasgow and Clyde				Yes			Yes
West Glasgow CHCP (Kingsway)							Yes
West Glasgow CHCP						Yes	Yes
NHS Greater Glasgow and Clyde ***						Yes	Yes
South East Glasgow CHCP				Yes			Yes
South West Glasgow CHCP				Yes		Yes	Yes
North Glasgow CHCP			Yes	Yes	Yes	Yes	Yes
West Dunbartonshire				Yes		Yes	Yes
Grampian	Yes		Yes	Yes			Yes
NHS Highland			Yes		Yes		Yes
Lanarkshire	Yes		Yes	Yes			Yes
Lothian			Yes	Yes	Yes	Yes	Yes
Shetland						Yes	Yes
Tayside			Yes		Yes		Yes
Western Isles	Yes						Yes
Total	3	1	11	12	8	10	22

***This project is not a smoke-free homes initiative but has elements of second-hand smoke awareness raising within its structure.

 Denotes CHCP areas within NHS Greater Glasgow and Clyde

3.2.1 Pledge systems

In terms of SFH initiatives, only one area (Dumfries and Galloway) has adopted the pledge approach of promoting completely smoke-free homes. Eleven health board areas have adopted a stepped pledge system. For example, people register with the SFH interventions to make a pledge to make their homes completely smoke free (Gold pledge) or to smoke only in one well ventilated room and never in front of children (Silver pledge).

3.2.2 Training Practitioners

Training professionals in SHS brief interventions is a model adopted by six health board areas. Greater Glasgow and Clyde (GGC) have adopted the Roy Castle Lung Cancer Foundation training “Reducing Children’s Exposure to Secondhand Smoke.” This involves a ‘training the trainer’ course that enables participants that work with pre-school children and families to:

- (i) Deliver the training the trainer course locally and
- (ii) Deliver the half day SHS Brief Intervention training.

The training programme centres on a “Five-Point Plan” that is based on behaviour change principles which involve the following:

1. Assessing exposure to SHS
2. Raising the issue
3. Assessing readiness to change
4. Taking action according to readiness to change
5. Follow up

In terms of sustainability this training programme anticipates that those who attend the training deliver brief interventions and include this within their daily practice.

Other NHS health board areas that are currently conducting training sessions with health workers, early year’s practitioners and others are:

- Ayrshire and Arran
- Forth Valley (Falkirk)
- Grampian
- Lothian
- Dumfries and Galloway
- Lanarkshire

3.2.3 Pre-school/Schools/Youth based interventions

Seven health board areas actively engage with pre-school establishments, schools and youth groups to raise awareness of and facilitate a reduction in SHS in the home.

3.2.3.1 NHS Shetland

The Health Improvement Team in conjunction with local young people developed a smoke free homes promotion focusing on a family of puffins. They produced a smoke free homes leaflet featuring the family and a DVD called '*Cut to the Action*' featuring smoke free home messages. In addition they have developed an education pack designed to meet the Curriculum for Excellence Health and Wellbeing outcomes² (**see appendix 3**), which is to be delivered to children and young people aged 3- 14 years. The education package will start at nursery, cover primary school years, and up to Secondary 3³ (the secondary schools pack will include the DVD).

The Smokefree Homes part of the package is delivered to primary 3 - 4 children (aged 6 – 8 years) and highlights the 3 strand '*Puff*' promise for parents:

- Smoke outside the house and car at all times
- Never smoke in front of the children
- If smoking in the house it will be in one room that is well ventilated, and never in the presence of the children

3.2.3.2 NHS Ayrshire and Arran

NHS Ayrshire and Arran are primarily engaging with pre-school establishments and groups to raise awareness of and encourage a reduction in children's exposure to SHS in the home. They are

- developing appropriate campaign materials and resources for use within pre-five establishments, maternity services, and for distribution to parents and carers
- introducing a campaign highlighting the dangers of second-hand smoke to babies and young children by distributing information packs and referral into smoking cessation service to all new parents in Ayrshire and Arran
- designing, developing and delivering a two strand prevention and education campaign within 111 pre-five establishments within specific post codes areas of highest smoking prevalence and deprivation
- developing a smoke free homes and zones resource pack and educational materials.

3.2.3.3 NHS Forth Valley

The smoke-free homes pilot in Culterhove will raise awareness of second hand smoke amongst Culterhove's young people by following up on the pilot smoking cessation activity at the YT club. The project will involve the young people designing a logo for the pilot.

3.2.3.4 NHS Highland

As part of the Highland's 'Smoke-Free Home and Smoke-Free Car Project' a poster competition was held for pupils from primary years 6 and 7 to create a

² Curriculum for Excellence Health and Wellbeing: experiences and outcomes (http://www.ltscotland.org.uk/Images/health_wellbeing_experiences_outcomes_tcm4-540031.pdf
Accessed 24th Nov 2010) See Appendix 5.

³ Secondary 3 is pupils aged 13-14.

poster that encourages families to protect themselves from the dangers of SHS by keeping a smokefree home and car. In addition a Tobacco Prevention Roadshow was also held for secondary and primary school pupils.

3.2.3.5 NHS Dumfries and Galloway

In Dumfries and Galloway the 'Smokefree Homes' intervention will incorporate SHS awareness sessions in selected primary schools. The team will assess the level of knowledge of second hand smoke amongst those pupils who have attended the awareness sessions and compare it with schools who have not received the awareness sessions.

3.2.3.6 NHS Lothian

West Lothian is working with the majority (n=55/66, 83%) of primary schools to involve pupil councils (children from primaries 4 - 7) in each school. The children will produce an information leaflet about SHS for parents which will be sent home along with an NHS leaflet inviting parents/carers to make a 'pledge' to restrict smoking in the home and family car. Many schools have also expressed interest in using SHS as a project which will run throughout the school session as part of the Curriculum for Excellence. In some schools, parent councils have requested training on SHS awareness. The intention is to use West Lothian as a pilot area for the involvement of primary schools, with a view to evaluating this prior to a possible roll out in the other three Local Authority areas (East Lothian, Midlothian and City of Edinburgh).

3.2.3.7 NHS Greater Glasgow and Clyde

Although not directly linked to the smoke-free homes campaign, NHS GGC has developed a tobacco education initiative, entitled 'Smoke-Free Me'. Each primary school in the health board area is offered the scheme once every three years, ensuring every child is given the opportunity to participate.

Targeting primaries five, six and seven, lesson plans linked to the Curriculum for Excellence cover the following topics:

- Smoking Values, Attitudes and Behaviours
- Secondhand Smoke
- Cigarette Contents and Effects on the Body
- Peer Pressure and Influences

A DVD and leaflet on SHS is used in the delivery of the lesson plan. The initiative has continued to maintain high levels of participation across the board area with over 90% of primary schools participating in the programme in 2009/10.

The **West Community Health and Care Partnership (CHCP)** have developed a SHS working group in partnership with key partners (nurseries, health visitors and PACT team) that will introduce pre-school children in nurseries to the harmful effects of smoking and SHS through arts and crafts, and smoke free homes and cars workshops. They will further build the capacity of nursery staff to promote the tobacco free childhood campaign. The objectives of the initiative are:

- To educate children on tobacco related issues and formulate their attitudes towards smoking.
- To increase capacity and skills of nursery staff and empower them to engage with parents in discussion on tobacco related issues.
- To engage with parents in order to increase their awareness regarding SHS and smoking cessation

In **North Glasgow CHCP**, the Smokefree Homes Coordinator engages directly with parents and carers through the community, in particular those with children under the age of five via:

- Nurseries
- Schools (primary 1 induction)
- Weaning fayres
- Toddler Groups
- Bounce & Rhyme Sessions in local libraries
- Baby clinics within health centres
- Community Events

In **West Dunbartonshire**, the Health Improvement Team Smoking Cessation Service has created a multi-disciplinary pack for local schools that includes all aspects of smoking including information on SHS. This is being delivered as part of the Equally Well project in the Whitecrook area of West Dunbartonshire.

3.2.4 Promotion of Home Fire Safety

Eight health board areas are currently working with local Fire and Rescue services to promote home fire safety checks as part of their SFH interventions. For example, households in NHS Fife that sign up to the smoke-free pledge are able to request a home fire safety risk assessment and free smoke alarm if required. In Tayside those who sign up to the SFH pledge will receive a priority visit from Central Scotland Fire and Rescue.

In Ayrshire and Arran (as with other health board areas) the promotion of home fire safety services is included within the SFH campaign materials and information leaflets.

3.2.5 Engaging with Credit Unions

NHS Forth Valley's aim is to promote financial inclusion by encouraging smokers who sign up to the SFH pledges to save money as they reduce their expenditure on smoking. The Culterhove SFH project will encourage those who have reduced their smoking through the pledge to save money in a SCU account. Those who make a successful quit (as evidenced by smoking cessation workers) during the lifetime of the project will receive £5 paid into their SCU account.

3.2.6 Smoking cessation services

All health board areas with SFH interventions in place mentioned the additional support of smoking cessation services within their SFH interventions. Parents who smoke and sign up to a SFH pledge are offered access to smoking cessation services if requested.

3.3 Target population

Scotland's SFH interventions target a range of populations. **Appendix 4** provides a description of each health board areas' SFH target populations. As noted previously, six health board areas are training practitioners who work with families and children.

Further populations specifically targeted are:

- Adults (n=20/22, 90%)
 - Smokers (n=17/22, 77%)
 - Non-smokers (n=15/22, 68%)
- Children (n=15/22, 68%)
- Pregnant women (n=13/22, 59%)
- Young People (n=10/22, 45%)

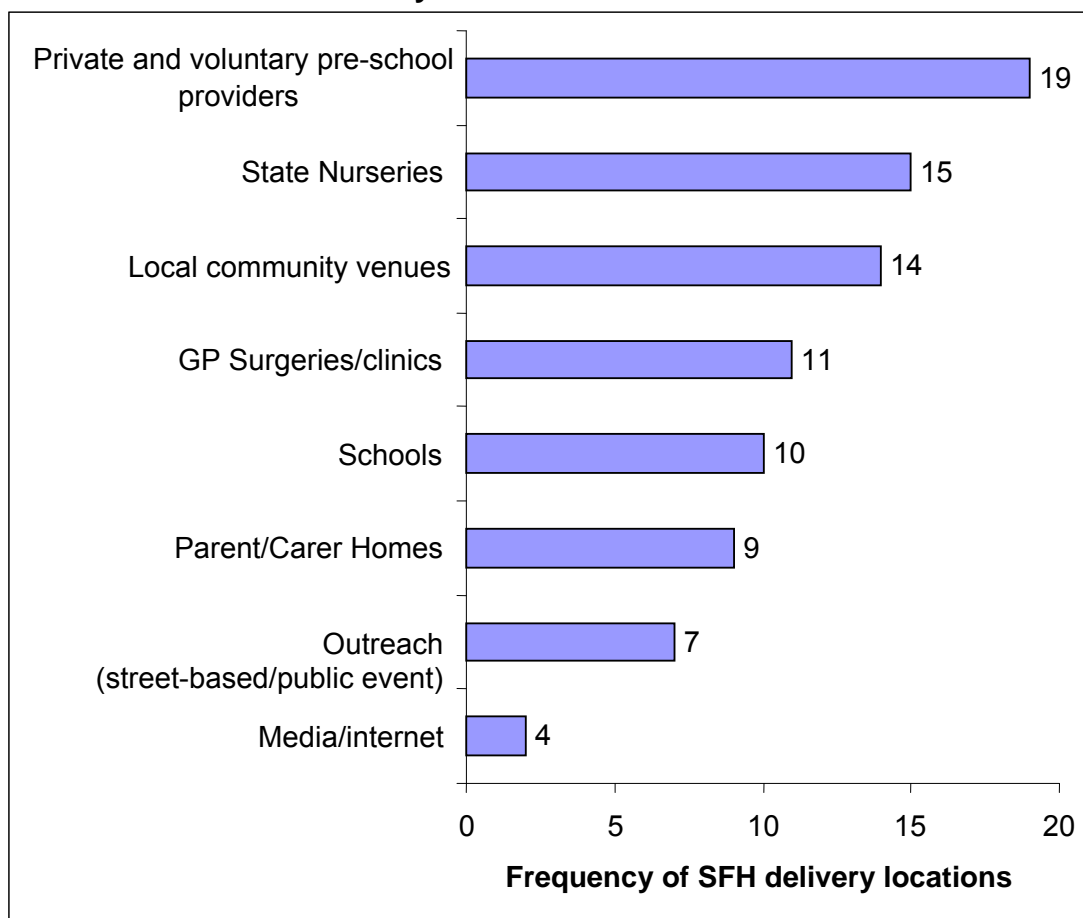
The Kingsway Tobacco Pilot Project (West Glasgow CHCP) targets adult populations of minority ethnic backgrounds residing in the Kingsway high rise flats. The aim is to address the needs of what is a culturally diverse population and develop culturally appropriate smoke-free services. Adopting a community participative model, the project has recruited six sessional workers of different ethnic origins, reflecting the diversity of residents within the flats.

3.4 Location of delivery

The 22 SFH interventions included in this report are delivered in a variety of locations (chart 2). Eleven health board areas deliver a SFH intervention, via training and information provision for staff, to a range of pre-school providers, including state nurseries, private nurseries, and mother and toddler groups.

More recently, NHS GGC have been supported to carry out research on smoke-free cars (Semple et al, 2010) by a local newspaper, the Evening Times, and its Glas-goals health campaign.

Chart 2: Location of delivery of SFH interventions



3.5 Monitoring and evaluation: evidence of effectiveness

There is no formal national framework for monitoring SFHIs. NHS Health Scotland provided a two day evaluation support session for members of the Second Hand Smoke Coordinators Network⁴ and members of the National Smoking Cessation Coordinators Network. The session included presentations on:

- Introduction to evaluation
- Evaluative cultures
- Evaluating your work

The thirteen health boards that responded to the survey have or plan to have some form of monitoring and evaluation of their SFH intervention.

The Borders, Lanarkshire, and the Western Isles are currently developing the evaluation systems for their projects.

NHS Forth Valley (Falkirk) and Grampian were developing their monitoring systems at time of writing. NHS Grampian reported that they plan to monitor

⁴ The Second Hand Smoke Coordinators Network is hosted by NHS Health Scotland and aims to provide an opportunity for those involved in smoke-free homes initiatives to meet to share and discuss information and support practice.

the pledges received with follow-up of participants at a later date. Also the training for professionals that will be offered to family support workers will be evaluated.

Where it has been possible to identify the numbers of smoker households in the monitoring and evaluation frameworks these have been included. However many areas did not report on the distinction between smoking and non-smoking households.

The following sub-sections describe the monitoring and evaluation frameworks of a selection of smoke-free home interventions by health board.

3.5.1 NHS Greater Glasgow and Clyde

In 2009, NHS Greater Glasgow and Clyde planned and co-ordinated the roll out of training which aims to reduce children's exposure to SHS across its CH(C)Ps and maternity services. Based on the Roy Castle Foundation training programme, GGC training aims to:

- increase awareness about the effects of SHS, particularly to children's health;
- equip participants with the knowledge and skills to help them carry out brief interventions with parents/carers to help them reduce children's exposure to SHS inside and outside the home; and
- familiarise participants with 'the five-point plan' as a framework for the brief intervention. The five-point plan involves: assessing exposure to second hand smoke; raising the issue; assessing readiness to change; taking action according to readiness to change; and follow up.

A monitoring and evaluation framework (**see appendix 5**) was developed by GGC and an independent consultant to evaluate the brief intervention training in order to ascertain whether

- the training is being delivered as intended
- some of the outputs, all of the short term outcomes and some of the medium term outcomes have been achieved. These are detailed within a logic model put together for the monitoring and evaluation framework.

Using a mixed method approach, the evaluation of the training involved

- a questionnaire which was completed prior to the training commencing (n=226/231, 98%)
- a post-training reaction questionnaire (n=229/231, 99%)
- a 3 Month follow up questionnaire (n=162/231, 70%) and
- qualitative interviews/focus groups with a sub-sample of those who agreed to be followed up (n=16/231, 7%)

The evaluation of the training was reported in December 2010 (Gordon J, 2010). The main findings suggest that participants on the training:

- Felt the training was useful and a 'good use' of their time
- Improved their knowledge and confidence around SHS and its effects on children's health
- Were more likely to intervene with families and follow them up if they were part of health visiting team
- Used the information leaflet on SHS produced by GGC as an opportunity to raise the issue of SHS in a 'non-invasive' manner

However, in terms of the delivery of the five-point plan between the end of the training and follow up, there was a reduction in confidence in

- describing the constituents of tobacco smoke
- helping families overcome difficulties in making their home or car smoke free and
- dealing with relapse.

Furthermore, in the interviews and focus groups, participants had general difficulty recollecting the training content, remembering what the five-point plan entailed and difficulties executing the five-point plan.

The training is based on the view that if exposure to SHS in the home and car cannot be eliminated then restrictions, such as smoking in one room, should be encouraged. A restriction in smoking in the home is believed to assist in making a *subsequent* elimination of exposure more likely. However, some participants found this message confusing and wanted more clarity on 'exactly' how the effects of SHS exposure can be reduced.

The evaluation has provided some robust findings and recommendations for further consideration and highlights the importance of targeting training to appropriate professional groups.

Prior to developing the smoke-free homes initiative in West Dunbartonshire CHCP, the CHCP commissioned research to identify an understanding of the behaviour and attitudes of smokers in the Whitecrook area in order to inform the development of the social marketing communication strategy on smoking.⁵

The research took place in November and December 2009 and provided recommendations on the planning, implementation and evaluation of two social marketing interventions to reduce smoking prevalence in the area. The programmes sought to enable the population of Whitecrook to lead healthier, smoke-free lives by:

- increasing the number of people considering a quit attempt, and
- increasing the number of smoke-free homes.

To address the first objective, a bespoke quantitative study utilising door-to-door interviewing was employed with responses collated from a specified geographic area within Whitecrook. Specifically the research sought to

⁵ PowerPoint presentation Scott Porter Research and Marketing

establish a baseline profile of Whitecrook residents examining demographics, lifestyle, smoking behaviour, attitudes towards quitting, and use of smoking cessation services. The research also explored the attitudes of primary carers of pre-school children in Whitecrook towards the issue of second hand smoke noting

- current awareness and beliefs
- smoking behaviour in the context of pre-school children in the home/car, and
- attitudes (motivators/barriers) towards creating a smoke-free home/car.

A similar research strategy was employed prior to the roll out of the smoke free homes/zones initiative in East Glasgow.

Greater Glasgow NHS Board commissioned a process and outcome evaluation of the smokefree homes and zones initiative in East Glasgow for the period September 2005 – December 2007 (Durkin et al, 2008)

Five main approaches were taken in conducting this evaluation.

- A quantitative (questionnaire-based) survey of attitudes and practices concerning smoking restrictions in the home and the car, with measures collected pre- (*Time 1*) and post- (*Time 2*) participation in the SFHZ initiative.
- A qualitative analysis based on interviews conducted with participants post involvement in the initiative.
- A qualitative analysis of open-ended responses to the questionnaire, concerning the programme experience and related observations.
- Interviews with key staff members handling recruitment.
- A short postal survey of school staff who assisted in recruitment.

The evaluation report documents the challenges inherent in smoking-related research. For example, there were some difficulties in recruiting participants in to the intervention itself in the first instance and further difficulties experienced in recruiting respondents to the accompanying evaluation.

In total, 163 participants took part at Time 1 of the evaluation study - 48 were recruited to the Intervention group (27 non-smokers and 21 smokers that took part in the SFH/Z initiative) and 115 (71 non-smokers, 44 smokers) to the Control group (these did not participate in the SFH/Z intervention).

Approximately three months after completing the initial questionnaire, participants in the Intervention group and Control group were re-contacted and requested to complete the second questionnaire. Only 17 participants in the Intervention group and 24 participants in the Control group participated at Time 2. Very few smokers (4 in the Intervention group, 5 in the Control group) remained in the study at Time 2.

A key finding from the evaluation was the importance of enlisting the support of nurseries/ schools/ health professionals. Furthermore, effectively marketing

the project was regarded as important. The report's authors concluded that the supportive nature of the SFH initiative needed to be conveyed to potential participants at the outset whilst the relevance of the initiative to non-smokers needed to be brought out more effectively. The report suggested a community champion to promote the programme could be an effective technique for attracting attention and potential participants.

3.5.2 NHS Highland

Participants signing up to NHS Highland's Smoke-Free Home and Smoke-Free Car Project's phone line are asked a number of key questions relating to:

- Numbers and age of children in house
- Numbers of smokers in the house
- Level of 'promise' that they are signing up to (e.g. diamond, gold, silver, bronze)
- Where smoking is allowed (in home and car)
- Where they heard about the project
- Whether they would like contact with a smoking cessation advisor

They are then asked for permission to be contacted in the future for evaluation purposes.

3.5.3 NHS Shetland

NHS Shetland is monitoring the delivery of the education packs for schools which includes the smoke-free homes leaflet. The returns from the 'Puff Promise' smoke-free home leaflets will be monitored on an ongoing basis.

3.5.4 NHS Dumfries and Galloway

The Smokefree Homes team in Dumfries and Galloway are using the GGC logic model as guidance in the development of their initiative. They will use a similar monitoring system as GGC for the training component; they will measure practitioners' levels of knowledge and confidence in raising the issue of smoking and smoke-free homes, and will measure the number of times those who have been trained raise the issues of SHS and SFH with their client group.

Furthermore they will use the 'Glow' system (an online intranet system for education) to assess the level of knowledge of SHS amongst those pupils who have attended the awareness sessions in primary school and compare it to schools who have not received the awareness sessions.

3.5.5 NHS Forth Valley

As previously noted the Falkirk CHCP area was developing their monitoring system at time of reporting. The Culterhove SFH project will monitor changes in smoking behaviours. Participants complete a smoking habit survey at sign-up to the project that will be followed up at three and six month intervals. The sign-up survey will show smoking behaviour, reasons for signing up and their desire to quit smoking. The follow up will track progress on keeping to the pledge, how the pledge has changed smoking habits and if they have attempted to quit.

An interim report has been compiled by the lead coordinators on the Cultenhove project. Initial findings demonstrate that the project has signed up 22 families to its smoke-free homes pledge via six community based activities. The target for the first year is 30 families. The monitoring has shown to date that:

- 15 families signed up to a gold pledge/4 to a silver pledge
- 12 homes had one or more smokers in the house
- Nine allowed smoking in the home
- 13 people wanted to quit smoking and 13 people had made a previous quit attempt.

Ten people participated in the three month follow-up survey. The findings suggest:

- Six people found the pledge easy to keep; four found it difficult
- Seven people attended smoking cessation
- Three quit smoking as a result of the smoke-free homes initiative

The project will target smokers who have decided to quit as a New Year resolution in January 2011. It will conclude the monitoring of the project during February and complete a final report by the end of March 2011.

3.5.6 NHS Fife

NHS Fife is currently monitoring their SFH intervention through an electronic database which includes all the pledge-makers' details from the original pledge sheet. At time of reporting they were in the process of developing a more comprehensive monitoring and evaluation framework for the initiative through a logic modelling process.

As of August 2010, they had received:

- Number of gold pledges = 821
- Number of silver pledges = 171
- Number of children protected by a pledge = 576
- Number of fire safety visits requested = 559

3.5.7 NHS Lothian

At time of reporting NHS Lothian had agreed that the indicators for the SFH initiative are:

- Number of households joining the initiative
- Level of child's exposure to SHS
- Smoking behaviour of adults in the home

Parents are also asked if they consent to their contact details being held for future contact to help with the evaluation of the initiative.

Arrangements for the staff training comprise of a questionnaire for staff to complete at the end of the training session which focuses mainly on knowledge about SHS and confidence in raising the issue with parents. A second questionnaire is sent to staff three months following the training which focuses on the benefits of the training in relation to practice around SHS and

the frequency of staff raising the issue with parents in the three months since the training.

Apart from the pledge form mentioned above, no further arrangements had been put in place in relation to the primary schools pilot.

3.5.8 NHS Ayrshire and Arran

The evaluation design will measure changes in participant beliefs, knowledge and efficacy in placing restrictions between the point of signing up to the campaign, and at three months follow-up. This is carried out through the use of a telephone survey conducted with (consenting) participants at these two points.

An interim evaluation was based on these data, in addition qualitative data from individual interviews carried out with seven participants (four non-smokers and three smokers) and eight stakeholders who had a role in supporting or implementing the campaign, was also collected.

3.5.9 NHS Tayside

The SFH scheme running in Perth records all applications to the scheme on a database. This contains demographic details plus the level of pledge at entry to the scheme. The database is updated with new information on an ongoing basis, including upgrades from silver to gold pledges.

3.6 Funding and staffing

Funding for the majority of SFH projects comes from NHS Boards via the Scottish Government Smoking Prevention Action Plan. The Scottish Government's overall budget for tobacco control activities from the period 2008/09 – 2010/11 was £42m of which £9m is committed for implementation of the Smoking Prevention Action Plan (SPAP).⁶ This was divided into around £1.5million annually given to local authorities to help them meet agreed enforcement outcomes and £1.5million given to NHS health boards to enable them to co-ordinate local smoking prevention activity. Many boards developed new SFH projects on receipt of this funding.

Information on the overall annual costs and funding source for the SFH interventions was reported by 11 of the 22 surveys returned. However insufficient information was received of budget details to provide any meaningful analysis. Where information was provided this is detailed in appendix 6.

⁶ Scottish Government (May 2008) Scotland's Future is Smoke Free: A Smoking Prevention Action Plan. <http://www.scotland.gov.uk/Publications/2008/05/19144342/13>

⁷ Scottish Government (December 2007) Better Health, Better Care: Action Plan. <http://www.scotland.gov.uk/Publications/2007/12/11103453/0>

From the 16 SFH initiatives that did provide details on funding sources, the following sources were identified:

- Smoking Prevention Action Plan (n=11)
- Local Authorities (n=3)
- Supporting partners (n=2)
- Community Health and Care Partnership (n=1)

3.7 Toward National and Local Targets

There are currently no national or local targets for reducing SHS in the home although the Scottish Government has set a HEAT target to increase the number of smoking quit attempts through cessation services.^{7,8} Nevertheless, four areas⁹ reported that the SFH interventions would work towards reducing smoking prevalence.

⁸ NHS Scotland, Local Delivery Plan Guidance 2011/12.

<http://www.scotland.gov.uk/Publications/2010/12/LDPGuidance201112/Q/Page/6>. Accessed 15.02.11

⁹ GGC, Shetland, Highland and Forth Valley.

4. A Brief Overview of Selected SFH Interventions in England

In contrast to Scotland's relatively recent development of SFH interventions, responses from the mapping survey show a number of areas in England have been delivering SFH interventions since at least 2003. This section describes nine key SFH initiatives reported via the mapping survey with additional information on a small number of interventions provided by SFH contacts.

4.1 Sample

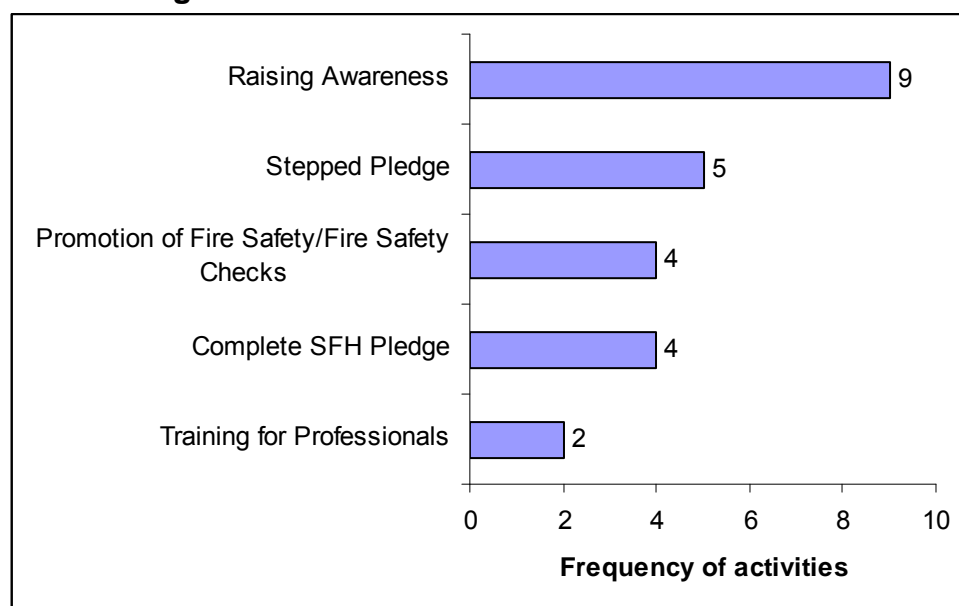
The mapping survey was sent to England's nine regional tobacco policy managers to distribute among their colleagues in order to identify SFH initiatives undertaken within their region. Nine surveys were completed and returned. The four regions that returned at least one survey were:

- East Midlands (Nottingham City; Lincolnshire)
- Yorkshire and Humber (North Lincolnshire; North East Lincolnshire; North Kirklees; Rotherham)
- North West (Wirral; Bury)
- South West (Bristol)

4.2 Type of SFH intervention and activities

All SFH interventions aim to raise awareness of the risks of SHS exposure to children's health. Chart 3 shows the range of activities. Five of the areas that responded promoted a stepped pledge approach whilst four areas promote complete smoke-free homes.

Chart 3: English SHS interventions and activities



All reported projects had links with fire safety and rescue services and the additional support element of smoking cessation services. Eight areas had links with midwifery services and health visitors. Other service providers involved in the smoke free interventions were:

- Families and children's services
- Education services
- Housing services
- Health trainers
- Pharmacists/dentists
- Youth services
- Community groups
- GPs
- Family Nurse Partnership

Four respondents indicated that they provide smoke-free home packs for individuals signing up to a SFH pledge. The packs contain items such as information leaflets on SHS, stickers, activity books and other items.

Nottingham City SFH intervention also enter families/adults who have signed up to a Gold Promise ("I/we promise to make the house totally smoke-free at all times") into a prize draw that is drawn biannually and offers a first prize of £50 and two runner-up prizes of £25 in high street vouchers.

The following sub-sections provide an overview of three English SFH interventions that have been selected to reflect the different approaches that have been adopted to promote and encourage smoke-free homes.

4.2.1 North Kirklees Smokefree Homes Project for Children with Compromised Respiratory Function

One particularly innovative project is that of North Kirklees. NHS Kirklees and Kirklees Community Healthcare Services commissioned a one year smokefree homes project for children with compromised respiratory function (CRF).¹⁰ The primary aim is to reduce the numbers of children with CRF exposed to SHS in the home. Children who are discharged from Dewsbury and District Hospital after an acute respiratory admission are referred to the community respiratory paediatric nurse. The project is introduced to parents and raises their awareness of SHS and its effects thus allowing them to consider the dangers of SHS exposure for their children and how they might best protect their child from SHS without pressuring them into complete smoking cessation. The project supports behaviour change in the home that is led by the parents. The objective of this approach is to empower the parents to take control in protecting their child from further respiratory hospital admissions.

In partnership with the community respiratory paediatric nurse a smoke free homes worker (SFHW) visited participating families three times over three months, and then reviewed the situation at six months to see if initial changes were still being implemented. Children were referred to the project with a

¹⁰ The project team is currently seeking further funding to continue the project.

range of conditions including asthma, 'wheezy' episodes and chronic lung disease.

Outcomes from the first year of the project were promising. Thirteen families took part in the project with seven achieving completely smoke-free homes. For those who were unable to go smokefree barriers (such as no outdoor space) were identified. As a result of the project, 25 children are now protected from the effects of SHS equating to 68% of those who were referred to the project. In addition there was a 100% reduction in the number of emergency respiratory hospital admissions three months following referral to the project compared to eight admissions in the three months prior to referral.

4.2.2 Bury Smokefree Homes Project

The Bury SFH project is a joint project between Community Services Bury (Bury Stop Smoking Service) and Greater Manchester Fire and Rescue Services. Both services promote the project through community events, clients who access the Stop Smoking Service, requests for a Home Fire Risk Assessment and during brief intervention training provided by the Stop Smoking Service.

The partnership between Community Services Bury and the Fire and Rescue Service enables both organisations to achieve targets pertinent to their own outcome measures, such as reducing smoking prevalence, four week quit targets and the number of homes with working smoke alarms and escape plans.

4.2.3 Smokefree North West – Take 7 Steps Out Campaign

Smokefree North West (based in Manchester) launched a public awareness campaign called Take 7 Steps Out in August 2010 aimed at reducing SHS exposure in the home. Following an extensive consultation exercise with professionals and the public, the Smokefree North West team developed a strategy to promote smokefree homes. The Take 7 Steps Out campaign¹¹ comprised a touring road-show of 24 locations over a one month period as well as a five week regional television campaign organised jointly with Fresh – Smokefree North East. Close collaboration with local media outlets aimed to ensure high levels of the campaign's dissemination into local communities.

The aim of the campaign was to provide a clear and consistent message to the public that 'Making homes completely smokefree by taking smoke right outside is the only effective means of protecting children from SHS; other measures such as opening a window or limiting smoking to certain areas do not provide sufficient protection.' The core message was therefore:

“To help protect children from SHS, take 7 Steps Out; because most of the harmful chemicals in cigarette smoke are invisible.”

¹¹ <http://www.take7stepsout.org.uk>

Television was considered an appropriate marketing tool for this campaign as it is watched by the majority of the population, is known to evoke emotion, and can help further debate and encourage opinion forming.

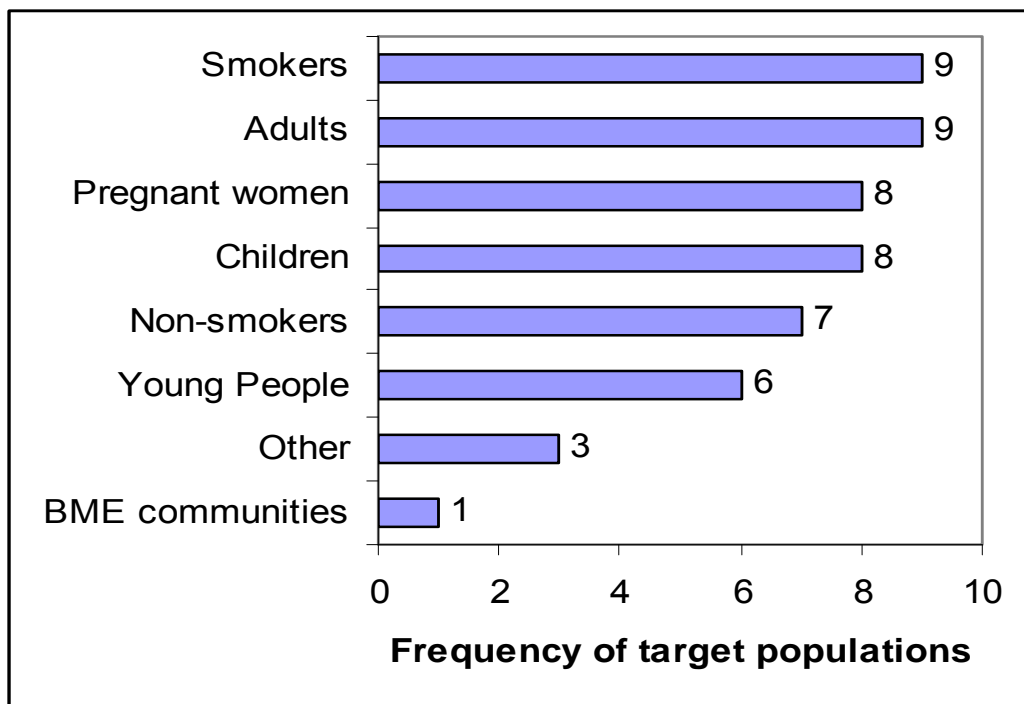
4.3 Target population

In addition to the target populations shown in chart 4, it is worth noting work undertaken in Nottingham City, Bury and Bristol.

Nottingham City Smoke Free Homes /Smoke Free Zones Project also targets European migrants, in particular those from the Polish community as well as black and minority ethnic (BME) groups, specifically Indian and Bangladeshi communities.

The Bristol initiative includes people with learning difficulties and mental health issues within its target strategy whilst the Bury project targets 'vulnerable' adults and older people.

Chart 4: English Target Populations



4.4 Location of delivery

The SFH interventions reported here deliver their interventions at a range of locations including parents' homes, schools, and early years' establishments including private nurseries and childminders; and community venues. Six of the nine areas also publicise their intervention through a variety of media outlets including local radio and/or internet sites.

4.5 Monitoring and evaluation: evidence of effectiveness

Six areas reported monitoring systems in place to measure the effectiveness of their intervention. Two areas are in the process of developing monitoring systems and one area did not respond to this question.

4.5.1 North Kirklees SFH intervention for children with compromised respiratory function (CRF) has monitored the progress of their one-year intervention. There were eight emergency respiratory hospital admissions in the three months prior to referral to the SFH intervention compared to one outpatient and one accident and emergency admission in the three months following referral; and no hospital admissions. Furthermore 68% of children who were referred to the project were reported to be living in smoke-free homes at time of reporting. However, the coordinators acknowledge the reduction in hospital admissions post intervention may not be directly linked to participation in the intervention and if successful in obtaining future funding they hope to develop further their monitoring and evaluation system.

4.5.2 Bristol Stop Smoking service introduced a 'Smoking in the Home' form into the Child Health Records in 2008. The forms are included at the 6-8 week and 8 – 10 month baby checks. Referrals from health visitors to Stop Smoking Services are recorded. These sources of information are used, in conjunction with the STORK database completed at ante-natal booking, to monitor the project's progress.

4.5.3 Lincolnshire Smokefree Homes work closely with midwives to provide brief intervention training and encourage referrals to the project. Midwives record smoking status plus exhaled breath Carbon Monoxide (CO) readings (if possible) at first ante-natal bookings. They ask parents if they wish to sign up for SFH and are referred to stop smoking services if required. Data collected from applications to the SFH project are used to ensure the project is targeting appropriate areas and potential participants. The aim is to follow-up 150 participants who sign up to a pledge after six months to ascertain progress in achieving smoke-free homes. An evaluation of the project is due in early 2011.

4.5.4 Bury Smokefree Homes project monitors their intervention against local targets. From 2008-09 and 2009-10 targets have been achieved in signing up targeted numbers of homes. They also use a geographic mapping database to record the postcodes of each home signed up to ensure they are reaching the areas with highest smoking prevalence.

4.5.5 Rotherham Smokefree Homes' intervention has commissioned Sheffield Hallam University to conduct an evaluation of their project. They have conducted telephone interviews with 36 households signed up to the smokefree homes and cars pledge. This included 20 households interviewed one month after signing up and 20 households six months after sign up. They have also conducted focus groups with two groups of six staff to gather their thoughts and experiences of the project, its training and resources.

Quantitative data has been collected through the dissemination of 600 structured questionnaires to pledged households with a return rate of 289 (48%).

Though still awaiting results from the questionnaire, initial findings from the households' telephone interviews showed that the project needed to promote the intervention more widely and consistently, particularly to smokers; some participants had forgotten they had signed a pledge and some reported that there was little SFH publicity compared to QUIT smoking services. Marketing materials need to emphasise the 'healthier, cleaner, cheaper' aspects of going smoke-free while the goody bags that are given to sign-ups should contain more parent/ adult orientated resources including information and tips on how to address issues such as negotiating with visitors and other family members who smoke. The staff consultation reported no issues and the project was generally perceived to be good. One issue that was highlighted was follow-up advice for staff on meeting some of the challenges that can arise when recruiting smoking households.

4.5.6 Nottingham City has been delivering a SFH intervention since 2003. Three evaluations have taken place since - the first covering 2003-06; the second covering 2007-08; and a third covering 2008-2009. A final report was due in December 2010.

Households that signed up to a promise received a postal evaluation form three months post sign-up. The first evaluation (2003-06) reported 531 sign-ups (428 Gold promises). A return rate of 99 responses (20%) revealed that 13 people had quit smoking; 14 had tried to quit; 31 had cut down and no change for 48.

In 2007 a steering group was re-established and a targeted action plan was developed that set a number of outputs and milestones that were to be achieved including number of homes in priority areas maintaining a change in smoking behaviour for at least three months and numbers of local workers attending briefing sessions on the project.

Since the beginning of the project in 2003 until the end of May 2009 there have been a total of 1009 families (including 965 children) who have signed up to the scheme. The majority of households have signed up to a gold promise and returned questionnaires suggest some positive changes within households.

However the low response rates to the telephone and postal follow-up surveys indicate that the responses may not reflect the overall impact of the project. People who returned their surveys or took part in the interviews may have been more successful in their ability to keep to the SFH promise or make positive changes in smoking behaviours than those who refused and this may have skewed the results.

4.6 Funding and Staffing

Funding levels for the nine SFH interventions reported here were varied with one area reporting funding of £6000 over four years for resource materials whilst another reported an annual budget of £53000.

Reported funding sources included both public and private sector funding. For example, three SFH projects reported funding from local Primary Care Trusts while two included funding from the Queen's Nursing Institute Innovation Award and the Pfizer Foundation.

Staffing for the English SFH interventions is largely built in to current roles. Staffing backgrounds include smoking cessation, community development, private sector (pharmaceuticals) and fire and rescue services.

4.7 Toward National and Local Targets

In the 2010 Tobacco Control Strategy (TCS) for England,¹² the Department of Health set out the goal to 'protect our families and communities from tobacco-related harm: aspiring to increase to two-thirds the proportion of homes where parents smoke but that are entirely smokefree indoors by 2020. The effect this has in reducing exposure levels will be validated by assessing cotinine levels in children in annual Health survey for England.'¹³ Prior to this there was no national target for smokefree homes and it is yet to be seen whether this aspiration, that was part of the previous government's tobacco control strategy, will be taken forward by the current coalition government.

At time of reporting four respondents were working towards national reduction targets in adult smoking prevalence figures. Six respondents reported working towards local targets based on the numbers of households signing up to the SFH interventions.

¹² Developed by the Labour government 2007-2010

¹³ Department of Health, *A Smokefree Future; A Comprehensive Tobacco Control Strategy for England*. 2010

http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@ps/documents/digitalasset/dh_111789.pdf

5. Discussion

The mapping of Scottish and English SFH interventions has provided a mixed picture. There are a range of interventions and activities taking place although the effectiveness of these activities remains unclear at this point. Where evaluations have been reported these have been included (sections 3.4 and 4.5) and will be discussed later.

Scotland, unlike England has not set targets for increasing the numbers of smoke-free homes. Furthermore there has been no direction from the Scottish Government in terms of funding for SFH despite £4.5 million being given to health boards to co-ordinate local smoking prevention activities over three years (2008 – 2011). Many areas have used the smoking prevention monies to develop their SFH projects although there is no consistency in terms of funding levels with some areas funded to only cover resources (such as marketing materials) while others have significantly more funding to develop their projects.

5.1 *Interventions and activities*

It is notable that most health board areas have adopted the stepped pledge approach rather than asking parents to completely stop smoking in the house. It is likely that a stepped approach may be a useful way of engaging with smoking parents, giving parents control over how and when they make further smoking restrictions in the home. However there is the possibility that the stepped approach can confuse the overall harm reduction message by suggesting that partial smoking restrictions may be sufficient to protect children from SHS exposure (Ritchie et al, 2009). Clearly physical distance and separation of children from smoking activity will, to some extent, reduce exposures (Cherrie, 1999), and there is recent evidence that a stepped approach or partial household restrictions can reduce SHS exposure (Johansson et al, 2004; Akhtar et al., 2009). It remains unclear whether or not these stepped reductions in SHS exposure produce observable health benefits when compared to the much greater exposure reduction achieved by having a smoke-free home.

At present there is no uniform approach among the stepped pledge interventions currently in place - from the four stage pledge programme in NHS Highland to the complete smoke free homes and cars pledge employed by NHS Dumfries and Galloway.

Evidence from the literature suggests that the most effective interventions are those based on 'strong behaviour change theories' that include repeated or longer contact with parents and carers (Gehrman and Hovell, 2003). However a recent Cochrane review of interventions that examined parental education and counselling programmes to reduce children's SHS exposure was unable to determine that one intervention reduced parental smoking any more effectively than others (Priest et al, 2008).

Although it could be assumed that parents of sick children might be more motivated to reduce SHS exposure in the home than parents of healthy children, recent reviews of SFH interventions did not find this to be the case (Gehrman and Hovell, 2003; Priest et al, 2008). In this mapping survey only one intervention reported specifically working with children with respiratory illnesses (see section 4.2.1). Initial findings suggest a reduction in hospital admissions following the intervention although whether there is a direct causal link between the intervention and a reduction in admissions has yet to be established. Furthermore it is not clear whether the apparent effect of reducing admissions will be sustained over the medium to long-term.

All health board areas have linked up with local smoking cessation services within their SFH interventions. Signing a SFH pledge may be the window of opportunity in terms of parents' motivation to quit. The inclusion of smoking cessation services in SFH interventions may offer motivation for parents to quit smoking and contribute to longer-term abstinence than stand alone SFH interventions (Hovell et al, 2009).

Six Scottish health board areas are currently providing training on brief interventions and SHS awareness raising for practitioners working with families and children. A recent study by Ritchie et al (2009) identified gaps in professionals' knowledge of the risks of SHS exposure in the home on children's health and effective interventions, such as whether to implement a stepped approach similar to the pledge programmes or whether to advocate a complete smoke-free homes approach. In addition it was noted that some professional health workers are reluctant to address the issue for fear of damaging relationships with parents. Thus they identified a need for suitable training and information for professionals on both SHS exposure and the development of appropriate attitudes and skills for professionals to work effectively with parents and carers who smoke. Such training may help build on practitioners' knowledge and confidence with regard to supporting parents on reducing SHS in the home and integrate their learning in to daily practice. The evaluation of GGC's training programme suggests that a clear targeting strategy is required to ensure those practitioners with sustained contact with families, such as health visitors, are provided with SHS training.

5.2 Partnership working

A range of partnership working has been identified in this survey including education departments, fire and rescue services and credit unions. Links with partner organisations increases the opportunities to raise SHS awareness within the population and can provide organisations with new opportunities to meet their own targets. The inclusion of children and young people in the development of resources and materials for the SHS interventions is common among the SHS interventions described in this paper with many working jointly with local education departments. Three areas have incorporated SFH into the Curriculum for Excellence while a GGC CHCP has delivered SFH through the Equally Well project.

Including fire and rescue services within SHS interventions is common, both in Scotland and England and appears to work well. SHS awareness raising can

be embedded into the work of fire and safety officers, and families can access fire safety advice and equipment such as free smoke alarms. Furthermore working with local SFH projects can assist fire departments to reach set targets for increasing the numbers of homes with smoke alarms.

One area in Scotland has adopted the novel approach of encouraging smokers to open a credit union account when signing up to the SFH initiative with a small incentive for those who successfully quit smoking. Early indications suggest this has had a limited impact but it may be worth considering including Credit Unions as an adjunct to SFH interventions as they may act as a motivating factor for some parents who are able to save the money previously spent on cigarettes and could promote financial inclusion to increase the number of people with savings and access to affordable credit.

5.3 Population Targeting

Integral to the success of SFH interventions is appropriate population targeting. As noted, North Kirklees has set out to target children with specific respiratory conditions while other areas are targeting BME populations, older people and adults with learning disabilities and mental health issues. Programmes to encourage smoke-free homes may need to be tailored to specific communities to achieve better results (Alwan et al, 2009; Lanumata, Thomson and Wilson, 2010). In order to achieve this community surveys may provide insight into the types of interventions that can help engage and influence the target population (Alwan et al, 2009). In Scotland, West Glasgow CHCP have undertaken a scoping exercise within a community of mixed ethnic backgrounds to ensure the development of an appropriate strategy to reduce SHS in the home that fits the cultural diversity of potential participants.

Media support may enhance the impact of community-based and family interventions that work through schools and other venues in reducing SHS exposure in the home and may help support practitioners in working with parents to reduce SHS in the home (Botelho and Fiscella, 2005). The 'Take 7 Steps Out' campaign in Manchester uses both internet and local television to push the message that smoking outside is the most effective way to protect children from second-hand smoke. NHS GGC works closely with a popular local newspaper to ensure its smoke-free messages are disseminated to a wide population. A panel of those working in Scotland's field of tobacco control agree that education on the harms caused by SHS exposure is needed in the wider general population (Ritchie et al, 2009).

The use of the internet as a means of accessing information on local SFH interventions has been adopted by a number of projects in Scotland and England although the impact of these sites as an information resource does not appear to be included in any of the reported evaluations. It would be useful to gauge the impact of the internet as an information resource in order to measure the effectiveness of these as a recruiting tool and as a means of imparting information.

5.4 Monitoring and evaluation

All SFH interventions aim to, or currently monitor their projects. Some are monitoring the interventions against local targets such as reducing smoking prevalence among young people or in the case of fire and rescue, against organisational targets (e.g. increasing the numbers of homes fitted with fire alarms). As noted previously there are no Scottish national targets for increasing smoke-free homes or a national monitoring framework for projects to measure their performance by.

It is a mixed approach in terms of current monitoring and evaluation with some interventions commissioning independent research to evaluate their projects while others incorporate the monitoring into their daily workload. For the most part, projects are gathering basic information on participants with most areas implementing some follow-up at either three or six months post sign-up.

Current monitoring and evaluation strategies identified in this mapping study are somewhat limited. Few of the studies/evaluations included a 'control' group to measure their intervention against. Dumfries and Galloway is the only NHS area in Scotland that reported conducting an evaluation that compares learning outcomes between an intervention group and control group.

It is difficult to assess the effectiveness of interventions and identify best practice due to low response rates at follow-up, risk of bias in self-reports and the lack of a robust national framework for evaluation of SFH projects. Furthermore it is necessary to monitor the engagement of smoking households, particularly those with few or no restrictions on smoking in the home, as distinct from all households when attempting to measure and report on the effectiveness of the interventions.

6. Conclusion

This survey has shown there is considerable interest and enthusiasm from NHS and allied health bodies in helping families reduce SHS exposure in Scottish homes. A range of activities and resources are currently deployed across Scotland to achieve this goal.

In order to sustain and build on the work that is currently taking place the Scottish Government and local policy makers should:

- **Set a national target** for increasing smoke-free homes and develop measurable intermediate and endpoint targets to reduce SHS exposure in the home in order to support awareness raising work and work in Scotland's communities.
- **Develop a sustained national information and media** campaign to support the SFH initiatives of local NHS health boards. There has been recent media interest in the issue of smoking in cars and as such the issue of second-hand smoke exposure is already embedded to some degree in the public consciousness.

- **Develop effective local social marketing campaigns** that link into local SFH interventions with the aim of increasing parental knowledge and understanding of the benefits of creating a smoke-free family home. These should include in-built evaluation processes to measure their effectiveness.
- **Ensure continued funding** to develop and robustly evaluate new SFH interventions. Current funding (through the Smoking Prevention Action Plan) ends in March 2011.
- **Identify evidence-based best practice** through the development and implementation of a national framework for evaluating SFH projects. Work has already been progressed in this area by NHS Health Scotland and the Secondhand Smoke Coordinators Network (SSCN) and a continuation of this work would assist in the development of robust monitoring and evaluation systems that would help measure and compare the effectiveness of the range of interventions on offer against local and national targets, and identify best practice. Further funding should be sought to conduct a large scale randomised control trial.
- **Encourage wider dissemination** of SFH information by maintaining and widening the network of practitioners involved in SHS interventions in Scotland. The current SSCN has a strong core group of (mainly) health practitioners. This could be widened to include other groups such as Fire and Rescue services, community development practitioners and early year's workers. The SSCN currently provides a platform whereby ideas for SFH development and shared practice can be discussed and disseminated.
- **Continue to develop and evaluate SHS training** for relevant professionals to ensure SHS awareness is embedded in to a range of organisations that work with families and particularly targeting those with sustained contact with families. This would assist in ensuring best practice and sustainability in terms of continuous practitioner awareness, knowledge and confidence in delivering SFH interventions.
- **Support partnership working** between health, community development, education and fire and rescue services to help achieve local and individual organisational targets. Given the current economic climate, partnership working could help meet costs through the pooling of resources.

References

Akhtar, P. C., Haw, S. J., Levin, K. A., Currie, D. B., Zachary, R. and Currie, C. E. (2009) Socioeconomic differences in second-hand smoke exposure among children in Scotland after introduction of the smoke-free legislation. *Journal of Epidemiology and Community Health* 64:341-346

Alwan, N., Siddiqi, K., Thomson, H. and Cameron, I. (2009), Children's exposure to second-hand smoke in the home: A household survey in the North of England. *Health and Social Care in the Community*, 18: 257–263. doi: 10.1111/j.1365-2524.2009.00890.x

Botelho, R., and Fiscella, K. (2005) Protect Children From Environmental Tobacco Smoke, But Avoid Stigmatization of Parents: A Commentary on Pyle et al. *Families, Systems and Health*. Vol 23(1), Spring 2005, 17-20.

Cherrie JW (1999) The effect of room size and general ventilation on the relationship between near and far-field concentrations. *Applied Environmental and Occupational Hygiene*. 14:539-546.

Department of Health, *A Smokefree Future; A Comprehensive Tobacco Control Strategy for England*. 2010

Durkin, K., Heim, D. and Akhtar-Durkin, P. (April 2008) *Evaluation of the Smoke Free Homes/Zones Initiative*. NHS Greater Glasgow and Clyde

Gehrman, C. A. and Hovell, M. F. (2003). Protecting children from environmental tobacco smoke (ETS) exposure: a critical review. *Nicotine and Tobacco Research* 5: 289-301.

Gordon, J & Associates (November 2010) *Evaluation of Training to Reduce Children's Exposure to Second Hand Smoke: A Report Commissioned by NHS Greater Glasgow and Clyde*.

Hovell, M.F., Zakarian, J.M., Matt, G.E., Liles, S., Jones, J.A., Hofstetter, Larson, C.R., Benowitz, S.N., (2009) Counselling to reduce children's second hand smoke exposure and help parents quit smoking: A controlled trial *Nicotine and Tobacco Research Advance Access* published on October 29, 2009 *Nicotine Tob Res* 2009 11: 1383-1394; doi:10.1093/ntr/ntp148

Johansson, A., Hermansson, G. and Ludvigsson, J. (2004b) How should parents protect their children from environmental tobacco-smoke exposure in the home? *Pediatrics* Vol. 113 No. 4 April 2004, pp. e291-e295

Jones, L, Woolfall, K, Porcellato, L & McVeigh, J. (January 2009) *Evidence relating to new tobacco control priorities that aim to protect children and young people from exposure to tobacco: Evidence review and map of tobacco*

control activities in the North West of England. Centre for Public Health, Liverpool John Moores University

Lanumata, T., Thomson, G. and Wilson, N. (2010) Pacific solutions to reducing smoking around Pacific children in New Zealand: a qualitative study of Pacific policymaker views. *New Zealand Medical Journal*. URL: <http://www.nzma.org.nz/journal/123-1308/3945>

Priest N, Roseby R, Waters E, Polnay A, Campbell R, Spencer N, Webster P, Ferguson-Thorne G. (2008) Family and carer smoking control programmes for reducing children's exposure to environmental tobacco smoke. *Cochrane Database of Systematic Reviews* 2008, Issue 4. Art. No.: CD001746. DOI: 10.1002/14651858.CD001746.pub2.

Ritchie, D., Amos, A., Phillips, R., Cunningham-Burley, S., Martin, C. (2009) Action to achieve smoke-free homes- an exploration of experts' views. *BMC Public Health*. 9:112. doi: 10.1186/1471-2458-9-112.

Scottish Government, *Scotland's Future is Smoke Free: A Smoking Prevention Action Plan* (May 2008) Scottish Government. Edinburgh

Semple, S., Apsley, A., Glaea, K. and MacCalman, L. (2010) *Smoking in cars: A project report from the Scottish Centre for Indoor Air*. Scottish Centre for Indoor Air

Appendix 1: Smoke-Free Homes Mapping Questionnaire

Smoke-Free Homes Mapping Questionnaire

This mapping questionnaire intends to capture services, activities, programmes and interventions in Scotland that aim to protect children and young people from exposure to tobacco smoke in the home. This includes interventions aimed at families in order to raise awareness of second hand smoke in the home and may include other services such as school based education or community based smoke-free home interventions.

Please complete the following questions providing as much detail as possible on your smoke-free homes interventions. If you have more than one service for families and young people please fill in a questionnaire for each individual service. The findings from this study will help inform future smoking prevention, tobacco control and health promotion activities and services in Scotland. **Your help is much appreciated. By returning this questionnaire it is taken that you consent to participate in this study. Only include information you consent to being included in ASH Scotland's final mapping report.**

NAME OF SERVICE/INTERVENTION
GEOGRAPHICAL AREA (Please identify the area where the smoke-free homes intervention is based and postcode/s): Area:
At what level is that service delivered? (Please tick all appropriate) PCT <input type="checkbox"/> Local authority <input type="checkbox"/> Regional <input type="checkbox"/> National (NGO) <input type="checkbox"/>
CONTACT DETAILS (only include information you consent to being included in the report): NAME: ADDRESS: EMAIL:

Q1 ARE YOU INVOLVED IN SMOKE-FREE HOMES INTERVENTIONS? (PLEASE HIGHLIGHT RESPONSE)
YES IF YES, GO TO THE QUESTION 2
NO IF NOT, PLEASE TELL US WHY NOT & GO TO QUESTION 11

Q2 AIMS AND OBJECTIVES OF THE SMOKE-FREE HOMES INTERVENTION

Q3a PLEASE PROVIDE A FULLER DESCRIPTION OF YOUR SMOKE-FREE HOMES INTERVENTION (including design (e.g. pledged system, intended outcomes, outcomes measures, dates intervention started and due to end, follow-up provision)

Q3b PLEASE PROVIDE A DESCRIPTION OF ANY ADDITIONAL SUPPORT ELEMENTS TO YOUR SERVICE PROVISION IF APPLICABLE (e.g. links with smoking cessation services)

Q4 PLEASE TELL US OF ANY OTHER SERVICE PROVIDERS WHO YOU ARE WORKING WITH ON THIS INTERVENTION (e.g. fire service, education dept)

Q5 WHERE IS THE SMOKE-FREE HOMES INTERVENTION DELIVERED? (Please tick all appropriate)

- In parents'/Carers homes
- Schools
- State Nurseries
- Private Nurseries/child minders
- Voluntary Playgroups/mother & toddlers
- G.P surgery/clinic /hospital Please specify:
- Local Community venues
- Through outreach (e.g. Street based or public event)
- Through media formats (e.g. TV, internet) Please specify:
- Internet sites Please specify
- Point of sale (e.g. newsagent/supermarket)
- Other (Please specify):

Q6a TARGET POPULATION?(Please tick all appropriate)

Adults	<input type="checkbox"/>	<input type="checkbox"/>
Children (e.g. tobacco exposure)	<input type="checkbox"/>	<input type="checkbox"/>
Young people	<input type="checkbox"/>	<input type="checkbox"/>
Smokers	<input type="checkbox"/>	<input type="checkbox"/>
Non smokers	<input type="checkbox"/>	<input type="checkbox"/>
Pregnant women	<input type="checkbox"/>	<input type="checkbox"/>
Other <input type="checkbox"/> Please specify:		

Q7a PLEASE PROVIDE DETAILS OF ANY SET NATIONAL AND LOCAL TARGETS THAT YOU ARE WORKING TOWARDS WITH YOUR SMOKE-FREE HOME INTERVENTIONS:

NATIONAL:

LOCAL:

Q8a DO YOU HAVE ANY MONITORING SYSTEMS IN PLACE TO MEASURE THE EFFECTIVENESS OF YOUR SMOKE-FREE HOMES INTERVENTION? (Please circle)

Yes
No
In development

Q8b PLEASE TELL US HOW YOU ARE MONITORING YOUR SMOKE-FREE HOMES INTERVENTION.

Please list any evidence you have on the effectiveness of this smoke-free homes intervention such as outcomes from evaluations. If you have electronic copies of evaluation reports/papers which can be included in our mapping please send them to april.shaw@ashscotland.org.uk

Q9a BUDGET (Please list the overall annual cost of this smoke-free homes intervention (e.g. total for the last full financial year) :

Q9b FUNDING (Please list all current sources of funding):

Q10 STAFFING STRUCTURE (please detail the number of personnel employed and voluntary (full and part time) and their job roles within your smoke-free homes intervention. Please include seconded staff:

Number:

Discipline/Backgrounds:

Job Roles:

Volunteer component:

Q11 OTHER CONTACTS: (Please give details for any other second-hand smoke interventions in your area that you think should be captured in this mapping exercise including contact name, service name, telephone and email address where possible:

Appendix 2: REFRESH Research Board Membership

- Prof. Amanda Amos, Professor of Health Promotion, Head of Public Health Sciences, University of Edinburgh. REFRESH Partner
- Dr. Viv Binnie, University of Glasgow, Chair of STCA Co-ordinating Group
- Gordon Brown, Public Affairs & Communications Manager, Asthma UK Scotland
- Mary Cuthbert, Head of Tobacco and Sexual Health Policy, Scottish Government
- Professor James Friend, Chair of ASH Scotland Policy and Development Subcommittee, ASH Scotland Board Member
- Alison Macdonald, Health Improvement Programme Manager, Early Years and Families, NHS Health Scotland
- Deborah Ritchie, Senior Lecturer in Health Promotion, University of Edinburgh, REFRESH Partner
- Dr Sean Semple, Senior Lecturer, University of Aberdeen, REFRESH Partner
- Elaine Tait, Chief Executive, Royal College of Physicians, Edinburgh
- Dr Stephen W Turner, Clinical Senior Lecturer, Department of Child Health University of Aberdeen
- Martin Woodrow, Scottish Secretary, British Medical Association
- Sheila Duffy, Chief Executive, ASH Scotland
- Dr Rachel O'Donnell, Policy and Research Manager, ASH Scotland
- April Shaw, Senior Researcher, ASH Scotland

Appendix 3: Curriculum for Excellence Health and Wellbeing Experiences and Outcomes

Learning in health and wellbeing ensures that children and young people develop the knowledge and understanding, skills, capabilities and attributes which they need for mental, emotional, social and physical wellbeing now and in the future. Each establishment, working with partners, should take a holistic approach to promoting health and wellbeing, one that takes account of the stage of growth, development and maturity of each individual, and the social and community context. I can expect my learning environment to support me to:

- *develop my self-awareness, self-worth and respect for others*
- *meet challenges, manage change and build relationships*
- *experience personal achievement and build my resilience and confidence*
- *understand and develop my physical, mental and spiritual wellbeing and social skills*
- *understand how what I eat, how active I am and how decisions I make about my behaviour and relationships affect my physical and mental wellbeing*
- *participate in a wide range of activities which promote a healthy lifestyle*
- *understand that adults in my school community have a responsibility to look after me, listen to my concerns and involve others where necessary*
- *learn about where to find help and resources to inform choices*
- *assess and manage risk and understand the impact of risk-taking behaviour*
- *reflect on my strengths and skills to help me make informed choices when planning my next steps*
- *acknowledge diversity and understand that it is everyone's responsibility to challenge discrimination.*

Appendix 4: Scotland's NHS health board areas and SFH target populations

	Practitioners	Adults	Children	Young People	Smokers	Non-smokers	Pregnant women	Minority ethnic groups
Ayrshire & Arran	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Borders		Yes			Yes		Yes	
Dumfries and Galloway	Yes	Yes	Yes					
Forth Valley		Yes	Yes	Yes	Yes	Yes	Yes	
Forth Valley (Falkirk)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
NHS Fife		Yes	Yes	Yes	Yes	Yes	Yes	
East Renfrewshire CHCP (see GGC for some details)	Yes	Yes						
NHS Greater Glasgow and Clyde	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
West Glasgow CHCP (Kingsway)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
West Glasgow CHCP		Yes	Yes					
South East Glasgow CHCP	Yes	Yes			Yes	Yes		
South West Glasgow CHCP	Yes	Yes	Yes		Yes	Yes		
North Glasgow CHCP	Yes	Yes	Yes		Yes	Yes	Yes	

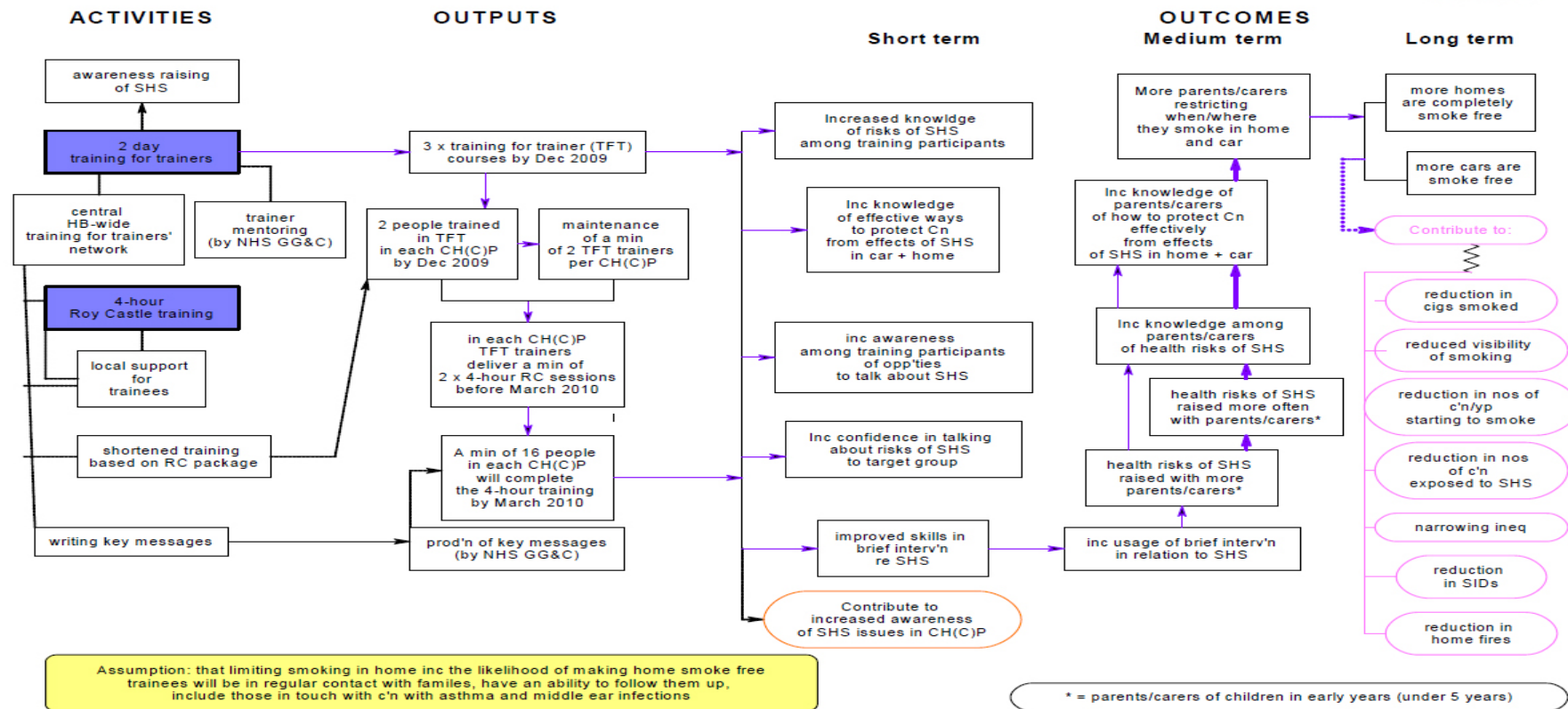
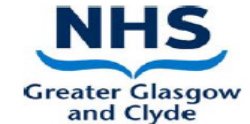
West Dunbartonshire	Yes							
Grampian	Yes	Yes	Yes		Yes			
NHS Highland		Yes	Yes	Yes	Yes	Yes	Yes	
Lanarkshire		Yes			Yes	Yes	Yes	
Lothian	Yes	Yes			Yes	Yes	Yes	
Shetland		Yes	Yes	Yes	Yes	Yes	Yes	
Tayside		Yes	Yes	Yes	Yes	Yes		
Western Isles		Yes	Yes	Yes	Yes	Yes	Yes	
TOTAL	12	20	15	10	17	15	13	1

 Denotes CHCP areas within NHS Greater Glasgow and Clyde

Appendix 5: NHS GGC Logic Model Framework



DRAFTED LOGIC MODEL FOR SHS TRAINING



Appendix 6: Scottish SFH Projects' Budgets and Funding Sources

	Budget (£)	Funding
Ayrshire & Arran	70,000	NR
Borders	NR	Smoking Prevention Action Plan Monies
Dumfries and Galloway	NR	NR
Forth Valley	542	50% Stirling council/50% NHS Forth Valley. Staff time is in kind from supporting partners
Forth Valley (Falkirk)	30,856	NHS Forth Valley Tobacco action Group & Falkirk Council
NHS Fife	NR	Smoking Prevention Action Plan Monies
East Renfrewshire CHCP (see GGC for some details)	staffing and venue costs only	East Renfrewshire CHCP
NHS Greater Glasgow and Clyde	10,000 p/a	Smoking Prevention Action Plan Monies
West Glasgow CHCP (Kingsway)	NR	Smoking Prevention Action Plan Monies
West Glasgow CHCP	NR	Smoking Prevention Action Plan Monies
South East Glasgow CHCP	NR	Smoking Prevention Action Plan Monies
South West Glasgow CHCP	1,200	Smoking Prevention Action Plan Monies
North Glasgow CHCP	Resources 7622 + staff costs	NR
West Dunbartonshire	N/A work carried out within remit of current roles	NR
Grampian	25,609 1st year	Smoking Prevention Action Plan Monies
NHS Highland	98,200	Smoking Prevention Action Plan Monies
Lanarkshire	TBC	Smoking Prevention Action Plan Monies
Lothian	25,000	Smoking Prevention Action Plan Monies
Shetland	11,000	NR
Tayside	NR	NHS Tayside, Perth & Kinross Council, Tayside Fire and Rescue, Fairfield Housing
Western Isles	Info not available	Smoking Prevention Action Plan Monies