A Process Evaluation of the Implementation of ASSIST in Scotland

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A Process Evaluation of the Implementation of ASSIST in Scotland

Final Report

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Executive Summary

This report presents findings from a process evaluation of the ASSIST (A Stop Smoking in Schools Trial) pilot in Scotland. ASSIST is a licensed peer-led, school-based smoking prevention programme that encourages the dissemination of non-smoking norms by training S1 (aged 12 to 13 years) and S2 (aged 13 to 14 years) students to work as peer supporters. Peer supporters are trained to have informal conversations with other students about the risks of smoking and the benefits of not smoking. The programme consists of seven training and feedback sessions with the peer supporters (peer nomination, peer recruitment meeting, peer supporter training and four follow-up sessions - where peer supporters meet with trainers and receive ongoing support), delivered over a 14-week cycle by trainers from outside the school who have attended a three-day course to enable them to deliver the programme.

ASSIST was previously evaluated through a large cluster randomised trial of 59 schools in South Wales and Avon, England with results published in the Lancet in 2008. Findings from this trial showed that ASSIST was effective and cost-effective at reducing smoking prevalence in young people. In 2010 ASSIST became a licensed programme and DECIPHer-IMPACT[1] Ltd was established to provide training, materials, support and quality assurance to maintain effective delivery.

ASSIST in Scotland

In 2013 the Scottish Government made a commitment to undertake a pilot of ASSIST in its national Tobacco Control Strategy.[2] One of the key differences between the delivery of ASSIST in Scotland compared with England and Wales is the age difference in school years. In England and Wales ASSIST is delivered to Year 8 students which is equivalent to S2 in Scottish schools. However, the age composition of year groups varies from England. At the end of year 8 students are aged between 12-13, whereas S2 students are aged 13-14. This is important because the slightly older age range may result in students being less receptive to the programme. The agreed approach in Scotland was to pilot in both S1 and S2 but to target S1 in the third term or second half of the school year.

The ASSIST programme was delivered in three NHS Boards across Scotland: Greater Glasgow and Clyde; Lothian; and Tayside. All three areas followed the licensed DECIPHer-IMPACT programme but their delivery models, in terms of project management, staffing and number of schools they worked with, varied. Across all sites delivery staff had a mix of professional backgrounds and came from the NHS, Local Authority and Third Sector. Some were employed as youth workers but did not have a background in smoking prevention or cessation, while others had tobacco control experience but had not previously worked with young people.

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[1] A not for profit organisation http://www.decipher-impact.com

[2] http://www.gov.scot/Publications/2013/03/3766

Aim and Research Design

The overall aim of the study was to evaluate the process of implementing ASSIST in Scotland. A series of research questions were developed and are included in the key findings section below.

In light of existing evidence demonstrating the effectiveness of ASSIST, this study focused on the acceptability and implementation of ASSIST to inform any potential future adoption in other areas of Scotland. The research design involved mixed methods, consisting of three elements: 1) evaluating the implementation planning process; 2) evaluating delivery in schools; and 3) assessment of costs. A range of stakeholders (school staff, trainers and students, n=101) were consulted via in-depth interviews, paired interviews, mini focus groups and observation along with a before and after survey to gather data from students (n=2130, at follow-up). To maximise available resources a two-tier design was used. Tier one included consultation with school leads and a pre and post student survey in **20** schools. Tier two involved **six case study schools** (two in each area, selected from the 20 tier one schools) where qualitative methods were used to observe peer supporter training and follow-up sessions and consult with peer supporters and other students.

Key Findings

Findings are summarised for each research question in the study, with recommendations in italics.

1. What are the barriers and facilitators to the implementation of ASSIST in Scotland?

Barriers and facilitators in this study were categorised as operating at the macro (strategic) and micro (operational) levels. At the macro level they were: partnership working; budget; and culture. These varied between schools but partnerships in particular were key, and findings from the evaluation suggest that *future delivery of ASSIST in new areas should ensure enough time is set aside to build relationships with key stakeholders (such as school leads, NHS and Local Authority staff) in advance of programme delivery, if these relationship do not already exist.*

At the micro level, barriers and facilitators were: trainers; delivery mode (peer nomination, training and follow-up); and behaviour management. Due to the different delivery models across the pilot sites, some trainers had a delivery role only, while others were responsible for both coordination and delivery. The combined role was particularly challenging. Feedback from trainers on their three day training to deliver ASSIST was extremely positive. However, *potential suggestions for improvement included more time in the training on how to organise the follow-up sessions.*

Levels of confidence to deliver the programme were influenced by professional background. *Where possible pairs of trainers with a mixture of smoking cessation and youth work expertise should be involved in programme delivery.*

Peer nomination was only delivered under exam conditions in one of the six case study schools, resulting in discussion between students which could have influenced whom they nominated. *This may be a difficult element of the programme for all schools to engage with, but should be attempted.*

Trainers faced some challenges delivering follow-up sessions in school (e.g. obtaining access to classrooms) and many peer supporters did not complete the requested diary of their conversations with others about smoking. Peer supporter comment suggested that the content as well as the number of follow-ups could be modified. *Fewer follow-ups should be considered in future and diaries, if included, may not need to be paper-based.*

2. What refinements are required to implement the ASSIST programme in Scotland?

Overall, we found that very few changes were required to implement ASSIST in Scotland. In terms of trying to deliver in either S1 or S2, there were advantages and disadvantages to both. School leads who were interviewed tended to focus on the reasons why one year was chosen over the other – not how this decision may have influenced delivery of the programme. Student feedback, however, suggested that friendship groups may have been more established in S2 than S1. *Therefore, in light of student feedback, if ASSIST is delivered in S1, this should ideally be in the second half of the school year when friendships are more established.*

3. Were essential elements of the ASSIST model maintained during pilot implementation in Scotland?

Overall, delivery appears to have been with a high degree of fidelity to the licensed programme. For example, the manual states that the list of students nominated to become peer supporters should be 18% of the school year to ensure adequate coverage. All case study schools delivered the four follow-up sessions, but observational fieldwork highlighted that diaries were not consistently checked in two of the six case study schools.

4. How acceptable is the programme from a stakeholder perspective (strategic leads, trainers, students and school staff)?

Stakeholder feedback suggests that delivery of ASSIST in schools in Scotland was acceptable with the (unavoidable) minor disturbance to school timetable accommodated. School leads indicated support for the peer education model and programme delivery which required a small amount of school resources. Trainers demonstrated a clear understanding of the theory behind ASSIST and recognised the importance of delivering the programme according to the manual. They were particularly clear that schools should not interfere with the peer selection process or delivery. School leads demonstrated a similar commitment to the peer element of the programme but there were examples of anxiety around student selection and an initial concern that the target of 18% might not be achievable, although it was. Peer supporters were positive about the programme and recognised that peer to

peer message diffusion was more appealing than having an adult speak to them about smoking. They appeared to favour the two training sessions more than the follow-ups sessions which is not surprising given the delivery context (i.e. the former was delivered out of school and the latter in school)

5. What changes in smoking-related knowledge, attitudes and behaviour are observed amongst students in the ASSIST Scotland pilot schools?

This process evaluation was designed to look at acceptability and fidelity, not intervention effectiveness. However, from the data we have, it is clear that there is uncertainty regarding the extent of message diffusion between peer supporters and peers in their school year and any impact this may have on smoking in adolescence prevalence. Findings from the student survey showed no significant change in self-reported smoking prevalence with 1.6% of pupils (n=33) reporting that they smoked one or more cigarettes per week increasing slightly to 1.8% (n=38) at follow-up. In addition, recall of any relevant conversations about smoking with a peer supporter was fewer than one in ten (9%). However, opportunities to have informal conversations about smoking with peers may now be limited due to the ongoing decline in adolescent smoking since ASSIST was first developed. It is also worth noting that some peer supporters felt apprehensive or awkward initiating conversations about smoking with their peers for fear of being judged or ridiculed, and this also may have contributed to the low recall of any conversations relevant to ASSIST.

Data collected from the original ASSIST trial is now 13 years old. Our findings on the number of relevant conversations (in particular) do raise questions about any appropriate assessment of ASSIST in the future. *A relevant future step would be an implementation trial (a Phase IV study) of ASSIST, using a similar methodology to the original RCT, to assess current effectiveness in the context of lowering smoking prevalence in the target age group.*

However, feedback from participants was overwhelmingly positive regarding the benefits of taking part in ASSIST for peer supporters, commenting on the personal skills they have gained and the potential for the school and wider communities to benefit. *Recognition of the wider benefits of peer supporter training should be included in discussions around the future of the ASSIST programme in Scotland.*

Another important factor perceived to influence message diffusion was the view that peer supporters were more likely to talk to family members than their school year peers. This could be important, particularly if social network members are smokers. *The impact of ASSIST in encouraging peer supporters to discuss smoking with smoking parents, other family members and wider social networks is an important area for research.*

6. What are the delivery costs of the programme?

The average cost to deliver one cycle of ASSIST in one school ranged from £8,939 £11,357. Between August 2014 – June 2017, 72 cycles of ASSIST were delivered or confirmed for delivery in 2017 and included in the cost analysis. The actual total delivery cost for all three sites was £674,360 of which 20% (£136,800) was for the license fee. This equates to a cost per cycle of £9366.

7. What lessons can be learned to assist future roll out across Scotland?

There are five considerations for any future delivery of ASSIST in Scotland, and a sixth relating to future research.

First, if a relationship between programme deliverers of ASSIST and the school is not already established, time should be included to invest in this before delivery. This will help with the programme but also add important context in terms of what smoking prevention provision the school already has in place. If delivery is in partnership with NHS Boards, Local Authorities and the third sector, time needs to be built into the delivery timetable to establish these relationships and understand the level of resource required from each partner.

Second, identifying trainers depends on available resources and they are likely to have a variety of professional backgrounds. Using this experience to pair up trainers with different backgrounds (e.g. one with youth work experience and one with smoking cessation) and developing opportunities to share practice and experience across sites may aid delivery and increase confidence.

Third, if the school timetable permits delivery of ASSIST to S1, students should be targeted during the third term, as this will maximise message diffusion via established friendship groups. Few problems were observed with delivery in S2, so this continues to be viable.

Fourth, consideration should be given to how trainers can be offered further support (e.g. further training, better use of teaching staff who chaperone students) to manage student behaviour if they feel this is required.

Fifth, in terms of the manual and intervention delivery, DECIPHer-IMPACT may want to consider: 1) whether a paper diary is still the best medium for students to record their conversations; 2) if four follow-ups are still productive; 3) how to include content on e-cigarettes in the programme, as appropriate (in particular, making clear that they are far less harmful than tobacco but are not products for teenagers that have never smoked, and informing teenagers of age of sale laws).

Sixth and finally, as outlined above there may now be a need for a Phase IV trial of ASSIST to determine effectiveness in the context of continued decline in smoking prevalence. This should, if possible, take into account that smoking still remains an issue particularly in more deprived areas.

8. Is there the scope to expand the model to look at other risk taking behaviours in Scottish schools in the future, e.g. drugs, alcohol?

There was general agreement (from school leads and students) that the ASSIST model (ie peer to peer message diffusion) could and should be applied to other risk taking behaviours such as alcohol or drugs. Currently and previously there have been other versions of ASSIST (focusing on sexual health, physical activity, healthy eating, binge drinking and drug prevention). An NIHR funded feasibility trial of the ASSIST model as applied to drug prevention has just concluded in Wales. Plans are now underway to seek funding for one component of this for a larger trial. In addition, a second NIHR feasibility trial of the ASSIST model applied to sexual health behaviour is currently underway in Scotland. Early results from both these studies look promising. Both studies should provide valuable data on the key elements of the peer to peer model that are particularly relevant for behaviours beyond smoking. School staff and stakeholders were also interested in how the ASSIST model could address multiple behaviours in one intervention, but this will be far more challenging to deliver. *Investigating how/if the ASSIST model could be developed to address more than one risk behaviour is an important area for further research.*

Chapter 1: Introduction and Background

This report presents findings from a process evaluation of the delivery of ASSIST (A Stop Smoking in Schools Trial) in three pilot areas across Scotland. This first chapter describes the policy context in which ASSIST was delivered, as well as a brief history of the ASSIST programme and the delivery models used in each of the three pilot sites. Research aims, objectives, method, sample, ethics/research permissions and the analytical approach adopted are the focus of Chapter 2. Results are presented in Chapters 3-5 with discussion and conclusions the focus of Chapter 6.

1.1 Policy Context

Smoking rates in Scottish adolescents have declined in recent years (Figure 1), particularly in the 15 year old cohort, with 30% of boys and girls smoking regularly (defined as smoking at least one cigarette per week) in 1996 compared to just 7% in 2015.

Figure 1: SALSUS regular smoking prevalence trend data 1982 - 2015[3]
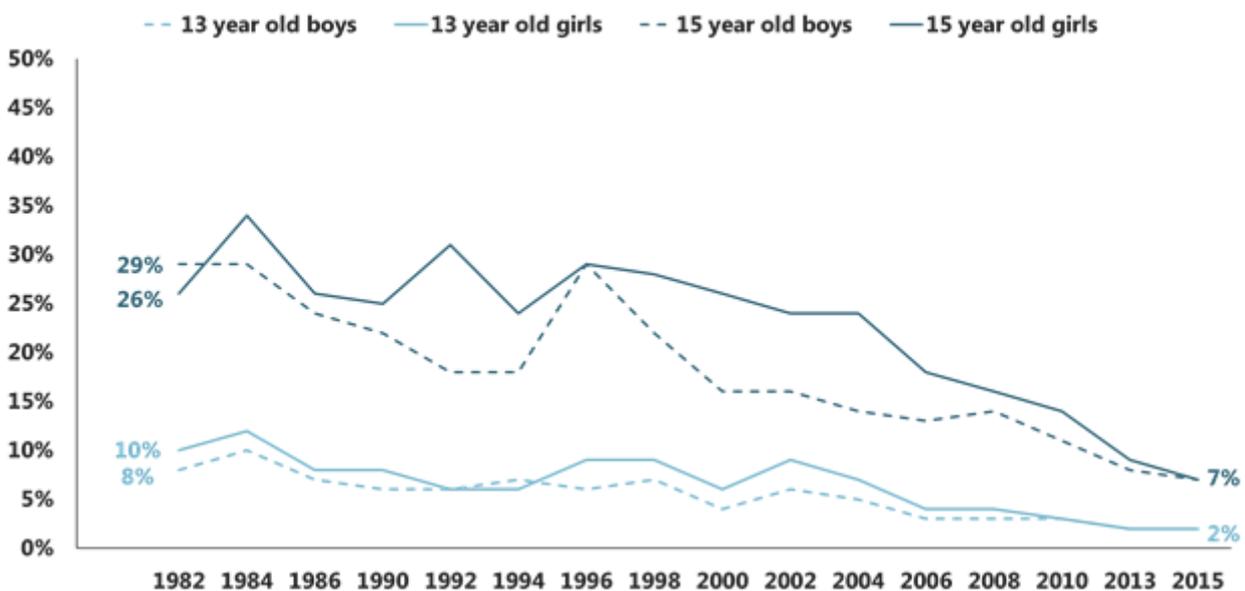
However, it is estimated that between 2010 and 2011 a total of 207,000 young people aged 11-15 started smoking in the UK. The estimated number of children who start to smoke daily in the UK is: 463 in England, 55 in Scotland, 30 in Wales and 19 in Northern Ireland (Hopkinson et al 2014). This will have a significant impact on future health and life expectancy. Young people can become rapidly addicted to cigarettes and up to 2011 it was estimated that most young smokers in the UK were tobacco dependent before they leave school; nearly 40% before the age of 16 (Dunstan and Robinson 2012).

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[3] Note the survey did not run in 1988. http://www.gov.scot/Resource/0050/00508401.pdf (last accessed 28.10.16)

Age is an important factor in adolescent smoking with existing evidence highlighting the relationship between smoking prevalence and age of initiation. For example, smokers who start at an early age tend to smoke more cigarettes per day in adulthood, smoke for longer, are less likely to quit and are more likely to die from smoking-attributable causes. (Flay et al 1998; Leventhal and Cleary 1980; Mowery et al 2004).

For these reasons, preventing smoking uptake, particularly amongst young people, remains a public health priority.

1.2 ASSIST

ASSIST is a peer-led, school-based smoking prevention programme that encourages the dissemination of non-smoking norms by training S1 (aged 12 to 13 years) and S2 (aged 13 to 14 years) students to work as peer supporters. Peer supporters are trained to have informal conversations with other students about the risks of smoking and the benefits of being smoke-free (Audrey et al 2004). The programme consists of seven sessions, delivered over a 14 week cycle by external trainers (who have to attend a three day training course to deliver the programme, discussed further in 4.2.1). Table 1 summarises the key elements of ASSIST.

Table 1: Essential elements of ASSIST

Peer nomination	Conducted in school, the entire year group is brought together to complete a peer nomination questionnaire. Students are asked to nominate students in their year who they look up to, respect and view as good leaders. This takes around 20 minutes and trainers then rank the number of nominations to produce a list of students in the year with the most nominations (this has to be 18% to ensure adequate coverage) who are then invited to become a peer supporter. Care is taken not to mention smoking as this may influence nominations.
Peer recruitment	Conducted in school, usually consisting of one class period lasting around 30-40 minutes. Students with a high number of nominations are invited to attend the peer recruitment meeting where they are introduced to ASSIST and the peer supporter role which includes two days of training away from school. They are given information about the benefits of taking part and invited to participate, but it is made clear that it is their decision whether to take part or not. Consent forms for parent/carer to sign are sent home.
Peer supporter training	Conducted in a venue away from school (e.g. hotel, community venue). The aim is to promote learning around the risks of smoking and the advantages of being smoke-free in an informal and supportive environment. Training is delivered through games, role play and group work. Once trained, peer supporters are asked to have informal conversations with peers over a 10 week period and record these in a diary.
Follow-up sessions x 4	After training peer supporters meet with ASSIST trainers 4 times over the 10 week cycle in school, usually during class time lasting around 30–40 minutes. This is an opportunity for peer supporters to share their experiences, discuss any problems and raise questions to help consolidate their skills and knowledge and encourage them to have informal conversations. It also enables trainers to monitor progress and check diaries.

The ASSIST model is different to previous school-based prevention programmes which systematic reviews have shown to be largely ineffective (Thomas Roger et al 2013). ASSIST was previously evaluated via a large cluster randomised trial of 59 schools in South Wales and Avon, England. Results from this trial showed that ASSIST was effective and cost effective at reducing smoking prevalence in young people (Campbell et al 2008), (Hollingworth et al 2012). This led to the wider roll out of ASSIST in parts of England and Wales and pilot expansions of the ASSIST programme to include healthy eating and physical activity (AHEAD) (Bell et al 2014). With current research underway looking at physical activity in young women (PLAN A) (Sebire et al 2016), drug prevention (ASSIST + FRANK) and sexual health (STASH[4]). In a 2013 systematic review of policies and interventions to reduce socio-economic inequalities in adolescent smoking, ASSIST was identified as having a positive equity impact and reduced smoking inequalities in school children (Amos et al 2013).

In 2010, ASSIST became a licensed programme and a not-for-profit company, DECIPHer-IMPACT, was established to provide training, a detailed manual, ongoing support and quality assurance to maintain effective delivery of the programme.[5] An annual conference is held for trainers and interested parties (e.g. commissioners, researchers).

Until recently ASSIST had not been delivered in Scottish schools. This changed in 2013 when the Scottish Government pledged its commitment to smoking prevention in 'Creating a Tobacco Free Generation' (the national tobacco control strategy published in March 2013) which stated that:

> "We will undertake a pilot of ASSIST, which will consider its suitability for Scotland and potential for further adaptation to other risk taking behaviour." (The Scottish Government 2013)

1.3   ASSIST in Scotland

In English and Welsh schools ASSIST is delivered to Year 8 students which is equivalent to S2 in Scottish schools. However the age composition is different. At the end of year 8 students are aged between 12-13, whereas S2 students are aged 13-14. This is important because the slightly older age range may result in students being less receptive to the programme. This presented three delivery options for Scotland. The first was to deliver to S1 students only. The advantage of this approach was that students would have been more comparable in terms of age (12-13), but as these students would just have started secondary school they may not have the established friendship groups which are an essential component of the ASSIST programme. The second delivery option was to target S2 students only who would have formed friendship groups, but who would be slightly older and the third option was to pilot in both S1 and S2 but target S1 in the third term or second half of the school year. This latter option was the agreed approach because it

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[4] http://www.nets.nihr.ac.uk/__data/assets/pdf_file/0007/163195/PRO-14-182-14.pdf [last accessed 31.1.17]

[5] http://www.decipher-impact.com/

offered schools more delivery flexibility, which could have encouraged greater school participation. It also allowed delivery comparisons across the two years which could potentially generate useful learning for future delivery.

Chapter 2: Design and Methods

This chapter outlines the research aim, research questions, design, sample and analytical approach.

2.1 Aim and Scope of the Evaluation

In light of the existing evidence base (discussed in Section 1.2) this is a process (not an outcome) evaluation to examine the acceptability and implementation of ASSIST to inform potential roll out to other areas of Scotland. The 30-month evaluation was funded by the Chief Scientist's Office and the Scottish Government and commenced in August 2014. The overall aim of the evaluation was to assess implementation across the three pilot areas specifically looking at fidelity and acceptability and drawing out learning that could assist future implementation in other areas. Data were also collected from students regarding their smoking status, but these were not primary outcome measures for this process evaluation.

The study had the following research questions:

1. What are the barriers and facilitators to implementation in Scotland?

2. What refinements are required to implement the ASSIST programme in Scotland?

3. Are essential elements of the ASSIST model maintained during pilot implementation in Scotland?

4. How acceptable is the programme from a stakeholder perspective (for strategic leads, trainers, students and school staff)?

5. What changes in smoking-related knowledge, attitudes and behaviour are observed amongst students in the ASSIST Scotland pilot schools?

6. What are the delivery costs of the programme?

7. What lessons can be learned to inform any future roll out of ASSIST across Scotland?

8. Is there scope to expand the model and look at other risk taking behaviours in Scottish schools in the future, e.g. drugs, alcohol?

2.2 Research Design

This was a mixed methods study consisting of three elements: 1) evaluating the implementation planning process; 2) evaluating delivery in schools and; 3) an assessment of costs. A range of participants (school staff, students, peer supporters, site leads/co-ordinators, trainers, stakeholders from policy and commissioning) were consulted via in-depth interviews, paired interviews, mini focus groups, observation and a self-complete survey. To maximise available resources a two tier design was used. Tier one included consultation with school

leads and a pre and post student survey in **20** schools from the three NHS Boards who took part in the pilot (Greater Glasgow and Clyde; Lothian; and Tayside). Tier two identified **six case study schools** (two from each pilot site, selected from the 20 tier one schools) where a researcher observed the entire cycle of ASSIST delivery, examining intervention fidelity and consulting with peer supporters and other students, via mini group discussion. Research methods to assess each element are summarised in Table 2. Where possible the student survey was administered by the research team via a special assembly for the whole year group. In two schools this was not possible and teaching staff administered the survey during class time (staff were invited to a face-to-face survey briefing by a member of the research team prior to delivery). The baseline survey was piloted before roll out and additional questions for the follow-up survey were tested with a group of S2 students.

Table 2: Summary of research design

Research method	Stakeholder group				
	Strategic*	**School leads**	**Trainers**	**Peer supporters**	**Students**
Semi-structured/ in-depth interviews	X	X (pre & post)	X (pre & post)		
Pre & post survey				X	X
Observation of entire cycle of ASSIST			X	X	
Paired interviews/mini groups				X	X
Desk based review of cost data					

*Scottish Government, DECIPHer-ASSIST, NHS Boards, Education, Site Co-ordinators

2.3   Sample

The school sample was selected using non-probability sampling techniques. Our aim was to examine the acceptability and fidelity of intervention delivery, not effectiveness, thus a random (probability) sample was not required. In addition, the delivery model for ASSIST was phased over three school years which meant that there was uncertainty around the exact number of schools taking part and when they would receive ASSIST which could result in an incomplete sampling frame. In light of this, and in consultation with the Research Advisory Group, the following quota sampling criteria were agreed:

1. A minimum of five schools from each NHS Board

2. A maximum of five schools will be in a rural area

3. A maximum of five schools will be in less deprived areas

4. The six case study schools will be spread out evenly across the sites i.e. two in each NHS Board

5. A minimum of eight schools will have ASSIST delivered to S1 students

6. A minimum of eight schools will have ASSIST delivered to S2 students

This means that findings from the student survey are not directly comparable to the wider school population. Table 3 presents an overview of the 20 schools that participated and how they compared with sample criteria described above. All sample criteria, except one (a minimum of eight schools will have ASSIST delivered to S1 students - seven instead of eight) were met. There are two reasons this criterion was not met. First, all Glasgow schools were working with S2 students only and second, two Lothian schools previously identified as working with S1 students were changed to S2 (in one school the Head Teacher requested this change and in the other the S1 school roll was too small to be included). Scottish Government provided the Scottish Index of Multiple Deprivation (SIMD)[6] data which showed S1 and S2 pupil distribution by their home postcode. This was used to identify schools with a larger proportion of pupils from more deprived areas. Categorisation of urban/semi-rural/rural areas was based on fieldwork observations of the school and surrounding area.

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[6] http://www.gov.scot/Topics/Statistics/SIMD

Table 3: School survey sample information

School ID	NHS Board	Rural/semi rural or urban	Deprived area	Case study	School year	School year roll	Baseline sample		Follow-up sample		Mode of delivery
							N	%*	N	%**	
2	Site 3	Urban	Yes	No	S2	79	60	75.9	37	46.8	In class by teacher
3	Site 3	Urban	Yes	No	S2	159	143	89.9	118	74.2	Special Assembly
4	Site 3	Urban	Yes	Yes	S2	225***	151	67.1	137	60.8	In class by teacher
9	Site 3	Urban	Yes	No	S2	134	114	85	106	79.1	Special Assembly
10	Site 3	Urban	Yes	No	S2	191	173	90.5	168	87.9	Special Assembly
17	Site 3	Urban	Yes	Yes	S2	167	140	83.8	127	76	Special Assembly
1	Site 1	Semi-rural	No	Yes	S1	107	90	84.1	84	78.5	Special Assembly
12	Site 1	Urban	Yes	Yes	S2	138	125	90.5	97	70.2	Special Assembly
15	Site 1	Urban	No	No	S2	138	132	95.6	121	87.6	Special Assembly
18	Site 1	Urban	Yes	No	S2	57	44	77.1	40	70.1	Special Assembly
19	Site 1	Urban	Yes	No	S2	58	41	70.6	37	63.7	Special Assembly
20	Site 1	Urban	Yes	No	S1	121	107	88.4	63	52	Special Assembly
5	Site 2	Urban	Yes	Yes	S1	176	160	90.9	149	84.6	Special Assembly (exam conditions)
6	Site 2	Urban	Yes	No	S1	200	185	92.5	161	80.5	Special Assembly
8	Site 2	Semi-rural	Yes	No	S1	188	169	89.8	52****	27.6	Special Assembly
13	Site 2	Rural	No	No	S1	110	90	81.8	89	80.9	Special Assembly
14	Site 2	Rural	Yes	No	S2	147	123	83.6	109	74.1	Special Assembly
16	Site 2	Semi-rural	No	No	S2	179	168	93.8	148	82.6	Special Assembly
21	Site 2	Semi-rural	Yes	Yes	S1	204	180	88.2	167	81.8	Special Assembly
22	Site 2	Semi-rural	Yes	No	S2	147	130	88.4	123	83.6	Special Assembly

* Percentage of eligible students (school year roll column) who completed a baseline survey.

** Percentage of eligible students (school year roll column) who completed a follow-up survey.

***The number of surveys completed at baseline in school 4 was low (n=151) in comparison with the number of eligible students which was 225 (school roll column). This is because the school was not able to accommodate a special assembly and we were reliant on class teachers administering the survey, some of which did not.

**** Several students were on a school trip the day the follow-up survey was conducted, which the school lead was not aware of. Unfortunately they were not able to facilitate self-completion for these students.

2.4 Participant Information

Across 20 schools, at baseline the number of students eligible to participate in the baseline survey was 2925, of which 2491 completed a questionnaire. At follow-up the number of eligible students was 2491, of which 2130 took part representing 15.6% lost to follow-up. As illustrated in Table 4 there was fairly even representation by gender and class at baseline, but fewer S1 students at follow-up (as noted in Table 3 school 8 had a very low response rate at follow-up).

Table 4: Survey respondents

	Baseline		Follow-up	
	N	%	N	%
Gender				
Boys	1250	50	1064	51
Girls	1247	50	1041	49
Total	2497*	100	2105	100
School Year				
S1	1011	41	789	38
S2	1480	59	1311	62
Total	2491*	100	2100	100

*28 and 34 children did not provide information on their gender or school year, respectively

In addition to the quantitative sample, the following qualitative data were collected:

- 41 interviews with 24 members of school staff (all bar one were face-to-face and included deputy head teachers, principal teachers, subject teachers, pupil care and support teachers);

- 31 trainers who participated in a baseline interview or focus group;

- 29 students who took part in six mini group discussions;

- 15 stakeholder interviews with 17 participants (face to face and telephone) who held a strategic, planning, commissioning, delivery or policy role;

- Structured observation of the delivery of an entire cycle of ASSIST in six schools.

2.5 Ethics and Informed Consent

The study was approved by the University of Stirling Ethics Committee on the 4th September 2014. To conduct research in schools we also had to apply for permission from each Local Authority (eight in total). Once this was granted, we were able to approach the schools directly to invite them to participate in the study. Informed consent was obtained from school leads and trainers. Parents were given written information about the study and an opportunity for their child to opt out of the research. Student consent was also obtained.

2.6 Analysis and Reporting Style

In light of the research study design (mixed method) data collected from each stakeholder group were analysed individually, but where possible, key findings are presented as a thematic analysis. As such, the report has been written in a mainly qualitative rather than quantitative style with tables and figures kept to a minimum

in the results section (summary tables presented in the appendix which the reader can refer to).

2.6.1 Qualitative analysis

Analysis of qualitative interviews and mini group discussions was conducted using a structured thematic approach based on systematic coding of verbatim transcripts which was organised and managed via QSR Nvivo 11. Coding frames for each of the stakeholder groups were jointly developed, piloted and amended by members of the research team prior to full coding of relevant transcripts. Key themes arising from coded data for each stakeholder group were identified and reported alongside those of other groups highlighting both similarities and differences.

Case study observations were recorded using a structured observation form which recorded all four stages of ASSIST delivery (peer nomination, peer recruitment meeting, training days and follow-up sessions). Data from the completed observation forms were entered into a MSWord template which was populated with details from each stage of delivery. This enabled assessment of key measures of fidelity and also contributed to the thematic analysis (e.g. observation date regarding behaviour management). The template was piloted and refined by two researchers before being populated.

2.6.2 Quantitative analysis

Student survey data were entered into MSExcel. The Excel data were checked for data quality and consistency before being 'locked' for analysis. This locked dataset was archived as the denoted version used for this analysis, and then imported into Stata V14. The data structure contained three possible units of analysis, the geographical area, the school level, and the individual pupil level. The descriptive analysis for this study focused primarily on the individual pupil level, and almost all the variables were categorical. For those pupils who completed the surveys at baseline and follow-up the missing data was minimal with almost all categories greater than 95% completion. At follow-up some questions were only relevant to students who had spoken to a peer-supporter. Nuisance responses (e.g. fabricated responses) and unlikely outliers were sparse and were re-categorised to missing, or to the next nearest likely category following discussion with the research team. Tabulated data was produced for both the baseline and the follow-up data. Both baseline and follow-up data were then match-merged on unique anonymised Pupil ID number and a series of cross-tabulations produced.

Chapter 3: Preparing for Delivery

The focus of this chapter is to examine the key considerations required in preparation of ASSIST delivery in schools. Drawing first on interviews from site leads and key stakeholders it will reflect on the preparatory 'behind the scenes' work required before actual delivery in school. Then, for additional context it will describe where schools were starting from in terms of current provision for smoking prevention. Finally it will outline the experience of trainers, specifically their feedback on the training and their perceptions of their readiness to deliver ASSIST in schools.

3.1 Preparatory Work and Delivery Models in Pilot Sites

Delivery of ASSIST required time and careful planning, working in partnership with school staff and other key partners (appended in Table A1). Site co-ordinators and key stakeholders were asked to reflect on this process and highlight three areas for discussion: identifying and engaging with key partners; delivery model; and identifying schools.

3.1.1 Identifying and Engaging with Key Partners

Identifying and engaging with partners was an important first step in delivery, with stakeholders commenting that a key learning point was to allow enough time at the planning stage to create these partnerships and obtain buy-in. This was especially true for Site 1 and 2 where engagement was necessary with seven Local Authorities. Reduced funding meant job roles and the remit of Local Authority staff had changed, resulting in additional time to identify the correct person to approve the resources needed, or secure any in-kind contribution. Key to facilitating these discussions was the existing evidence-base regarding ASSIST's effectiveness which helped secure buy-in from partners.

> "I think the evidence, the initial evidence; we had been running tobacco programmes in [Site 3] for young people for a very long time….The problem had always been how to evidence that those programmes were effective…..So it [ASSIST] was something that was clearly evidence based, we wouldn't have to do the research to work that out." (Stakeholder 11)

Having existing relationships and previous positive experience of working with partners was clearly advantageous to engagement with ASSIST. All three pilot sites had this, some stronger than others, but this foundation was clearly beneficial and more productive than tendering to a sub-contractor (as is the more common model in England and Wales).

Concerns around sustainability of a pilot programme, like ASSIST, are common and justified. This is why 2 sites made the decision to deliver ASSIST more than once to schools who signed up. A particular aim of Site 2's model of a partnership approach between NHS, Local Authority and the third sector was to embed the tobacco prevention agendas and build capacity in other organisations (i.e. not just the NHS).

Finally, partners helped deliver ASSIST by offering in-kind resources – e.g. staff to deliver ASSIST, liaise with schools and encourage their participation, school staff time to help plan delivery and chaperone peer supporters, classrooms for follow-up.

3.1.2 Delivery Models in each NHS Board

The ASSIST pilot programme was delivered in three NHS Boards across Scotland: Greater Glasgow and Clyde; Lothian; and Tayside. All three areas followed the licensed DECIPHer-IMPACT programme but their delivery models in terms of project management, staffing and number of schools they worked with varied across pilot area. A summary of the delivery model in each area is presented in Figures 2, 3 and 4. Further detail on: funding source; key partners; number of schools who participated' pilot start and end dates; and number of trainers can be found in Table A1, appended.

Figure 2: Site 1 delivery model
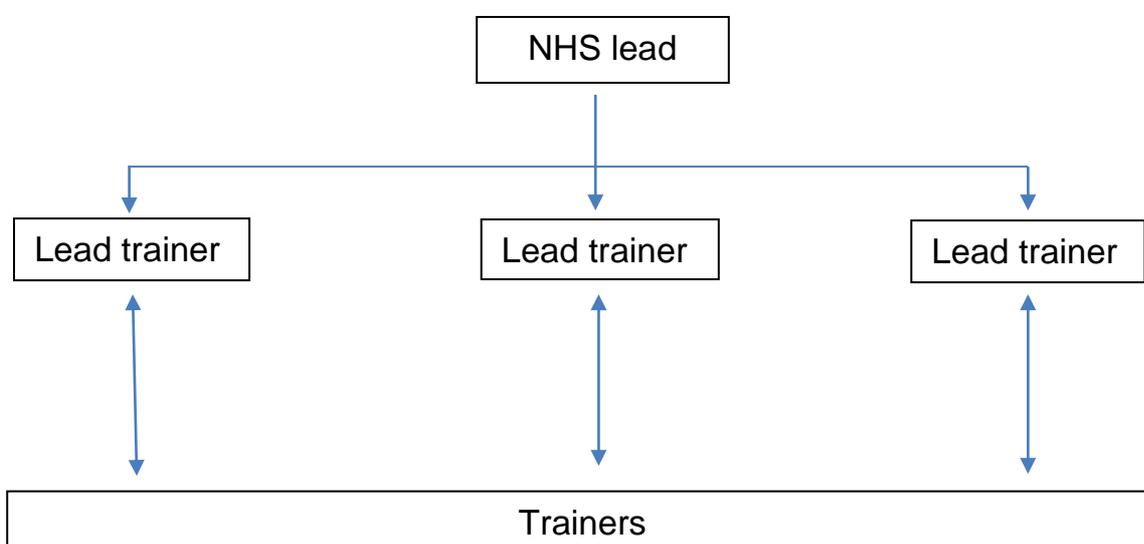
An 'in-house' model operated in Site 1 with a pool of NHS and seconded Community Learning and Development (CLD) staff delivering ASSIST as their sole remit (except the NHS lead). The delivery model was one of devolved responsibility with the NHS lead appointing three lead trainers who were responsible for securing schools, planning delivery, and liaising with trainers in a specific geographic area. They also worked as trainers and cross-covered other areas to offer support when necessary.

Figure 3: Site 2 delivery model
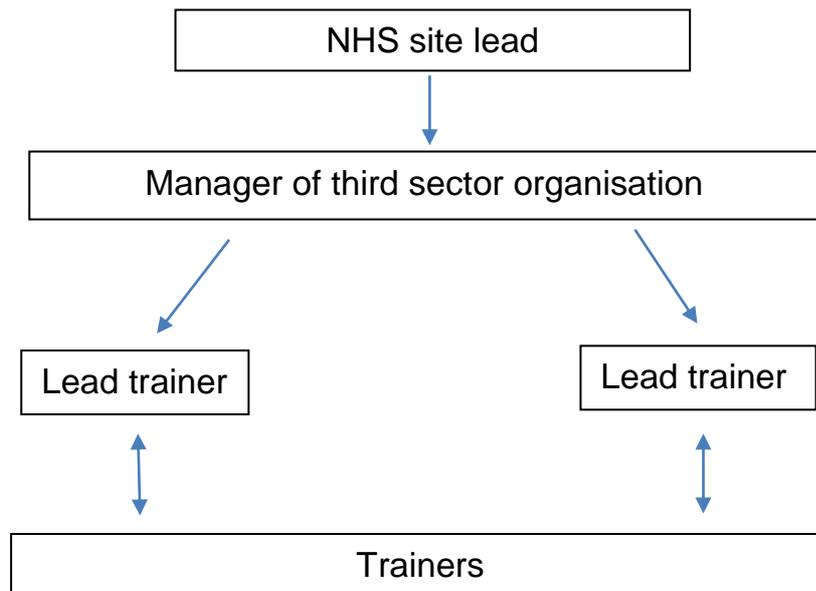
A partnership model was used in Site 2, with delivery subcontracted to a third sector organisation (TSO). The NHS lead took responsibility for securing school participation and sourcing trainers, with the TSO then following up to arrange delivery dates, co-ordinate trainers and manage all aspects of delivery. All staff involved in delivery of ASSIST had other responsibilities in addition to their ASSIST role.

Figure 4: Site 3 delivery model
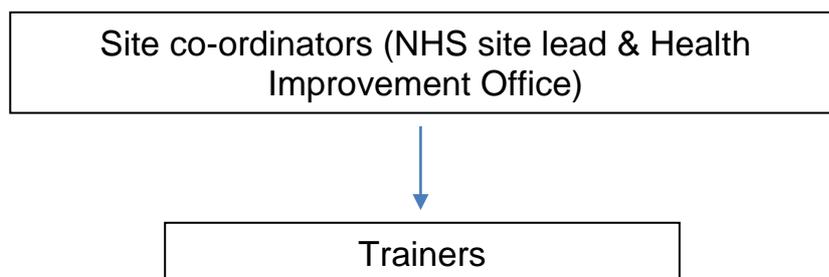
Site 3 operated a flat structure where the site lead along with another member of staff took responsibility for all set-up and delivery tasks (securing participation from schools, organising the delivery timetable and associated tasks - booking in trainer and the materials required for delivery). Trainers were NHS staff who worked across the three Community Health Partnership sectors, which meant that site co-ordinators had to liaise with each sector to secure participation from staff – this made planning delivery more time consuming (especially if schools had to change delivery dates with short notice) than the other two delivery models. Like Site 2, Site 3 staff had other responsibilities in addition to their role in ASSIST.

Model 1 is similar to how ASSIST was previously delivered in England and Wales (the current approach is to outsource to a third party). Stakeholders commented

that the Site 1 model worked particularly well. However, this approach was only possible because this NHS Board purposely moved resources from cessation to prevention programmes. The more complex approach to securing trainers in Sites 2 and 3 meant that the site co-ordinations and lead trainers had to manage staff that may not have worked with young people before and who had other responsibilities in addition to ASSIST. This required extra time to build relationships, contact staff to confirm training sessions, and accommodate timetable changes when they arose. Time that was not required in Site 1.

3.1.3 School Selection

School selection varied across sites (as illustrated in Table 3). In Site 3, to address sustainability concerns, the decision was made to target 10 schools who were all eligible to receive three cycles of ASSIST. In contrast, Site 1 had the resource to offer ASSIST to all the schools in their NHS Board, and used SIMD data to identify the schools most in need (i.e. those in deprived areas, with higher smoking rates) of ASSIST and tried to target them first. Site 2 targeted schools with higher smoking rates, but also took into account other factors that may impact delivery i.e. change in the senior management team. That said, all sites indicated a degree of pragmatism and were keen to work with schools who showed an interest and enthusiasm, especially when they first started to deliver the programme.

3.2   Schools' Starting Point

In order to assess delivery of a smoking prevention programme such as ASSIST, it is important to understand where the school was starting from in terms of smoking prevention coverage in the existing curriculum. Answers to these questions may influence why the school decided to take part and add important context to understanding delivery.

Across the 2491 respondents at baseline, findings from the pre-intervention student survey suggested a reasonable awareness of their schools' smoking policy and any lessons on smoking harm/prevention, with two thirds (64%, n=1532) recalling being taught lessons on smoking prevention[7]. However, half (55%, n= 1306) did not know if their school had any rules on smoking, and 57% (n=1365) did not know what action would be taken if they were caught smoking.

Schools participating in the evaluation appeared to either adhere to the standard Local Authority policy or did not have their own school specific smoking policy - with some commenting that they did not know if their school had a policy or not. The exception was school 12 who had included their own smoking policy in the school handbook (i.e. 'no smoking on school grounds, any student found with cigarettes will have them confiscated'). The general point was also made that the number of students smoking these days is very low, with a perception in some schools that smoking is not much of an issue anymore – "*I could probably tell you children that smoke.*" (School lead 20, follow-up interview)

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[7] For some school years smoking had not been covered as part of the PSHE (personal, social and health education) curriculum at the time of ASSIST delivery.

Existing education on smoking was generally delivered in social education or personal, social and health education (PSHE), but the school year varied. For example, in some schools it was delivered across all years whereas in others it was targeted at younger students (S1/S2). National 'no smoking day' was an important feature of the school calendar at the time of the study, with a number of schools involved in different activities, often in partnership with local organisations.

3.2.1 School Perceptions of ASSIST

School leads demonstrated a good understanding of the ASSIST model, grasping the key components e.g. a focus on smoking prevention using a peer education approach with a 'non-preachy' approach to message diffusion. One school lead interviewee raised a salient point when they commented that they were not sure if ASSIST would include anything about vaping (electronic cigarettes).

There was also a great deal of support for the programme. Delivery by external trainers (i.e. not school staff) and the two training days delivered away from school, were viewed as particularly important because it showed the young people how valued they were. Even in schools who commented that smoking was not 'a huge issue' they still felt the programme was worthwhile because 'young people will experiment with cigarettes.' Comment was also made regarding the existing evidence base which showed the effectiveness of ASSIST. Again this emphasised the importance of setting aside time to engage with schools to build up a relationship. However, there was also speculation regarding how effective message diffusion would actually be (i.e. will peer supporters have conversations?).

There were a number of reasons school leads gave when asked why their school decided to take part in ASSIST. First, was the opportunity to receive an additional (evidence-based) resource which required minimal school input to protect young people from smoking harm. Second, signing up to ASSIST seemed to have developed as a result of long-standing relationships with NHS health improvement teams and a specific or general willingness to help them or take part in the pilot to help future delivery. Third, was a specific interest in the peer education element of ASSIST either because they had seen the benefit of this approach previously or wished to pursue it more fully in the future. One school lead said that in addition to the possible impact of the programme, ASSIST would help them meet requirements of national policy - partnership working set out in the National Curriculum for Excellence, for example. Finally, one interviewee was not aware of why their school had decided to participate but had simply 'been asked (told)' to lead on this by a senior member of staff.

3.3 Trainer Perspectives on Preparing for Delivery in Schools

One essential element in preparation for delivery was training of trainers. Baseline interviews with trainers explored this in detail, as well as their perceived role, confidence to administer the role, and sources of support that would be available to them.

3.3.1 Feedback on 'Train the Trainer' Training

ASSIST trainers took part in three days of "train the trainer" training delivered by DECIPHer-IMPACT (funded as part of the licence fee). Overall, trainers were very positive about the training and particularly liked the interactive and energising nature of delivery, leading many to describe it as *'fun'*, *'enjoyable'* and the *'best training they had done.'* A stakeholder comment was similar - one participant commented that their colleagues (who had attended the training) were struck by the quality of the training programme, and about how well thought out it is and delivered.

Training content gave participants multiple opportunities to obtain first-hand experience of delivering training activities and observe the different approaches of fellow participants, which was viewed positively.

> "I liked the fact that it was more interactive than sitting being talked to. And it was giving us the chance to practice and to go through which was, certainly for me it was more helpful and more memorable because I can think back to oh that activity was very, so and so did that or I did that and it's making it more memorable for me." (Trainer, Site 1)

Additionally, trainers mentioned benefiting from being asked to act as prospective audience members (i.e. young people) and therefore gaining differing perspectives on delivery.

> "Because you are the peer supporters and basically somebody is delivering this to you and you start to get the feelings of what sounds good, what feels good for me, what doesn't feel good, and that is important to get that feeling because the audience is all important and if you are not getting it right for them then you know you miss the target." (Trainer, Site 2)

These aspects were perceived as very useful in preparing to deliver ASSIST as were the opportunities training provided for trainers to get to know one another, particularly those with whom individuals would be working closest.

> "Probably one of the key things – as well as learning the whole thing – but one of the key things that I think comes out of that is the fact that you get to know everybody else so well, whereas, I don't know, maybe if it was structured differently and it wasn't as long a time, you wouldn't feel as comfortable." (Trainer, Site 3)

The three day duration of the training, though daunting for participants beforehand, was thought to have been necessary and appropriate. Venues and catering for training events were also positively received with one participant remarking on how such detail had made them 'feel special' and was thought to be beneficial for creating the right environment for young people.

"… also we were made to feel special, but I think that was psychological out of what they were meant to do, so that you were feeling, so you got a lovely lunch each day you know and we were all talking about the lunch, so we need to actually incorporate that into what we are supplying to young people so that they feel special and they want to engage with the programme." (Trainer, Site 3)

One possible improvement mentioned, however, was for more attention and/or time to be given to the follow–up sessions within schools. One participant commented that follow-ups were discussed at the very end of the course when they were more likely to be tired and lacking in energy.

"I remember at the end of Day 3, sitting in the group to do the follow-up…..I remember sitting there and I know I wasn't the only one an' I was, like, 'I'm really sorry but I am knackered. I am not taking this in. I'm reading it but I'm reading the same sentence twice. I'm just not taking this in.'…..So, I don't know whether – I mean, another half day's probably not practical – but maybe there needs to be, maybe the follow-up needs to come earlier on Day 3 or more time given to it, or something different done around it." (Trainer, Site 3)

Additionally an important suggestion came from participants not working in tobacco control/health promotion, that the training course could involve more information on smoking and tobacco. However, they also acknowledged that the presence of others with such knowledge positively off-set this challenge.

"For me I mean I have no knowledge or background knowledge of smoking and prevention stuff like that so I was a bit kind of flapped about kind of not having that. But I think what we quickly picked up on, day one is more about the information that they require whereas day two is more about the skills that they require. So I felt more confident about the delivery of day two, that I could you know get involved with that. Whilst also being involved in the day one smoking part but that's not my strong point. Whereas that is [other trainer's] strong point, is the smoking knowledge." (Trainer, Site 2)

3.3.2 Understanding of ASSIST

In general trainers demonstrated a good understanding of the ASSIST model and were able to pick out key aspects which they felt were most important for explaining the programme to others. The characteristic of ASSIST most commonly mentioned was the peer nomination element, which was viewed positively.

"I think the good thing is that you are going to get a really good mix of young people no matter what school you go to because teachers haven't picked them, so they might not be the most academic, they might not be the best behaved but it's still something for them to take ownership of and work with." (Trainer, Site 3)

Trainers were also clear that the ASSIST programme is aimed at training young people to positively influence their peers in an informal and non-prescriptive way. Some also emphasised that the programme was about empowering young people or giving them the skills to communicate with their peers about smoking.

"I mean if I was to encapsulate it in one word it would be to empower these children, to actually give them that power to be able to just confidently go forward, so we give them knowledge, we give them skills, you know, we are teaching them context and things, so in some ways we are empowering them.…. They are walking in and saying 'hey I am confident about this, I can talk about this. I am going to be able to slip these suggestions into conversation, constantly and without batting an eye because I know this, I am trained in this and I can do this'." (Trainer, Site 1)

Trainers' understanding of the ASSIST programme generally took into account the importance of fidelity to the model. Trainers understood that to ensure the effectiveness of ASSIST they had to adhere closely to what they had learnt in their training though some felt there were opportunities for flexibility.

"I think yes the prescriptive thing is great but sometimes there may be opportunities for us just to adapt slightly. But it's about making sure that the main part is as it should be." (Trainer, Site 1)

For some, the importance of adhering to the established model of delivery seemed to reinforce their appreciation for the effectiveness of the approach and represented an exciting prospect.

"For me I was quite excited actually because I've worked in tobacco for quite a while and I think especially in schools we have not really came across anything that is evidence based and that actually works and that you actually have a thing, like a script, not a script, but it's all written out for you, we've never came across that before with tobacco it's always been a wee bit woolly and maybe trying things, you know different areas try different things in schools but actually to have something that is evidence based to take it into the school I think that is quite exciting to be involved in it and because it's new and it's been piloted I think it's a good opportunity." (Trainer, Site 2)

3.3.3 Trainer Perspectives of their Role within the ASSIST Programme

Delivery models varied across sites with some trainers having a delivery role only, whereas others had a remit for both coordination and delivery (see Figures 2, 3, 4). As might be expected, given these differences, there was also variation in expectations of how much time the implementation of ASSIST would involve, but there was agreement that delivery would become quicker as they worked with more schools.

"I think, initially, it'll take up more time than probably I would, you know, envisage because, just to you get familiar, and I think it's like anything – once you start delivering it, you become more comfortable and, you know, your knowledge of the pack becomes better." (Trainer, Site 3)

There were also trainers who delivered ASSIST alongside other responsibilities completely separate to ASSIST. This caused some anxiety for the trainers with regards to managing these different commitments.

"I'm hoping it's not too much because nobody will do my substantive role while I'm not there - not that I think it will deflect me from the programme - but I don't know how I'm going to juggle it yet, to be honest with you. I haven't had a look at the form, for the timings etc, so that is a bit of a concern for me, to be honest." (Trainer, Site 3)

3.3.4 Levels of Confidence Prior to Delivery

Trainers' levels of confidence prior to delivery of ASSIST in schools were generally high, mainly reflecting satisfaction with the training they had received on the programme. For those who expressed low confidence levels in the baseline interviews this appeared to simply be a reflection of the fact that they had not yet delivered the programme.

"… basically there is a lot of things that no matter how much preparation that we do as a team there is always going to be that little unknown and in some ways it's that little unknown. And it's not that I am not confident to deal with it, but there is just a little unknown…" (Trainer, Site 2)

Trainers felt that once they had had this experience and were familiar with what they were doing their confidence would increase. However, there were two other concerns that also influenced confidence to deliver ASSIST. First, was the lapse in time (often involving several months) between receipt of training and expected delivery and the possible impact on their training capability. Though all felt this issue would be resolved by re-familiarising themselves with programme materials prior to delivery. Second, feelings of frustration and being under-prepared were reported by some trainers who were unclear of delivery details (e.g. training delivery dates).

Experience of working with children or young people or having a background in/knowledge of tobacco control/health promotion were important factors that affected confidence. Those that had little or no experience of working with children or young people worried about how they would respond in challenging situations. These are important issues related to behaviour management discussed more fully in Section 4.9.

"…. we know that we are going to go along and we are going to participate, but how do you know that your young people will, so it does, because after my other week when I had a group, like I did the sort of world café thing and some of the groups were lovely and then this, you get a wee group that just doesn't want to even communicate with you, so how do you know that that is not going to happen?" (Trainer, Site 3)

Similarly those with limited knowledge of tobacco were concerned that they may find themselves in a situation where they could not adequately respond to a question.

"Maybe where I do require support is because my background isn't in I suppose health promotion and relating to smoking…. For me I would find it quite challenging if a young person were to say oh right so you said there is these amount of chemicals in cigarettes what are they called, you know, if there was a specific question that I maybe didn't have the knowledge of…" (Trainer, Site 3)

However, despite these concerns, participants felt that support from trainer colleagues with knowledge and skills in the areas where they felt weakest would make up for shortcomings.

3.3.5 Sources of Support and Working with Other Trainers

Trainers identified a number of sources of support for ASSIST delivery. This included calling on the site co-ordinator or their own line manager (if not the same person). Others contacted the DECIPHer-IMPACT team directly and reflected on this support very positively. Another important source of support were the schools themselves, especially where good links were already established (i.e. where trainers had worked with them in the past).

"….a lot of support from the schools as well because….it is about relationship building with the schools…..because we've always had support from the schools in all the bits of work that we've done…..without them we wouldn't have any work because they don't have to let us in basically and you know if the schools say 'no we don't want you' there is nothing we can do. So they are our most valuable source of support, depending on who you get." (Trainer, Site 1)

Most commonly trainers perceived that, if necessary, they would call on the support of other trainers working alongside them in the same area. As highlighted in the previous section, this fellowship between trainers was considered important in responding to specific issues where individual trainers may lack confidence but it also seemed to be important more generally perhaps due to a sense of a shared experience.

"I think the core support is coming from each other, because they are all, it is all very new and we will all experience it at the same kind of time that we are able to turn to each other and utilise certain skills that certain people have got, and do it that way" (Trainer, Site 1)

In one particular site, co-ordinators were highly aware of the potential for support amongst trainers as indicated by the set-up of an online forum and meetings held in preparation for the 'train the trainers' course and prior to first delivery.

In contrast, some participants indicated reservations about working with other trainers, primarily because they had not worked together before. Trainers who held this view indicated a preference to work with someone they already knew (who had also been trained in and would deliver ASSIST) in order to benefit from knowledge of each other's way of working.

"… and we won't ever work together… It is a shame in the sense that we kind of know how each other works to a certain extent, even though our jobs are different we still, it's still nice to know how somebody works, but that won't happen and that's fine." (Trainer Site 3).

Chapter 4: Delivery of ASSIST

The aim of this chapter is to discuss the different elements of ASSIST delivery (peer nomination, recruitment meeting, peer supporter training and follow-up sessions) with a specific focus on fidelity. This section will also discuss six elements related to delivery – initiating conversation, school contribution to delivery, scheduling ASSIST, school year of delivery, behaviour management, and will finish with a review of costs associated with delivery.

4.1 Peer Nomination

Feedback on peer nomination has been summarised into four main themes: reflection on the theory behind the peer nomination process; practical application of peer nomination; nominated students; and delivery fidelity.

4.1.1 Peer Nomination Theoretical Approach

In general, school leads appeared supportive of the peer nomination approach. On one hand, there were schools who put their faith in the existing evidence base and supported **all** students nominated to be peer supporters. These school leads believed that the best outcome would be for students with challenging behaviour to be nominated because some of them can be important influencers of their peers. However, there were other school leads who had concerns about the suitability of some students to take part, mainly due to immature behaviour and mixing of students who do not usually spend time together. For example, in one school the school lead had a particular concern over mixing 'street kids' and 'quieter kids', but was pleasantly surprised to see that they did engage and there was an improvement in their behaviour.

There were also some schools who wanted to maintain a degree of control over who took part in the peer supporter training. For example, if nominated students were perceived to be disruptive they would not be allowed to go, or were told they could go but were warned that they would be pulled from the programme if they caused any trouble or their behaviour reflected poorly on the school

> "Then I saw the list an' I just thought, 'Oh God, no, not on your life.'….There was about three – two or three – we had to withdraw cos there was absolutely no way on earth." (School lead 9, baseline interview)

Another school lead reported that they had made the decision to exclude certain students from peer nomination. While acknowledging that this was at odds with the peer nomination ethos they had concerns that peer nomination was being used as a form of implicit bullying. They held this view because they felt some students from their first wave of ASSIST had been nominated by other students to make a fool of them. Another school also commented that they thought some of the students may have been nominated for 'a joke.' Due to the seriousness of this perception it was followed up in interviews with trainers and site co-ordinators. Trainers did not feel this was a widespread problem and commented that students did not know what they were nominating their peers for so bullying was unlikely:

"Nope I think that's rubbish…. because that young person will have no knowledge what they are nominating that person for. So that's more personal in my opinion what they are saying." (Trainer, Site 2)

However, there was also the view (from trainers) that some students had nominated other students for 'a joke.'

Finally, there was a belief that it would be the most popular students who would be selected or the ones who usually put themselves forward for things like the school show. This caused some concern that peer nomination may exclude more disadvantaged pupils.

"I don't see a lot of young people that are, that look to me that they are from a deprived background, so who is influencing them because I don't think, my feeling is that these ones we are training wouldn't have smoked anyway, maybe one or two of them…a lot of them that come along to me are high achieving young people, they are very good at drama, well you'll have seen them yourself, a lot of them are very confident." (Trainer, site 3)

However, as this school lead comment shows there were examples of student diversity, which is the aim of peer nomination.

"Q: And what was your initial impression when you saw the students that had been nominated?"

"Some of them were, some of them were who I would have expected but some of them were quite different so I think it was a real mix… I expected it to be the same folk all the time, the normal kids that would do it, and some of them were obviously, but some of them were quite different from that, so that was really good." (School lead 8, follow-up)

Trainers were clear that school staff should not interfere in the delivery of ASSIST. There was a recognition that schools may attempt to intervene in the nomination of students they may deem unsuitable for participation, yet trainers at baseline seemed largely unconcerned about responding to and resolving such challenges in line with the ASSIST model.

"We've got to be quite forceful about that……We can't add extra people in so, again, but … just be really clear that they can't – and it is, it's interfering in the process. They can't interfere in the process." (Trainer, Site 3)

At trainer follow-up it became clear that in instances of school intervention in peer nomination, trainers were willing to challenge schools though not necessarily to reject attempts to remove certain students from the programme.

"…we normally give them all a wee bit of leeway if there was somebody they'd felt couldn't handle the training at all or would be extremely disruptive to the point where it would destroy it for everybody else. We've gone with that because the teachers know the pupils." (Trainer, Site 1)

4.1.2 Peer Nomination Practical Application

A range of comments were received from school leads regarding the practical application of peer nomination (i.e. delivery in a school setting). For example, concern was expressed at baseline interview that there may not be enough students nominated or there would be gaming i.e. *'I'll nominate you if you nominate me.'* The former was not an issue with the school lead noting their surprise (during follow-up interview) at how easy peer nomination was and that the critical mass of 18% (discussed in Table 1) was achieved. As most peer nominations were not conducted under exam conditions, researcher observations recorded several instances of students conferring with each other. Thus there is a possibility that gaming may have occurred. For example, students who did not understand what they were being asked to do tended to nominate their friends in the hope that they would be nominated by them:

> "I thought it was for classes." "That's why I put all my friends down so I would be in their classes." (Peer Supporter, school 1)

> "It was good but, like, you didn't know what this was for so I just wrote all my friends down an' I should of wrote down other people." (Student, school 17)

Other views centred on the mode of delivery i.e. a special assembly, with students sitting next to their friends, which may have influenced who they nominated. Trainers noted that during the scoring process following peer nomination tended to highlight friendship groups.

> "…when we are doing the cleaning [scoring] process, you can tell whose group of friends have been sitting with each other when they're doing it. You get so many with the same names and then suddenly it's the next lot and its different names but then they appear. You can tell who's been sitting together cos they are sitting nominating each other." (Trainer, Site 2)

Linked to this was discussion around the school year being so large that students often became disengaged and did not pay attention during a special assembly. In light of this it is perhaps not surprising that one school lead questioned whether peer nomination would have been different had they approached it on a class by class basis. Stakeholders commented that delivery of peer nomination via special assembly was 'not ideal' and trainers noted that exam conditions were preferable but that this could be overly burdensome for schools to arrange.

> "Very rarely have we managed to have them at individual desks and that's just practicalities within schools, they don't have the time and the feasibility to set-up the assembly halls like that. There's been one or two but that's quite, like near exam time because it's been like that anyway." (Trainer, Site 1)

It was suggested (by a school lead at follow-up) that peer nomination could be done on a class by class basis using survey monkey (or similar online survey package) which would allow school staff could greater control over levels of conferring and

students would have more anonymity. This may also make score tallying to identify the list of peer supporters easier for the trainers.

School leads also commented that some of the students found it difficult to answer some of the questions – who they admired, for example. Student feedback supported this view, with reports of students finding some of the questions "really hard" to answer. Follow-up interviews with trainers also highlighted that some students struggled to understand the language used in questionnaires.

> "And I think some of the questions in the peer nomination are maybe a bit difficult for them to understand. Is there one to do with respect? There's two of them that seemed quite similar. And so I think the young people get a bit confused by that." (Trainer, Site 1)

4.1.3 Nominated Students

Just over one fifth (22.5% n=477) of students said they were asked to be a peer supporter, which is slightly higher than the fidelity measurement of 18% recommended in the original effectiveness trial of ASSIST. This is most likely a reflection of tied scores where one or more students had the same score – rather than exclude some, they were all put forward.

Both school leads and students expressed an element of surprise regarding those nominated to be peer supporters. Student opinion from mini group discussion was split in terms of how representative peer supporters were of their year group. On the one hand, was a view that those who were nominated did represent their year group because of the various friendship groups. However, there were also those who felt that some groups of students had been left out, resulting in an under-represented section of the year group. Results from the student survey revealed that 16% (n=317) felt that students chosen to be peer supporters were not the best ones to speak about smoking. This view became more apparent once the purpose of the peer nomination was explained during the focus group discussion. There was also a belief that some students did not 'deserve' to be nominated because their motivation to take part was perceived to be getting out of classes, with other more deserving students being left out who would have worked harder.

Additionally, drawing on observation notes from a peer recruitment meeting, a school lead noted their surprise to trainers that none of the students selected to be peer supporters came from an ethnic minority background despite students from this demographic making up approximately ten per cent of the year group.

In general schools did not believe that students who were not selected to be peer supporters would be too concerned. However, there was a view that there may be a degree of jealousy at being away from school for two days, with the perception that some were 'a bit grumpy' at not being selected. School leads also reported that a few students questioned why they had not be chosen. On one occasion, students who were not selected as peer supporters attended a session which would suggest they were interested in what was taking place. Survey results presented a similar view – of those who answered, 66% (n=833) said 'I don't mind' when asked how

they felt about not being nominated and just over a quarter (27% n=343) said they were either 'quite/very unhappy' or they 'did not know' how they felt.

In contrast however, there was a view from peer supporters that students who were not nominated may have felt left out.

"I think some of them felt a bit left out." (Peer Supporter, school 21)

"Yes they were upset because they felt left out almost." (Peer Supporter, school 21)

However, in agreement with school leads, they also acknowledged that this may have had more to do with them missing out on two days out of school.

"But I don't feel they felt left out because they weren't getting to learn information, it was more because they weren't getting to miss out on school." (Peer Supporter, school 21)

4.1.4 Fidelity of Peer Nomination

In terms of fidelity, feedback from school leads, site leads and observation of ASSIST delivery highlighted student confusion regarding the peer nomination questionnaire which asked them to write the "tutor/year group" for the student they nominated (Case Study 1). In Scotland, the term "registration class" is used instead so students were unfamiliar with the different term. This was fed back to the DECIPHer-ASSIST team who amended the paperwork to "registration class." However, despite this correction the requirement to write both name and class for the person nominated still created a degree of conferring (shouting) as students asked one another for the class information. This is clearly at odds with the theory of peer nomination which states that the process should be done independently. It is, therefore, not surprising that observation highlighted occasions where students were not asked to write the registration class of the students they nominated. In addition, follow-up interviews with trainers and site leads noted that class detail was often abandoned opting for name only.

A high ratio of adults to students was present in all of the case study schools for peer nomination, with the number of trainers present varying between three and six depending on availability and the size of the year group. Trainers were often supported by school staff, which was important for administering the peer nomination questionnaire and behaviour management.

The ASSIST manual specifies that if the peer nomination process is undertaken in a large hall then it should be set up for examinations with each student having an individual desk. Observation highlighted that this was only possible in one school (Case Study 6). Conditions in the other schools varied between having students sitting on chairs in rows with nothing to lean on (Case studies 1 and 5), students sitting at dining tables facing each other (Case studies 3 and 4) and a large gym hall with neither chairs nor tables resulting in students sitting in groups on the floor (Case Study 2). Where exam conditions were observed, it was noted that there was minimal opportunity for pupils to discuss the nomination process with each other.

Other conditions resulted in a high level of disruption with many students sitting closely together and discussing answers with each other.

A microphone was used on three occasions to help introduce the questionnaire (Case studies 3, 4 and 6) and a power point presentation was used on one occasion (Case Study 3).

4.2   Peer Recruitment

The peer recruitment meeting is when nominated students find out what they are being asked to do and decide if they want to participate or not and is, therefore, an important part of ASSIST delivery. This section will outline perceptions of how students felt to be nominated, and their understanding of their role. It will also consider fidelity of delivery.

School leads generally felt that students were excited and flattered to have been nominated, with one commenting that:

> "… some of the kids who were on the ASSIST thing said that that was one of their greatest, you know, best achievements – was being selected." (School lead 4, Follow-up)

Observation of delivery in the case study schools also suggested that students were happy to take part in ASSIST. As illustrated in Table A4 (appended) student drop off between the peer recruitment meeting and the two training sessions was very low, with no drop off in schools 1 to 3. However, there was also a view, from school leads, that some students may have been reluctant to take part, mostly because they were apprehensive of trying something new. Students also reported feeling unsure about what they were being asked to do and what it would mean to be a peer supporter. For example, there was an impression that being a peer supporter would mean giving a talk to the whole school about the dangers of smoking, which was a daunting prospect:

> "I thought we were gonna have to, like, speak to, like, big groups o' people. Yeah, that's, I thought, 'We need to speak at, like, an Assembly or something.'" (Peer Supporter, school 5)

Others thought that they had been singled out because trainers were under the impression that they smoked and they were going to get into trouble. However, once it was explained that their fellow students had nominated them and what the peer supporter role entailed, many students mentioned that it made them feel *"proud", "important", "special"* and *"respected"* to be *"looked up to"* and nominated by their peers. Many students believed that being nominated as a peer supporter had a lot to do with their level of popularity or because they were good at sports (another common indicator of popularity). Some students were surprised that they had been nominated as they had never previously perceived themselves as popular.

"Like I didn't see myself as like popular…In a way, I know it sounds really weird, but I always thought people knew them but didn't really know me." (Peer Supporter, school 21)

At the peer recruitment meeting, trainers explained that taking part in ASSIST would mean attending a two day training course and four follow-up sessions which they would be taken out of class for. This was a source of great excitement and one of the main factors in their decision to take part in the programme. School leads also commented that students would find the prospect of being away from school for two days very appealing. This was also evident in observation of the peer recruitment meeting where it was noted:

"One child puts the date in his diary as 'smoking road trip – no homework!" (School 1, observation notes)

Overall trainers regarded the operation of peer recruitment meetings as largely straightforward and noted few issues or concerns. In agreement with school leads, trainers generally perceived excitement and enthusiasm in the response of peer supporters to the prospect of attending training, particularly the fact that they will be out of school for two days.

"…the recruitment [meeting], that's great, they are just really excited at the meeting because they are hyper because they get out of school for two days, they are delighted." (Trainer, Site 1)

That said, trainers (reflecting on the peer recruitment meetings) were not always sure that peer supporters fully grasped what the role of a peer supporter would entail.

"I suppose it's exciting isn't it [being nominated]? And they are still really quite young, it's not, so they maybe don't understand the commitment they're making." (Trainer, Site 1)

Trainers also noted that some students chose not to participate in the programme and perceived that these were perhaps quieter or less engaged pupils some of whom maybe smokers themselves.

"…maybe they are smokers, maybe their parents were smokers, I've always wanted to know that, who are those ones that don't come, and sometimes you get that opportunity to speak to the teacher about it." (Trainer, Site 1)

4.2.1 Fidelity of Peer Recruitment

Observation of recruitment meetings showed a high degree of fidelity, covering each objective specified in the manual. All sites gave information about the role and responsibilities of being a peer supporter and reassurance that students were only expected to speak to students that they knew in their year.

Peer recruitment meetings tended to take place in classrooms which could become quite cramped depending on the size of the group. In two cases (Case studies 3

and 6), the student group was very large. Although these groups were split into two for the training sessions, they were grouped together for the peer recruitment meeting resulting in large and disruptive groups which were difficult for the trainers to manage. Trainers also reported feeling restricted at times in terms of the time available to deliver the peer recruitment meeting.

> "Sometimes in terms of timing, you've not always got time to do loads of games, because by the time you get people out, cos they come from different classes to a set location and then back again, you've not always got the time to do that." (Trainer, Site 3)

As specified in the manual, the tables were often laid out in order to allow students to have informal discussion in groups. The manual also specifies that students should be seated in small groups. However, there were occasions where tables were set up in such a way that a larger group were seated together (Case Study 1 and 2). This caused disruption, as these groups began to dominate the session. In contrast, those in smaller groups appeared to get on with the task and engage in group discussions with minimal disruption.

Where facilities were available, information on the role and responsibilities of a peer supporter was communicated via a standard ASSIST power point presentation.

As specified in the manual, informal discussions were used to establish what the students already knew about smoking. One group (Case Study 1) were observed doing an exercise to look at the reasons why someone would start smoking and the reasons they should stop. Discussion with the trainers revealed that they decided to add this exercise so they could gauge student knowledge and awareness.

Trainers' style of delivery promoted a friendly atmosphere, keeping interactions informal and emphasising the positives of being nominated as a peer supporter. In one school, trainers encouraged students not to view them as teachers by creating and adopting nicknames, sitting amongst the students and talking about things they found interesting (music, tv, etc). Students were given paperwork for their parents/carers to complete. Great importance was placed on returning the forms and students were told they would not be able to attend the training without returning the forms. This often resulted in the students being given the forms with only a few days to return them, sometimes over the weekend.

A large part of the session was taken up by outlining the training days and what the peer supporters could expect from them. However, minimal detail was given on the follow-up sessions at this stage and in some cases, these were not mentioned at all.

4.3   Peer Supporter Training

Feedback on peer supporter training was generally positive. School leads spoke highly of content, delivery, organisation and logistics to deliver peer supporter training.

"I thought the training was phenomenal, the best I've ever seen." (School lead 8, follow-up)

On the odd occasion where something did not go to plan (bus not arriving for example), trainers were praised for their ability to deal with the situation "robustly"' and keep the training schedule on track. As this was a pilot it is not surprising that school leads, trainers and site co-ordinators observed that some venues were more suitable than others. For example, one school lead commented that for wave 1 of ASSIST, training was delivered in the Science Centre which they thought took 'centre stage' suggesting that the students were less focused because of the exciting venue. For the second wave, training was delivered in a community centre and the students were perceived to be 'more focused.'

Points for consideration from school leads focused on rewards and 'fiddle toys.' One school lead commented that trainers had given students sweets as a reward but their view was that this was not the best approach for a school that was trying to promote healthy eating. Fiddle toys were viewed as a distraction which meant students were not concentrating on the training course.

Trainers exhibited a high degree of enthusiasm and support for the training.

> "I think the kids are getting a wonderful experience, a day out of school, somewhere really nice, with people who want to be there to teach them and invest time in them. So it's all win, win…" (Trainer, Site 1)

4.3.1 Style of Training

Peer supporters felt that the style of the training was an effective way of learning facts about smoking and was described as *'a fun way to get points across'."* The training's emphasis on activities and games, as opposed to classroom learning, meant students were more enthused about the material and more likely to remember what they had learned.

> "Like, when you're just writing stuff down, you don't really remember it but when you do it as an activity, it makes you remember it." (Peer Supporter, school 5)

Trainers also felt that the programme benefited from the interactive training style, creating an appropriate mix of activities, listening and reflection.

> "…all the activities were really well done, you know, they were interactive, and they were constantly changing from areas in the room to listening to talking to, so it was all really well put together." (Trainer, Site 2)

Students felt that dropping smoking facts into conversations with their peers was a more natural way of talking about smoking and could reach students who would not normally respond to being taught about the dangers of smoking by their teachers.

> "Yeah, because when a teacher says something to you, you don't really pay attention to it, like, when they say something an' you're like that, 'Alright then,' but then when your mate says something, like, you pay more attention, like,

you're, 'Oh, right,' an' you actually have listened to him whereas a teacher, you just sort o' blank them an'." (Peer Supporter, school 5)

The style of the training also meant that students were encouraged to mix with those they previously may not have interacted with. Dividing the students into groups was also done in a fun, interactive way which the students responded positively to:

"Yeah, like, when you have to, like, go up in a line, like, you could work with different people... cos, like, normally all the girls would go together an' all the boys would go together. Like, we wouldn't mix together." (Peer Supporter, school 1)

"Like, it was good because you made new friends out of them." (Peer Supporter, school 1)

Peer supporters felt that the trainers worked hard to keep the activities interesting and because each activity did not last too long, it helped maintain students' enthusiasm and energy.

4.3.2 Content of Training

Some peer supporters commented that the first training day, which focused on teaching the students facts about smoking, contained a lot of information, which was difficult to take in. However, the second training day, which focused more on the practical application of the knowledge gained during the first day, was received more positively.

When asked to recall their favourite activities, two games stood out from the peer supporter training. One was the 'Ready, Steady Cook' task from day one, which students felt was a good way of communicating the chemicals in cigarettes and provided an opportunity to discuss exactly what went into making a cigarette.

"I didn't know acetone was in it." (Peer Supporter, school 17)

"I thought we were making a cake. [Laughter] Then she put rat poison in it. [Laughter]." (Peer Supporter, school 17)

The other activity was the 'Listening Train' task from day two which helped peer supporters improve their confidence and communication skills. Peer supporters also stressed the importance of interspersing the activities with games in order to keep levels of enthusiasm high.

"I think the training, because you did an activity an' then you done a game so it was, like, you done two activity an' then a game, so, instead o' messing about on loads o' activities, we got to do stuff in between so it was kinda, it made some people want to do it more." (Peer Supporter, school 17)

Trainers also noted that 'Ready Steady Cook' and the 'Listening Train' worked particularly well in terms of engaging peer supporters. One trainer commented on the 'Listening train':

> "I was thinking wow, okay, because kids that age don't usually want to listen or speak to each other like that, and they absolutely adored it. You could feel the buzz in the room." (Trainer, Site 2)

However, there were some activities that they perceived to be repetitive such as "The Wind Blows", which some felt 'fell flat.'

> "…it's a bit of a hit or miss because by the time that you do that, you've gone over all the stuff so you are saying to them you know, 'smoking wind blows if you think that….' but you've already dispelled that myth or you've already spoke about it." (Trainer, Site 1)

4.3.3 Relationship with the Trainers

Peer supporters felt that it was important that they could feel relaxed and build up a good relationship with the trainers. The fact that some trainers had previous experience working with children was also viewed as beneficial because they were able to speak to the students on their level. Trainers' informal approach and delivery style helped to further differentiate the training from a normal day at school which in turn made peer supporters feel more comfortable and added to the impression that they were being treated like mature, young adults as opposed to children.

Trainers also felt the benefit of building rapport with peer supporters. There was a sense that good relationships with peer supporters could facilitate the delivery of the training but also make the experience enjoyable for trainers too.

> "It's quite important obviously to establish some kind of working relationship with them, so I quite like the first part of the first day just getting a bit of a laugh, getting a bit of rapport with them. Hoping that then they will sit and listen and take part without much issues with behaviour or anything like that. That's really important. I quite enjoy going on the bus for that reason as well. Because it gives me the chance to have that extra fifteen, twenty minutes with them on the bus." (Trainer, Site 1)

4.3.4 Confidence Building and Communication Skills

Peer supporters felt that taking part in the training gave them the confidence, knowledge and skills to effectively communicate the dangers of smoking to their peers; something they would not have been able to do before taking part in the training.

> "Yeah, I kinda felt a little bit more confident about speaking about it. Like, it's still obviously quite a big thing to speak about and it's kinda, like, it's affecting someone's life obviously, it's affecting their health an' how they do things so it's like, you don't really want to try an' interfere as much but it helps, like, it does,

you get a bit more confident about speaking to it. The training really helps." (Peer Supporter, school 4)

Peer supporters also indicated that their confidence grew as a result of getting to know their classmates better.

"You learned more and you got to know everyone better and they were really helpful." (Peer Supporter, school 17)

Trainers also observed that peer supporters' levels of confidence grew over the two training days. One trainer, however, felt that the training could do more to develop peer supporters' communication skills to help them initiate a conversation.

"The way the manual goes, I think there is an expectation that young people know a little bit about communication skills. But I think communication is getting worse with young people. I do think they communicate very differently from how we did. It's a very comprehensive programme, but I don't think the manual maybe had enough in it. How do I have a conversation?" (Trainers, Site 3)

4.3.5 Choice of School Chaperone and Behaviour Management

Peer supporters felt it was important for the school chaperone to be someone that they had a positive relationship with rather than someone who was in a more senior, authoritative position as this may affect their ability to be open and honest with the trainers.

"So it was quite awkward. And XXXX was there an'."

"Yeah. So we had to kind of behave ourselves."

"I was more nervous when she was there when, say, she wasn't. Cos one day she wasn't there for a wee bit an' we had more fun. So, like, maybe she should have just not gone next time." (Peer Supporter, school 1)

Some peer supporters found the venue for the training to be very formal which affected the way they behaved. This group associated the venue with business meetings and conferences which meant they were worried about getting into trouble for misbehaving. They also mentioned that other meetings were going on which affected their level of comfort.

Choice of training venue was also important to trainers who realised the benefits of having access to additional space (particularly outside space) for peer supporters and themselves to spend time away from training rooms.

"At lunch time they got taken out and they were allowed to use the basketball courts and football courts. The weather was nice and it made a difference – they got out." (Trainer, Site 2)

4.3.6 Fidelity of Peer Supporter Training

Observation of peer supporter training noted that students began the training with a great deal of enthusiasm and excitement, but levels of engagement varied across the two days. Students appeared very interested and attentive while listening to the trainers' introductions and contributed well to the first half of day 1. However, on both days the enthusiasm of the students dropped after lunch. The trainers noted that this was very common. Some students showed signs of disinterest (looking bored) at the end of day 1.

The contribution of students varied across the sites with a noticeable change in their confidence levels during the two days. For example, on the morning of day 1 students were reluctant to give full answers or put their hand up to offer suggestions but as the days went on their confidence levels grew and many more hands were raised at the end of day 2 with students offering much longer answers.

Venue suitability varied across the six case study schools. Three training sessions were held at local hotels (Case studies 1, 3 and 6). None of these three venues offered a self-contained outside space. The other three schools travelled to local venues which offered function rooms (Case studies 2, 4 and 5). Only one of these three venues contained an outside space (Case Study 2).

The ASSIST manual specifies that peer supporters should be given healthy foods but that it also needs to appeal to young people. Two schools (Cases 1 and 2) opted to serve foods such as hot dogs, pizza, chips and chicken nuggets in an effort to ensure that the students would eat the food as they had provided healthier options in the past which often went uneaten. The remaining schools offered options such as soup, sandwiches, wraps, fruit, yoghurt and fruit juice and the students appeared to eat this. Two schools (Case studies 1 and 2) offered prizes for those who answered questions and participated in the group discussions. These often consisted of sweets which were eaten right away.

The ASSIST manual specifies that toast and hot or cold drinks should be served at the morning break, the reason being that many students will not have had breakfast before attending the training. Two schools served breakfast at the morning break as suggested in the manual (Cases 1 and 2), however, several schools opted to serve breakfast earlier in the day as the trainers believed that since many students would not have had breakfast it was better that they had something as early as possible (Case studies 3,4,5 and 6).

Observation suggests that the overall objectives of the training were met. Trainers demonstrated an extensive knowledge of tobacco and communicated this to the students who appeared to easily digest and store this information. However, there were disruptive students and it was not clear whether these students understood what their role as a peer supporter entailed, as many were not able to recall skills or practice conversations.

4.4 Follow-up Meetings and Diaries

As detailed in Table 1 there are four follow-up sessions where trainers come back into school to meet with peer supporters to discuss progress and any issues. School lead's opinion on the number of follow-ups that should be undertaken was mixed. Some felt that four sessions were too long and became repetitive, which meant that peer supporters began to lose interest and got 'a bit fed up.' Others felt that four sessions worked well, maintained momentum and allowed peer supporters to raise questions about their role. One school lead commented that their students would have been happy to attend more follow-ups.

Feedback from students suggests that they did not feel the follow-up sessions were as useful as the training days. Several mentioned that they did not enjoy the follow-up sessions as they found them to be boring and repetitive. The availability of classroom space meant that some groups did not have the room to play games which left students feeling bored and unmotivated. However, some students mentioned that they found the follow-up sessions helpful as they provided an opportunity to refresh their knowledge and skills although these sessions tended to take place during one school period which many students felt was not long enough.

> "On [the training days], we had the whole day but in that we had, like, one period to do it which was kinda taken up by coming up, getting your names an' all that. Sitting down an' getting settled an' that." (Peer Supporter, school 1)

Peers supporters suggested that the follow-up sessions could be combined into two longer sessions which more closely resembled the training days. To address the time pressures, some trainers also suggested that it may be better to combine follow-up sessions so that they may be conducted over two school periods or an afternoon. In one pilot site this approach was trialled out of necessity (the school had forgotten the follow-up had been arranged and a double session was all that could be accommodated) with mixed results. Some felt it provided more time to reflect on peer supporter experiences but others found it more difficult to maintain peer supporters' engagement over a longer session.

On a positive note peer supporters noted that the follow-up sessions offered them the opportunity to discuss any worries or concerns around message diffusion. For example, before taking part in the two day training, some mentioned that they were worried about the response they would get if they approached their peers and started talking about the dangers of smoking. They anticipated disinterest and hostility from those who smoked because they might not want to be told that what they are doing is bad for them. The follow-up sessions were believed to have been helpful in dealing with these types of issues and the trainers were on hand to reassure peer supporters that even though they might be greeted with resistance or indifference, they may still be having an effect. The follow-ups also gave the peer supporters an opportunity to go over any conversations they may have had and identify any areas they could improve upon.

> "But, the one thing I liked about the follow-ups was, when you'd done your conversations and they went over them and then they tried to make them better.

Like, they tried to make you more confident than you were." (Peer Supporter, school 1)

Trainer experience of follow-up sessions highlighted some challenges. One issue related to the logistics of hosting follow-up sessions in school with issues around the allocation of suitable rooms, the timely release of peer supporters from class and directing them to the correct room. Trainers reported that on arrival at some schools, staff were not aware of their visit. Problems with logistics could add further time pressures to the already short period of time allocated to follow-up sessions with trainers often feeling that they were rushing through the required tasks.

"Just getting into the school on time and getting into a decent room and getting set up and having the time to deliver it is really difficult… The attention of the peer supporters tends to be really good, but you're meant to have an hour and only get twenty minutes by the time they round up all the pupils, you get a room and you're able to get started. The follow-ups are the hardest bit." (Trainer, Site 3)

Maintaining peer supporter engagement within and between the four follow-up sessions was perceived as problematic. Trainers notice a difference in peer supporter engagement with follow-up sessions compared to that on the training days. For some this was due to follow-ups being conducted in a school environment and peer supporters' attitude and behaviour reflecting this more formal and familiar environment. Other trainers commented on the less interactive style and repetitive content of the follow-up sessions which discouraged peer supporters.

"The pupils are different. They behave differently. When you take them out of the school setting, you would think that they would behave worse, but actually most of the time, they actually behave a bit better and they are more respectful. When you are back in school with them, they kind of revert to that pupil mode and they start behaving like young people in school and try to have a laugh and trying to be difficult – I don't have a pen and I don't have this…" (Trainer, Site 3)

"I think the follow-ups, I don't like to say they fall a little bit flat, but they've had the two days training, they have had the hype of going out. And then you come into the school. I mean all the activities in the follow-ups are fine you know, but the kids' evaluation as I've said, there was too much writing, and there was too much sitting about." (Trainer, Site 1)

In contrast to the feedback from peer supporters above, some trainers felt follow - ups did not provide enough time to address peer supporters' concerns or difficulties around conversations. Trainers reported that there was no specific activity included in the follow-ups that considered conversations and that the specified activities reduced the time available to discuss peer supporters' issues.

"…we did say if anyone had any issues and some would say something, I think we could have spent more time on it, discussing what the issue was, so that everybody was hearing how you could do that…I think the follow-ups would be better being more about them and them coming to us…" (Trainer, Site 2)

4.4.1 Diaries

Peer supporters are encouraged to complete a diary to record conversations and serve as a resource for facts they could use in conversations. Diaries were intended to be used as a tool to help peer supporters remember facts and record conversations to share at follow-up sessions. Robust monitoring of the number of conversations recorded is not required (but the manual states that they should be checked at each follow-up). Diaries, therefore, were not used as a measure of message diffusion because this was never their objective. With this in mind, feedback on diaries focused on two key areas: their utility and fidelity with regard to checking at follow-up sessions.

The perception from school leads was that diaries were not being completed (students forgetting to bring them in or losing them). The suggestion was made that perhaps a paper diary was not the most conducive way for peer supporters to record conversations, with an electronic version perhaps more appealing.

Peer supporters made similar comment noting that they received their diaries at the end of the second training day and were shown how to use them. Several stated that although they found the facts listed inside to be useful conversation starters, they did not really use their diaries, even if they were having conversations with their peers. The main reason for this was simply that they did not remember to record each conversation because they would not have the diary close at hand. When they did have their diaries, many had forgotten the detail of their conversation or believed them to be too insignificant to warrant recording. This meant that it was common for peer supporters to only remember to fill in their diaries before the follow-up sessions as they knew they would be checked by the trainers. One group mentioned a girl who felt awkward when she found out she was the only one using her diary on a regular basis which led her to no longer use her diary.

"So then she used it a lot but then she was like, 'Why is no one else using them?' and we were, like, 'We all forgot,' and she was like."

"Yeah, she felt it, like, 'Why am I the only one doing it?'"

"Like there wasn't a point in doing it if no one else is gonna."

"And then last week she didn't bring it in." (Peer Supporters, school 5)

More emphasis was placed on diary keeping amongst trainers in one pilot site but all reported issues with peer supporters losing diaries or frequently forgetting or not bringing them to follow-up meetings. Corroborating the feedback of peer supporters, trainers did not perceive that poor diary keeping reflected a lack of conversations but that simply these were not being recorded in diaries.

"They are having the conversations – a lot of them don't even fill the diaries out and they lose them after day 1." (Trainers, Site 3)

4.4.2 Fidelity of Follow-up Meetings and Diaries

For some case study schools, diaries were not always checked by trainers at follow-up, which was a fidelity issue. This was also reflected in feedback from peer supporters with some under the impression that the main focus of the follow-up sessions was to check their diaries to see if they had been recording their conversations. Whereas, others felt that the diaries were hardly mentioned during the follow-ups. Trainers mentioned that they found the diaries problematic (for reasons mentioned above in (4.4.1) and in Sites 1 and 3 they decided not to place a great deal of emphasis on them. In contrast, Site 2 examined diaries at each follow-up to count conversations and allocated time for diary completion at the start of each session. This variability and confusion is perhaps a reflection of the point made earlier (3.3.1) where trainers commented that there was not enough time allocated to delivery of follow-up sessions in their training. Peer supporters appeared to retain facts from the training days, however observation of follow-up sessions suggested that it was not clear whether they understood their role in terms of preventing their peers from starting to smoke or who they should speak to. For example, follow-up observations highlighted examples of peer supporters talking to smokers and random people they would pass on the street (Case Studies 1 and 3).

Due to timetabling issues, the room allocated to the follow-up sessions was often small and cramped. Some rooms were large enough to have the tables rearranged but this was not always possible. It was common for rooms to be laid out with desks in rows facing the front or several tables grouped together. Rooms with large tables, were generally unsuitable because it often resulted in large all male groups with disruptive behaviour (Case studies 2 and 5). Students were allowed to sit where they wanted which meant boys and girls were not interacting during the follow-up sessions. In some schools (Case Studies 5 and 6), the follow-ups took place in various classrooms which left the trainers with very little time to set the room up and much of the time allocated was taken up with trying to get the students to the correct room.

Where peer supporter groups had been split into two groups for the peer supporter training, they were sometimes combined into one large group for certain follow-up sessions. For example, the first follow-up session in one school (Case Study 6) combined the groups into one very large group which was too large to manage. This resulted in many students disengaging from the material and a lot of disruptive behaviour. Likewise, for the fourth follow-up session at one school (Case Study 5) the groups were brought together, resulting in a very cramped and hot room in which the students found it difficult to concentrate.

Timetabling issues within the school could also result in difficulties communicating to students when and where they should be. For example, during one observation

(Case Study 5), students were sent out of the room to find other students and let them know where they were supposed to be.

Due to the restricted time allocated to the follow-up sessions, activities often had to be cut short or be left out altogether. This was particularly true for the first follow-up which contains three activities. Trainer feedback suggested that some preferred to prioritise time to discuss examples of conversations and how the students should deal with certain situations rather than completing activities.

Table A5 (appended) indicates that school staff presence at each stage of delivery varied. For example in one school the same senior member of school staff attended all stages except one, whereas in the second school no representative from the school was present for any of the follow-up meetings. Finally in the third school the same member of staff was present throughout delivery and was a member of the pupil support team. The ASSIST manual recommends that teaching staff attend all stages. There were occasions where this caused challenges for trainers who had to manage behaviour (discussed further in Section 4.9) but also retain the informal friendliness required to be an ASSIST trainer.

The fourth and final session varied greatly in terms of thanking the students for their participation and presenting them with their certificates. For example, in one school (Case Study 1), the entire year group was gathered together for an assembly and the peer supporters were presented with their certificates in front of their peers. In other case study sites (Case Studies 2, 3 and 5), the peer supporters were presented with their certificates in front of the other peer supporters and thanked for their participation. In one case study site, (Case Study 6), the final follow-up session ended very abruptly. Several students had already been permitted to leave the session and return to their English class and the students were informed that they would receive their certificates at a later date.

4.5 Initiating Conversations Following Training

Peer supporters reported feeling apprehensive and nervous approaching their peers following receipt of training. This indicated that they may have found it difficult to initiate conversations, not necessarily about smoking, but conversations in general.

"Yeah, I don't really like starting conversations." (Peer Supporter, school 21)

Trainer feedback on peer supporters' initiating conversations was more mixed. Some peer supporters were perceived to be very confident in starting conversations but trainers were also highly aware that many other peer supporters lacked the necessary confidence for fear of being laughed at or risking offence.

"…in the main I would say no they weren't confident. They still questioned themselves just in terms of you know whether my friends are going to laugh at me. And that seemed to be something that was quite prevalent, they weren't sure if they were going to appear a geek if they suddenly started spouting all this stuff." (Trainer, Site 2)

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Peer supporters who found it difficult to begin conversations felt nervous about asking for help during the follow-up sessions in case they were singled out or made to feel less able than the other students.

> "Because everybody else knows what to do and you don't want to be the one that doesn't know what they are doing or anything." (Peer Supporter, school 21)

When peer supporters did manage to have conversations, these tended to be based on the facts and information gained during 'Ready, Steady, Cook' or other activities from the training days.

On smoking specifically, some peer supporters expressed concerns that by approaching their peers and telling them facts about this issue, they would come across as patronising. This was echoed by non-peer supporters who felt it was inappropriate for their peers to be giving them this type of information.

> "Cos they're acting like they know better than me an' I know I'm more or less the same." (Student, school 17)

However, there was also the view that peer-to-peer conversation was more effective than having a teacher deliver a lesson on smoking.

> "But, see, if ma pal says something to me, I'd probably take it more than if Miss xxxxx said something to me." (Peer Supporter, school 17)

Although peer supporters were aware that they were supposed to be having conversations with other students even if they did not smoke, many stressed that they were not having conversations with their peers because they did not smoke or because their friends had been nominated to be peer supporters.

> "All my friends were pretty much at the ASSIST meetings." (Peer Supporters, school 21)

Trainers also reported that peer supporters, initially at least, perceived that they should be speaking to smokers and that this was a barrier to conversations trainers attempted to address in follow-up sessions.

> "And then they go, 'oh but my friends don't smoke'. Then it was about telling them it's not just about people who are smoking, it is about stopping them smoking. They found that hard to grasp sometimes." (Trainer, Site 2)

Many students recalled having conversations with family members who smoked in an attempt to get them to stop. These conversations also gave some the confidence to try and have further conversations with their friends.

> R: "Yeah, my Gran was, she only has, like, a few now so she's cut down."

> Q: "Because of what you said to her?

R: "Yeah, because, she already was trying to stop but because she didn't get anything like this in school, she didn't know as much about, like, the facts so, yeah, she was, like, 'Oh, I never knew that. That's interesting.'" [Laughter] (Peer Supporter, school 5)

Trainers were also aware of peer supporters having conversations with family members and mentioned encouraging this in order to increase confidence in starting conversations in the short term.

4.6   School Contribution to ASSIST

Schools participated in the delivery of ASSIST in three ways. First, was logistics which included: being the point of contact for the trainers; organising class time and rooms for recruitment and follow-up meetings; emailing colleagues to inform them students would not be in class because of ASSIST training or follow-up meetings; administering and collecting consent forms for students to attend the two training sessions and helping trainers identify the best time of day to conduct the follow-up meetings.

Generally schools appeared to accommodate the required input to deliver ASSIST which was helped by the offer of back fill costs (but not all sites could offer this and most schools did not request it). However, it was noted that at times it was 'a bit of a challenge' to organise cover.

School lead perception of their role at baseline interview was generally the same at follow-up, which was manageable alongside their existing workload. On the rare occasion where unanticipated time was required this was due to internal school procedures e.g. one school used specific computer software to manage school trips so the school lead had to upload information to the system, even though the school was not organising it.

Second, was organising staff cover to chaperone students for the two day training. This worked better in some schools than others. For example, it was notable that the school chaperones for one case study school did not contribute to the training but instead spent the first day chatting at the back of the room (Case Study 2). As per the training manual, schools were given a briefing sheet outlining what the expectations were from chaperones. However, it was clear that interpretation of this varied amongst schools.

Trainers provided mixed feedback on the role of the chaperone and some of this was dependent upon whether or not they had experience of working with young people. Trainers with a background in youth work expressed concern that peer supporters may feel inhibited by their presence.

"They [peer supporters] think teachers are there to spy on them and grass them up for stuff…..Some of them, they maybe just didn't get on with that teacher. They just wind them up." (Trainer, Site 2)

Other trainers and particularly those with little or no experience of working with young people were happy for school staff to be present particularly with regard to supporting behaviour management but were frustrated when chaperones did not fulfil their expected role and/or showed no engagement with the programme.

> "Obviously a teacher or support teacher comes with the pupils. I've had two different experiences of that. The first one was not a good experience. She wasn't supportive at all of us managing the behaviour of this really challenging group and sat outside the room, despite being asked to come in." (Trainer, Site 3)

Finally, school staff encouraged and supported students in their peer supporter role. This ranged from encouraging them to accept the role, to checking in on them once they attended training to see how they were getting on.

4.7 Scheduling of ASSIST

There were two approaches to the scheduling of ASSIST. One was to avoid having the follow-up meetings at the same time (i.e. same class) so that students were not missing too much of one subject, the other was to schedule during PSHE or PE in order to minimise the number of teaching staff that had to be notified. A learning point was raised by one school lead who explained that when they completed their first wave of ASSIST, peer nomination was on Friday afternoon which meant the students were 'excitable.' It was subsequently moved to a morning slot where the students were described as being 'calmer.' Trainers also noted that follow-up sessions scheduled after lunch-time could be affected by peer supporters experiencing a lull in energy.

It is, therefore, not surprising that school leads cautioned against timetabling ASSIST sessions over lunch breaks or after school and recommended taking advice from the school as to when was best to deliver the sessions. Trainers, also stressed the importance of working with the schools to schedule meetings in advance particularly given the range of competing activities going on in schools.

It should be emphasised that site co-ordinators and trainers were praised for the flexibility they displayed to schedule ASSIST, with one school lead commenting that they appreciated having an input to the timetabling of ASSIST.

> "It definitely helped that we had a say in the time of year that we wanted to run the project. Once we agreed that we would be part of the project, it wasn't that we were then told, 'your six weeks will be those six weeks'. We had a say when we would start the project so it would fit in with our school calendar, so that helped." (School Lead 5, follow-up)

4.8 School Year of Delivery

As noted in Section 1.3 in order to reflect the age range used in the original RCT a pragmatic decision was made to deliver ASSIST in either the last term of S1 or the first term in S2. In reality this was not always possible to due school timetables.

Assessing what this meant for delivery of ASSIST was a key area of interest for this process evaluation. However, as one stakeholder observed, because this was a process, not an effectiveness evaluation we do not have any evidence to show whether the varied delivery slots made a difference or not.

"I think, yeah the truth of the matter is we don't know." (Stakeholder 3)

That said, feedback from school leads did not seem to suggest there was any particular difference in terms of delivery targeting S1 or S2, with most commenting that they were given the option to choose S1 or S2 (the exception to this being site 3 schools where ASSIST was delivered to S2 year groups only). The focus of discussion was on the reasons why one year was picked over the other (i.e. S1 chosen because S2 was busy with course selection for future years, or because the school thought it would be particularly beneficial "to bond the year group"). One school lead reflected on whether S1 would have been better because they would have been more 'eager' than the S2s but overall there was a sense that the decision was based on pragmatism.

S1 students commented that because they were still getting to know people in their year group they felt it was too early to identify the most influential people in the year. The concept of nominating other students they trusted was also difficult for some which resulted in many students nominating their friends or people that they knew:

"I thought it was really hard because like you have to put people like who you trust, it's really hard for me to trust people because it depends like if I know them and that and the same probably goes with…that you've got to trust them before you tell them stuff." (Student, school 5)

This view may be a reflection of the delivery date which was January, meaning S1 students had just four months to establish friendship groups.

4.9 Behaviour Management

School lead discussions suggested that trainer management of student behaviour could be challenging at times. In the main the trainers were praised for striking a balance between maintaining discipline and establishing a rapport with students, with one school lead describing them as 'sensational' and another commenting that the trainers had 'a good approach with young people.' However there were examples where the school lead felt the behaviour of the students was not acceptable. In one school, for example, the school lead described the peer nomination process as a bit of a 'rammy' and noted that he had received negative feedback from colleagues regarding student behaviour in the follow-up sessions. He wondered if trainers should think more about the kind of atmosphere they want to create and the balance between a youth club and school atmosphere. A similar view came from another school who noted that whilst trainers should not take on the role of a teacher, they do need to have some authority.

"The trainers are really, they were really really nice an' the kids warmed to them so well, and I think they need that as well. They can't be too, they can't take the role of a teacher cos that's not the point. They have to take, they <u>have</u> to be that friendly person who the kids'll go to if <u>they</u> have a problem with smoking, cos they're saying to them, 'If you come to us' – they have to be approachable but they also have to have the authority." (School lead 9, follow-up)

In light of this it was not surprising that some school leads felt that it should be class teachers not support staff who attend the training sessions but this very much depended on the resources available within the school.

Trainer's perspectives on behaviour management was different to school leads. Despite valuing the support provided by the presence of teachers, trainers were keen to distinguish between the formality of the school environment and the informality of the training course. They were clear that teachers should not interfere in the running of the peer supporter training course specifically with regard to discipline.

"… they are just there really not to really, just as chaperones and if somebody is misbehaving or whatever, but again that is something we are capable of dealing with that you know, and I mean if it got to the stage if somebody had to be taken out." (Trainer, Site 3)

However, case study observations revealed a degree of confusion surrounding the role of the school chaperones, particularly in relation to behaviour management. In situations where the the whole group was poorly behaved it became obvious that the trainers would have liked the school chaperones to step in and speak to particular students. For example, during one observation (Case Study 2), the behaviour during day 1 of the peer supporter training was very disruptive, however, the school chaperones did not get involved. Instead, they (i.e. the school chaperone) reported the behaviour when they returned to school to the Head Teacher and some parents were called to inform them of their child's poor behaviour. Trainers would have preferred the school chaperones to have got involved on the day, rather than punishing the students retrospectively.

In addition, observation data highlighted that trainers with a background in youth working appeared more equipped to deal with disruptive behaviour from the peer supporters. Follow-up interviews with trainers also supported this view with many of those with experience of working with young people appearing largely unfazed by poor behaviour in peer supporters.

"I mean I've been working as a youth worker for twenty to twenty five years, so if somebody was getting, and I think it was excitement the behaviour, just over excited it's just a quiet chat outside the room just to say that you know it's not appropriate and you are spoiling it for others." (Trainer, Site 2)

4.10 Delivery Costs

Funding to deliver the ASSIST pilot came from the Scottish Government and NHS Boards tobacco prevention budget, with Local Authority partners providing in-kind resources only. *At the time of writing this report the Scottish Government had made no commitment to fund delivery of ASSIST beyond the pilot.* Setting the budget for each site varied depending on their delivery model and the number of schools they planned to work with. All three pilot sites praised staff at DECIPHer-ASSIST for their help to cost delivery of the programme, with the only reports of unforeseen expenditure for things like post-it notes, pens, coloured paper. As would be expected with any pilot, cuts and saving were made as the pilot progressed – preferred venues, coach hire, catering were used and staff time to prepare for delivery became streamlined the more experienced they became.

Stakeholders commented that ASSIST was not 'the cheapest programme to deliver' but also added that not only was it an investment to potentially protect young people from smoking harm it also equipped them with a skill set that will serve them well in the future.

Between August 2014 – June 2017, 72 cycles of ASSIST were delivered or confirmed for delivery in 2017 and included in the cost analysis. The average cost to deliver one cycle of ASSIST ranged from £8,939 to £11,357. The actual total delivery cost for all three sites was £674,360 of which 20% (£136,800) was for the license fee. This equates to a cost per cycle of £9366. Costs include the license fee and VAT. However, this cost can only be regarded as a ball-park figure, as circumstances differed between the sites in terms of the size of the school and location (e.g. costs for training in rural areas will likely be higher than for urban schools). Therefore it is not possible to rely heavily on the average experience by these three sites when planning future implementation of ASSIST.

Chapter 5: Post-delivery of ASSIST

This chapter describes findings post-delivery of ASSIST, in particular the benefits of being a peer supporter; message diffusion; smoking status; and views on future application of the ASSIST model.

5.1 Message Diffusion and Impact

Delivery of ASSIST centres on peer-to-peer informal message diffusion, which expects students to have conversations with their peers to spread anti-smoking social norms. This section of the report examines perceptions on the extent to which this happened, based on the data available from the study.

Stakeholders, school leads, site co-ordinators and trainers were sceptical (some less so than others) about diffusion of key messages via informal conversations, which mainly centred on how many conversations actually took place. There were two explanations for this. First, the point was made that smoking in schools nowadays is not 'a big issue' so opportunities may be limited. This implies that peer supporters would only speak to smokers which is not the objective of ASSIST (smoking prevention by reinforcing smoking harm is also a key objective of the programme). They also acknowledged that just because they were not aware of informal conversations taking place this does not mean they are not happening.

> "Just because they're not filling in the diaries, they might still be covering the conversations." (School lead 5, follow-up)

Second, there was a perception that peer supporters may be more likely to have conversations with parents or family members than their peers. Findings from peer supporters support this view with several mentioning that they had engaged in conversations with other people outside of their year group such as their parents or other family members, but not with their peers. Some peer supporters felt they had really made a difference to their families' health because it had resulted in them cutting down or trying to stop smoking altogether. While others reported being dismissed by parents who felt that they were already aware of the dangers of smoking.

The student survey indicated that conversation recall with peer supporters was low with 9% (n=145) of respondents answering yes, when asked if a peer supporter had spoken to them about smoking.

Why did so few conversations with peer supporters take place or were recalled? There are a number of potential explanations for this. First, smoking rates in Scotland are now so low in this age group overall, that young people may have not

felt the topic was immediately relevant to them or their peers. Just 1.6% of pupils (n=33) reported that they smoked one or more cigarettes per week increasing slightly to 1.8% (n=38) at follow-up (see Table A3), and this is consistent with national surveys. If so very few young people are smoking, then it is understandable that few conversations on the topic were taking place. Even though ASSIST does not intend for conversations only to take place with smokers, this very low prevalence may well have affected when and with whom conversations took place.

A priority group for conversations are young people who are not already regular smokers, but are at risk of smoking uptake, particularly those who are experimenting with cigarettes or considering experimenting. We did not assess smoking susceptability but we did ask about experimenting with smoking. Only 12 of the 145 students who reported a conversation with a peer supporter had experimented with smoking (had tried smoking once or used to smoke sometimes but not now). Thus we do not have any evidence that the conversations that did take place were targeted at the most 'at risk' group.

Secondly, there may be methdological reasons for why so few conversations were recalled. The data collection mode was a self-complete survey, so there is a possibility that by the time they completed it, young people may simply not have remember conversation(s) with a peer supporter or may not have known that they had spoken with a peer supporter. Some weight is added to this argument when reviewing answers to a different survey question – 'How many conversations have you had with friends from school about smoking in the last week?' Between baseline and follow-up there was significant increase in the number of conversations (p<0001, see Table A4), with 18% reporting smoking conversations at baseline and 26% at follow-up. These data suggest that smoking conversations in general between students (albeit not necessarily facilitated by peer supporters) had increased over the intervention period.

When conversations with peer supporters who had received ASSIST training did happen, feedback from the student survey suggests that the majority took place face-to-face (87% n=125), and during school hours (63% n=94). Similar findings came from student focus groups with students reporting that most conversations took place in school. The main reason students communicated face-to-face (rather than by text or social media) was because it let them see facial expressions and body language and they would also find it hard to bring up facts about smoking via text or social media. Non-peer supporters were able to recall some of the conversations they had with peer supporters which included various facts:

"Like, I remember one person was saying like cigarettes are like as addictive as cocaine or something like that."

"And then there was like £17.50 to smoke like so many cigarettes in a week or something like that."

"Yeah and it's like every cigarette you smoke takes seven minutes off your life and stuff like that." (Student, school 5)

However, some students who were not selected to be a peer supporter mentioned that they had not been approached by a peer supporter because they were not part of that person's particular friendship group. These students also felt that the fact that the peer supporters had got out of school for two days was more important to them than actually talking about smoking because they had heard them boasting to their friends about going away for the training.

5.2 Benefits of being a Peer Supporter

School leads were very positive regarding the wider opportunities that becoming a peer support held for students, recognising that ASSIST was not just about smoking prevention. Comments centred on personal and transferable skills which would not only help them in school but also when they moved onto higher education or employment. Perceived skills included: improved self-confidence; self-esteem; self-worth; leadership; working as a team; communication; social skills and new friendships. There was also a view that taking part in ASSIST may encourage students to sign up for other activities within the school, especially the quieter students who do not normally put themselves forward. It was also noted that, particularly in first year, it helped create a greater level of cohesion as peer supporters got to know their peers a bit better. This was especially true in one school that had seen eight primary schools merge to form S1. Finally, there was a perception that peer supporters had acquired a considerable amount of knowledge about cigarettes, especially the tobacco industry, which will benefit not just them and the school, but also their family and communities.

> "… they were speaking to folk in their clubs and their wee youth groups so I suppose you get a range of ages in there, so you did get that and as I say it was granny, grandads, mums and dads that were getting it you know, it was their family members so I dare say it was their big sisters and big brothers in there as well."
>
> Q: "So the clubs and the youth group, was that within the school or was that out-with the school?"
>
> "No that was outside, outside in the community." (School lead 3, follow up)

Similar views were held by peer supporters who stated that one of the benefits of being involved in the programme was that it allowed them to make friends and grow closer to other students who had attended the two day training course. Many also mentioned how the programme had helped to make them more confident when speaking to other people and improved their communication skills.

Some students believed that being a peer supporter might also be a useful thing to add to their CV. They were proud of their achievements and believed it was something which would be of great use to them in the future.

Stakeholders could also see the positive outcomes of ASSIST for peer supporters in terms of life skills e.g. personal and social skills.

"When you hear about it, that they [peer supporters] get something really positive out of it which must be worthwhile. So I think that is, and I am talking about self-esteem, self-confidence, those personal qualities that people are getting out of it I think is really worthwhile." (Stakeholder 11)

However, it was suggested that peer supporters would benefit further if their contribution was recognised by a national award, which could help them in the future to apply for jobs or further education opportunities.

"But I think a big part should be how it ties in with Saltire [youth volunteering initiative], what awards, and youth achievement awards, I think we could be better at that." (Stakeholder, 6)

5.3   Trainer Reflections on Implementation

As would be expected, trainer confidence to deliver ASSIST increased over the course of the pilot, with self-perceived scoring of their confidence increasing between baseline and follow-up.

"I think I would probably; I'd definitely be up [score for level of confidence] from before, because you are always a bit nervous about doing things for the first time. And now having done it twice I do feel a lot more confident." (Trainer, Site 2)

The perceived usefulness of the 'train the trainer' training during baseline interview was largely maintained at follow-up though some felt the training could be improved by providing additional instruction on how to conduct follow-up sessions and, depending upon the occupational background of the trainer, behaviour management and tobacco related knowledge.

Overall, trainers' experience and satisfaction with being involved in ASSIST appeared to vary according to the extent and nature of their role which was often linked to the way in which the programme was implemented in different sites. For example, trainers who were employed as part of a dedicated team and involved in all aspects of delivery, appeared to exhibit greater satisfaction with their role.

"If you were doing this on top of another [job], certainly if I only worked part time and I've got ten schools, you couldn't do it, but because we are specifically for the ASSIST project. I think that's one of the main reasons it's ran so smoothly for me, it's the focus of my work." (Trainer, Site 1)

In contrast, trainers who took on the role part time alongside other working commitments and/or were employed on short term fixed contracts with input into the programme limited to delivery only, appeared less satisfied with their involvement.

"My job is on a fixed term contract, so it runs from year to year. But everyone wants a permanent job, so when your fixed term contract comes up for renewal,

which might not be renewed, then you are obviously going to be looking for other posts." (Trainer, Site 3)

5.4 Future Application of ASSIST Model

Participants reflected on the future direction of ASSIST in Scotland in two main ways – strategic (factors that will influence funding beyond the pilot) and operational (what do schools plan to do?).

5.4.1 Strategic Perspective

As would be expected, the key factor influencing future delivery of ASSIST beyond the pilot is funding. Stakeholders acknowledged the cost in delivering a licensed programme like ASSIST and the considerable challenges NHS Boards and Local Authorities will face to securing future funding for delivery. This was especially pertinent because ASSIST currently focuses solely on smoking and does not address other risk taking behaviours, with some commenting that in the current context of extremely low smoking prevalence rate in adolescents perhaps the programme is becoming less relevant?

> "It's an expensive programme and you've got, it's got to address a need that is there, an identified need. Now if your need is not there, why would they spend that level on a programme particularly on one topic area? I don't think it is the best way forward. Especially targeting it at an age group where there is, you wouldn't identify that as a specific need. I think it would be better to look at something that is maybe more health improvement, a generic focused programme, and I think peer education is a brilliant way of working but to just focus it on tobacco I think is too narrow." (Stakeholder 11)

Linked to this were questions around the frequency of message diffusion, wider budget cuts and how this will effect ongoing partnership working to deliver ASSIST.

> "I think there are interesting questions even if there is a commitment to fund at whatever level. Questions that other people have been raising, about prevalence rates being so low, so in practice, if the implications of that is the peer educators are struggling to have the conversations, I think that has to be looked at quite seriously…… And there is a real challenge in Local Authorities just now about CLD [Community Learning and Development] - seems to be getting decimated. Which for youth health promotion generally is a real serious concern, not just DECIPHer-ASSIST and tobacco. They have a long tradition of delivering work that is focussed on young people's health and well-being. The NHS doesn't have the skills, the capacity, the position, to deliver that work. So without CLD youth work sector to work in partnership with, I think that we will struggle." (Stakeholder, 7)

The counter argument against diverting funds away from ASSIST to other health promotion activities is associated with a need to maintain the current provision to prevent prevalence going up.

"I would take the other view which is actually you need to maintain the investment at that age which is a key transition from primary to secondary. In order to meet the target of reducing prevalence at 15 down to 2%, but really we need to also have the adult rate reduced to a significantly lower level to allow us to think that actually we could, an approach like ASSIST is no longer necessary." (Stakeholder, 1)

5.4.2   ASSIST Existing Evidence Base

The evidence base to support ASSIST is 13 years old. Stakeholders made reference to this and there was a strong view that the existing evidence base is now outdated and there is a clear need to not only update the existing RCT findings but also to follow schools and peer supporters longer term to see what impact (if any) ASSIST has had.

There were also contextual issues that were raised, most notably on e-cigarettes and vapourisers which have made clarification of current smoking prevention messages more complex. The existing RCT of ASSIST was conducted well before e-cigarette experimentation amongst adolescents was occurring.

"I think the other issue as well is that ASSIST, I mean it's been slightly updated but the whole kind of emergence of e-cigarettes and you can't, it doesn't deal with those, for good reason because they weren't part of the RCT, but they are the real – you know that has been a game changer in terms of people's behaviours, and I don't know going forward whether you would need to adapt a programme that actually took into account those things like e-cigarettes." (Stakeholder 10).

5.4.3 Operational Perspective

It was common for schools to report that they had received more than one cycle of ASSIST and would be keen to receive more in the future, suggesting that the programme was viewed positively and imposed little burden on schools.

Schools leads could see potential to apply the ASSIST model to other types of health behaviour change such as alcohol or drugs, (with one school commenting that they had used the peer approach to tackle energy drinks) but wondered if the age range would need to change (i.e. older students). Comment was made around the potential for saturation – i.e. the reason it works so well is because it is new to the school and different. Using the same approach in a different area may dilute impact if students become disengaged. It should be clarified that school leads were asked this question to ascertain their views on the peer support model and theory underpinning ASSIST. For reasons discussed in the background chapter (i.e. ASSIST is an evidence based, licensed programme) there was no expectation that schools attempt to apply or adapt the model, as this would require further research and development. Peer supporters and students expressed doubts about the applicability of the ASSIST model to sexual health as they felt that would be too embarrassing for the students to talk about with each other.

Baseline interviews from school leads highlighted an interest in using the skills the peer supporters had been given through ASSIST, although the precise detail of what this may look like was lacking, which is to be expected because ASSIST had yet to be delivered in their schools. At follow-up it was perhaps still too early to assess what schools had done with the resources they had been given. School leads were still vague about what they would like to do or could do rather than describing explicit actions. There was a sense of a willingness not to let the opportunities from ASSIST '*fizzle out'* but also an expectation of further input from the trainers to drive this forward. As illustrated below when the school lead was asked if the school had any plans to use the peer supporter in the future.

> "Yes. How we would do that, I haven't really thought through. I don't know if there's going to be any more input from the actual ASSIST team about how we might follow on with it or not?"

> "You don't know, do you, if ASSIST will do anything more specific with us?" (School lead 4, follow-up)

Suggestions included having something at the end of the ASSIST delivery period to raise the profile of ASSIST in the school. This included creating a game; video; drama or radio show; having a slot in the annual school health week; peer supporters contributing to the student council newsletter; or incorporating some of the ASSIST activities into PSE classes. Another suggestion was putting ASSIST schools in touch with one another so that they could learn from one another in regard to next steps i.e. how they could use the peer supporters in other areas or adapt the model in some way to tackle other health behaviour change or problems within the school (litter for example).

Students believed that the ASSIST model could be applied to other health behaviours such as drugs, alcohol and violence. It was also mentioned that it might be useful to spread anti-bullying messages. Most trainers were also very positive about the potential benefits of using ASSIST to tackle various other behaviours with sexual health education being a frequently mentioned, possible topic.

Chapter 6: Discussion and Conclusions

This final chapter will discuss our findings and finish with a brief conclusion to summarise the key points and future recommendations.

6.1 Discussion

Chapter 2 in this report set out the research questions for the study. Here we reflect on how each of these have been addressed through our findings, discussing key results for each question in turn. Recommendations are highlighted in italics throughout.

1. What are the barriers and facilitators to the implementation of ASSIST in Scotland?

Barriers and facilitators in this study were categorised as macro (strategic) and micro (operational). At the macro level they were: partnership working; budget; and culture. Delivery of ASSIST in Scotland was led by NHS Boards, but with a significant contribution from Local Authority partners working in education and Community Learning and Development. Local Authority contribution varied across sites, ranging from offering support to recruit schools to in-kind staff time to deliver training. Relationships with schools were key to the successful delivery of ASSIST. One of the reasons schools agreed to take part was previous successful collaborations with the pilot sites. Identifying a school lead who was supportive of the programme was clearly advantageous. The evaluation has highlighted examples where the school staff had taken the time to encourage students to take part who were perhaps unsure and also identified suitable classrooms and organised student consent forms, etc. In addition, establishing a good rapport with the school lead made scheduling the different elements of the programme easier as they could advise on timing (e.g. not arranging slots over lunch or after school). All three pilot sites had an established relationship with their partners, some stronger than others. *Future delivery of ASSIST in new areas should ensure enough time is set aside to build these relationships if they do not exist already.*

At the micro level barriers and facilitators were: trainers; delivery mode (peer nomination, training and follow-up); and behaviour management. Due to the different delivery models across the pilot sites, some trainers had a delivery role only, while others were responsible for both coordination and delivery. In addition, some trainers delivered ASSIST alongside other responsibilities completely separate to ASSIST. The latter caused some anxiety for trainers with regards to managing these different commitments. Feedback from trainers on their three day training to deliver ASSIST was extremely positive. They found it particularly useful because it equipped them with first-hand experience of delivering the programme and provided an opportunity for trainers to get to know each other prior to delivery which built confidence. *Potential suggestions for improvement included more time to go through the follow-up sessions.*

Levels of confidence to deliver the programme were influenced by professional background. Most trainers tended to have either a background in youth work or

smoking cessation, not both. Naturally this caused some anxiety pre-delivery but the model used in some schools of pairing up trainers with different experience seemed to go some way to address this anxiety. *Pairs of trainers with a mixture of smoking cessation and youth work expertise should be applied (where possible) in future.*

Peer nomination was only delivered under exam conditions in one of the eight case study schools, resulting in student 'chatter' which could have influenced whom they nominated. There was a suggestion that peer nomination would be better administered on a class by class basis (especially in schools with a large year group). However, this would have resource implications for delivery and create logistical challenges for the school. *Future deliverers of ASSIST should adopt a pragmatic approach to balance best practice and fidelity for programme delivery alongside schools being able and willing to sign up to the programme.*

The style and content of the peer supporter training were viewed favourably by staff and students, with trainers praised for treating the students like young adults, rather than children. However, there was discussion around behaviour management with some schools suggesting a lack of authority which, at times, resulted in students not engaging or respecting the trainers. This was clearly very challenging for trainers and highlights the difficulty they face trying to balance the informality of the ASSIST model alongside the 'formality' required to keep the students safe and equip them with the skills and knowledge required to fulfil their peer supporter role.

Trainers faced some challenges delivering follow-up sessions in school – classrooms were not ideal and time to deliver the session was often too short. There was also general discussion related to the number of follow-ups with a view that students may have found four sessions too many – showing signs of disinterest and boredom. Diary use was limited, which led to discussion around whether they were the best format for peer supporters to record their conversations, with some sort of phone based device or application viewed more favourably. *Fewer follow-ups should be considered in future and diaries, if included, may not need to be paper-based.*

2. What refinements are required to implement the ASSIST programme in Scotland?

Overall, we found that very little adaptation was required to implement ASSIST in Scotland, with DECIPHer-ASSIST praised for the quality of delivery manuals, support and training offered as part of the license fee.

Evidence of the acceptability of delivery to S1 or S2 was limited. School leads tended to focus on the reasons why one year was chosen over the other – not how this decision may have influenced delivery of the programme, with no apparent challenges delivering to S1 or S2. Student feedback, however, suggested that friendship groups may have been more established in S2 than S1. *Therefore, in light of student feedback, if ASSIST is delivered in S1, this should ideally be in the second half of the school year when friendships are more established.*

3. Were essential elements of the ASSIST model maintained during pilot implementation in Scotland?

Overall, delivery appears to have been with a high degree of fidelity to the licensed programme. Fidelity measures for the peer supporter critical mass of 18% were met. All case study schools delivered the four follow-up sessions, but observation fieldwork highlighted that diaries were not consistently checked in two of the three case study schools.

4. How acceptable is the programme from a stakeholder perspective (strategic leads, trainers, students and school staff)?

Stakeholder feedback suggests that delivery of ASSIST in schools in Scotland was acceptable with the (unavoidable) minor disruption to school timetable accommodated. Similar to findings from the process evaluation of the 2008 RCT, school leads indicated support for the peer education model and programme delivery which required a small amount of school resources (Audrey et al 2008). Trainers demonstrated a clear understanding of the theory behind ASSIST and recognised the importance of delivering the programme according to the manual to maintain the fidelity of the intervention. They were particularly clear that schools should not interfere with the peer selection process or delivery. School leads demonstrated a similar commitment to the peer element of the programme but there were examples of anxiety around student selection and an initial concern that the critical mass of 18% might not be achievable, although it was.

The general opinion was that students selected to be peer supporters viewed this positively, but opinion was mixed regarding their motives and suitability to fulfil the role.

5. What changes in smoking-related knowledge, attitudes and behaviour are observed amongst students in the ASSIST Scotland pilot schools?

Findings from this evaluation have clearly shown that ASSIST continues to make a significant and positive contribution to peer supporters and their schools. This contribution goes beyond learning about tobacco harms and discussing tobacco use with peers, to wider benefits in terms of building knowledge and skills amongst peer supporters. Feedback from participants was overwhelmingly positive regarding the benefits of taking part in ASSIST for peer supporters, commenting on the personal skills and social contacts they have gained and the potential for the school and wider communities to benefit. *Recognition of the wider benefits of peer supporter training should be included in discussions around the future of the ASSIST programme in Scotland.*

Naturally schools were interested in what 'impact' ASSIST had in terms of smoking prevalence, even though this process evaluation was designed to look at acceptability and fidelity, not intervention effectiveness.

From the data we have, it is clear that there is uncertainty regarding the extent of message diffusion between peer supporters and peers in their school year and any

impact this may have on adolescence smoking. Findings from the student survey showed no significant change in self-reported smoking prevalence with 1.6% of pupils (n=33) reporting that they smoked one or more cigarettes per week increasing slightly to 1.8% (n=38) at follow-up. In addition, recall of any relevant conversations about smoking with a peer supporter was fewer than one in ten (9%). Despite the caveats around the sampling approach used (discussed in 2.3), this was considerably lower than positive responses to the same question which was asked of students who participated in the original RCT of ASSIST. Indeed in the trial, just under one in four students (23.9%) recalled that a peer supporter had spoken to them about smoking (Audrey et al 2006).

Despite these findings, it is important to recognise that opportunities to have informal conversations about smoking with peers may now be limited due to the ongoing decline in adolescent smoking since ASSIST was first developed. This decline may also partially explain why schools did not have their own clear smokefree policy and why there was limited student awareness of any existing smoking prevention lessons. It may well be that addressing smoking has become less of a priority in schools. It is also worth noting that some peer supporters felt apprehensive or awkward initiating conversations about smoking with their peers and this also may have contributed to the low recall of any conversations relevant to ASSIST.

The original ASSIST trial is now 13 years old. Although our study was not designed to assess effectiveness, our modest findings on the number of relevant conversations (in particular) do raise questions about any appropriate assessment of ASSIST in the future. The programme is still fairly widely delivered in England and Wales. *A relevant future step would be an implementation trial (a Phase IV study) of ASSIST, using a similar methodology to the original RCT, to assess current effectiveness in the context of lower smoking prevalence in the target age group.*

Another important factor perceived to influence message diffusion was the view that peer supporters were more likely to talk to family members than their school year peers. Findings from peer supporters supported this view suggesting conversations with parents and other family members was a common occurrence. This is an important research area which is currently being explored by a PhD student. *The impact of ASSIST in encouraging peer supporters to discuss smoking with smoking parents, other family members and wider social networks is an important area for research.*

6. What are the delivery costs of the programme?

The average cost to deliver one cycle of ASSIST ranged from £8,939 £11,357. Between August 2014 – June 2017, 72 cycles of ASSIST were delivered or confirmed for delivery in 2017. The actual total delivery cost for all three sites was £674,360 of which 20% (£136,800) was for the license fee. This equates to a cost per cycle of £9,366. This cost is higher than the comparable cost analysis data conducted as part of the part of the original RCT, with costs per intervention school being £5,662 (Hollingworth et al 2013). However, these costs did not include the

license fee which accounted for 20% of the cost per cycle and were for one delivery model only.

7. What lessons can be learned to assist future roll out across Scotland?

Key lessons have been discussed above and we have included recommendations in italics. Overall, we believe that there are five considerations for any future delivery of ASSIST in Scotland, and a sixth relating to future research.

First, if a relationship between programme deliverers of ASSIST and the school is not already established, time should be included to invest in this before delivery. This will help with programme delivery but also add important context in terms of what smoking prevention provision the school already has in place. If delivery is in partnership with NHS Boards, Local Authorities and the third sector, time needs to be built into the delivery timetable to establish these relationships and understand the level of resource required from each partner.

Second, identifying trainers depends on available resources and they are likely to have a variety of professional backgrounds. Using this experience to pair up trainers with different backgrounds (e.g. one with a youth work experience and one with smoking cessation) and developing opportunities to share practice and experience across sites may aid delivery and increase confidence.

Third, if the school timetable permits delivery of ASSIST to S1, students should be targeted during the third term, as this will maximise message diffusion via established friendship groups. Few problems were observed with delivery in S2, so this continues to be viable.

Fourth, consideration should be given to how trainers can be offered further support (e.g. further training, better use of teaching staff who chaperone students) to manage student behaviour if they feel this is required.

Fifth, in terms of the manual and intervention delivery, DECIPHer-IMPACT may want to consider: 1) whether a paper diary is still the best medium for students to record their conversations; 2) if four follow-ups are still productive; 3) how to include content on e-cigarettes in the programme, as appropriate (in particular, making clear that they are far less harmful than tobacco but are not products for teenagers that have never smoked, and informing teenagers of age of sale laws).

Sixth and finally, there may now be a need for a Phase IV trial of ASSIST to determine effectiveness in the context of continued decline in smoking prevalence. This should, if possible, take into account that smoking still remains an issue particularly in more deprived areas.

8. Is there scope to expand the model to look at other risk taking behaviours in Scottish schools in the future, e.g. drugs, alcohol?

There was general agreement (from school lead and students) that, in theory, the ASSIST model could and should be applied to other risk taking behaviours such as alcohol or drugs. Indeed it may have real promise for these behaviours. There was

strong support for the peer model of delivery but in the current climate of continued budget cuts, NHS Boards and Local Authorities may be cautious to direct funding to ASSIST because it only covers one risk behaviour. Currently and previously there has been other versions of ASSIST (sexual health, physical activity, drugs). Given the very low prevalence of smoking now in the target age group, using the ASSIST model in relation to these other behaviours may be particularly important. It is worth highlighting that a feasibility trial of the ASSIST model as applied to drug prevention (ASSIST +Frank and Frank friends) has just concluded, conducted by some of the authors of this report. Plans are now underway to seek funding for one component of this from NIHR for a larger trial. Early results look promising. School staff and stakeholders were also interested in how the ASSIST model could address multiple behaviours in one intervention, but this may be far more challenging to deliver. *Investigating how/if the ASSIST model could be developed to address more than one risk behaviour is an important area for further research.*

School leads were motivated to make the best use of the skills they have acquired from ASSIST. A range of ideas were suggested, but no evidence was gathered of explicit actions taking place or timescales around this. This is perhaps a reflection of the follow-up interviews taking place soon after the programme finished. Finally, it should be noted that suggestions centred on raising the profile of ASSIST within the school. This may have fidelity implications if the school plans to deliver ASSIST to subsequent years – a key component of the programme is that students do not know anything about ASSIST as this may influence who they nominate to become peer supporters.

6.2   Conclusion

Overall, this process evaluation has demonstrated that it is feasible and acceptable to deliver the ASSIST programme in Scottish schools. Despite slight differences in the age of young people participating compared to the original programme in England and Wales, and some organisational and socio-demographic variation between the three participating areas in Scotland (Glasgow, Lothian and Tayside), the programme was delivered to a high degree of fidelity. All the research questions set out in the original proposal were addressed, and recommendations for practice and research have been set out above.

Three different delivery models were piloted in the participating areas. This did not impact on fidelity or acceptability but we have outlined the strengths and weaknesses of these different models. There are learning points from them to apply to other areas that may implement ASSIST in Scotland. For example, the manual states that peer nomination for the whole school year (via a special assembly) should, ideally, be delivered under exam conditions. This was observed in one case study school only. There were various reasons for this and a pragmatic approach is required to balance fidelity of the intervention and securing schools for delivery. Partnership working, from the onset, was viewed as being key to successful delivery and securing school participation. Feedback was overwhelmingly positive regarding the wider benefits of taking part in ASSIST for peer supporters (i.e. personal and communication skills) but also for the school and communities, via message diffusion to wider social networks. In addition, we have documented the

cost of delivering the programme in each area, which provides useful information to other areas or schools considering ASSIST.

Our findings show less certainty regarding the extent of message diffusion and any impact this may have had on adolescent smoking. Student survey results showed no significant change in self-reported smoking prevalence between baseline and follow-up and conversation recall with a peer supporter was low at 9%. There are caveats around the interpretation of these results which were not the main focus of this process evaluation. It is also important that the current context (where regular smoking prevalence is 2% overall in 13 year olds in Scotland[8]) is taken into account. Now may be the time to consider whether, 13 years on from the original RCT, an implementation trial of ASSIST is warranted to determine if it is still effective and cost effective. It may still have an important role to play, particularly in more deprived areas where youth smoking uptake starts in the early teens and where community smoking rates and norms have shown little change in recent years.

Specific (although more minor) adaptations to the existing ASSIST programme should also be considered. In particular: the utility of paper diaries; whether four week follow-ups are required; and how content on electronic cigarettes can be included in a way that makes clear the important distinctions between vaping and smoking.

Further consideration is also merited regarding the best school year for any delivery of the programme in Scotland i.e. S1 or S2. Findings from the process evaluation gave no clear guidance over one year or the other. However, considering the very low rates of smoking amongst young people in their very early teens today, and the relevance of peer groups being formed when the programme is delivered, S2 may be more appropriate.

This process evaluation has demonstrated that it is feasible and acceptable to deliver the ASSIST programme in Scottish schools, although questions remain about the extent of message diffusion. Further consideration is required to assess whether delivery of ASSIST still offers a suitable return on investment and what role it may play in schools in areas of deprivation where smoking rates are higher.

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[8] Scottish Government. Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS): Smoking Report 2015. [last accessed 25 October 2016.]

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Appendix

Table A1: Delivery model in each site

Site	Funding source	ASSIST delivery by	Total number of schools participating in pilot	Start and end date of pilot	Number of cycles per school	Key partners	Number of trainers and from where
NHS Greater Glasgow and Clyde	NHS Greater Glasgow and Clyde and Scottish Government	Public Health Directorate Health Improvement Team and Glasgow City CHP sector Health Improvement Teams	10 from 1 Local Authority (Glasgow City)	January 2015 – June 2017	3 (S2 only)	Education Department and Glasgow City Community Health Partnership (GCCHP)	14: 12 from NHS Health Improvement and two from third sector
NHS Lothian	NHS Lothian	West Lothian Drug & Alcohol service is contracted by NHSL to organise and co-deliver the project in conjunction with a multi-disciplinary team including Smoking Cessation and CLD staff	25 across 4 Local Authority areas (East, West, Mid Lothian and Edinburgh City)	August 2014 – June 2016	1 (S1 and S2)	East, West, Mid Lothian and Edinburgh City Local Authorities CLD and NHS Lothian Smoke Free Service	Ranged between 8 and 14: Trainers included: CLD staff; teacher; Army Link Worker; Youth Workers and Smoking cessation staff
NHS Tayside	NHS Tayside and Scottish Government	Early Years and Young People Team, Public Health, NHS Tayside	27 across 3 Local Authority areas (Perth and Kinross, Dundee City, Angus)	January 2015 – December 2017	3 (S1 and S2)	Angus Council Children and Young People Directorate, Dundee Children and Family Services and Perth & Kinross Education and Children's Services and Community, Learning and Development in Angus, Dundee and Perth & Kinross	12: 9 from Health Promotion team and 3 from CLD

*Note the same trainer could have delivered in year 1 and year 2 so totals do not sum up together.

Table A2: Student survey results

	N	%
Lessons on smoking in school		
Yes	1532	64.1
No	412	17.2
Don't know	446	18.7
Total	2390	100
School rules on smoking		
Yes	889	37.3
No	191	8.0
Don't know	1306	54.7
Total	2386	100
Action taken if student found smoking		
Nothing done	155	6.5
Parents told	508	21.4
Student punished	76	3.2
Student is spoken to about it	136	5.7
Don't know	1365	57.2
Other	134	5.6
Total	2374	100
Asked to be a peer supporter?		
Yes	477	22.5
No	1280	60.3
Don't know	367	17.3
Total	2124	100
Feelings about not being asked to be a peer supporter		
Very/quite happy	95	7.5
I didn't mind	833	65.5
Quite/very unhappy	140	11.0
I don't know	203	16.0
Total	1271	100
Peer supporter talk to you about smoking?		
Yes	145	8.9
No	1237	76.1
Don't know	244	15.0
Total	1626	100
Students who answered yes when asked - Do you smoke at all nowadays?		
Baseline	49	2.3
Follow-up	64	3.0
Does your best friend smoke?		
Yes	211	9.9
No	1712	80.3
Don't know	105	4.9
Total	2130	100

Which of these sentences best describes your friends?	Baseline	Follow-up
All of my friends smoke	8 (0.4%)	13 (0.6%)
Most of my friends smoke	38 (1.9%)	48 (2.3%)
Some of my friends smoke	93 (4.5%)	103 (4.9%)
A few of my friends smoke	359 (17.4%)	415 (19.9%)
None of my friends smoke	1349 (65.5%)	1133 (54.3%)
Don't know/not sure	212 (10.3%)	375 (18.0%)
Totals	2059 (100%)	2087 (100%)

Table A3: Number of cigarettes smoked

Statements	No. pupils at baseline	No. pupils at follow-up
I have never smoked	1889 (89.9%)	1850 (87.5%)
I have only ever tried smoking once	137 (6.5%)	162 (7.7%)
I used to smoke sometimes but I never smoke a cigarette now	29 (1.4%)	46 (2.2%)
I sometimes smoke cigarettes now but I don't smoke as many as one a week	13 (0.6%)	18 (0.9%)
I usually smoke between one and six cigarettes a week	19 (0.9%)	14 (0.7%)
I usually smoke more than six cigarettes a week	14 (0.7%)	24 (1.1%)
Totals	2101 (100%)	2114 (100%)

Table A4: How many conversations have you had with friends from school about smoking in the last week?

Number of conversations	No. pupils at baseline	No. pupils at follow-up
None	1604 (82.4%)	1518 (74.1%)
One	166 (8.5%)	218 (10.6%)
More than one but less than three	78 (4.0 %)	129 (6.3%)
Three or more but less than five	51 (2.6%)	87 (4.3%)
Five or more	48 (2.5%)	97 (4.7%)
Totals	1947 (100%)	2047 (100%)

There was a significant increase between baseline and follow-up for number of conversations reported about smoking within the previous week (Wilcoxon signed rank test, Z= -7.65; p<.0001).

Table A5: Case study observation measures

	School 1	School 2	School 3	School 4	School 5	School 6
Adherence to delivery timetable						
S1 or S2?	S1	S2	S1	S2	S2	S1
Date peer nomination	16/01/15	20/08/15	12/01/16	14/01/16	26/03/15	27/03/15
Date of last follow-up	24/04/15	16/11/15	12/04/16	31/03/16	17/06/15	29/06/15
Total number of weeks for delivery	14	13	13	12	12	13
Peer supporter retention						
Number at recruitment meeting	25	26	43	29	25 approx (group split)	40 approx (group to be split at training)
Number at training	25	26	21 in observation group (group split, 43 overall)	23	41 (groups split into one larger group and one smaller group)	22 (observation group)
Number at FU1	22	24	21 in observation group	24	19 (observation group)	39 (groups were not split)
Number at FU2	24	25	19 (observation group)	24	19 (observation group)	20 (observation group)
Number at FU3	20	24	20 (observation group)	20	18 (observation group)	17 (observation group)
Number at FU4	24	23	20 (observation group)	19	34 (groups initially split but brought together)	16 (observation group)

	School 1	School 2	School 3	School 4	School 5	School 6
School staff presence						
Recruitment meeting	2 – Deputy Head plus staff member from learning support	1 – PTC Guidance and school lead	1 – Maths teacher and school lead	1 – School lead	1 - Class teacher	1 - Pupil support Worker
Training day 1	As recruitment meeting	2 - guidance and pupil support worker	2 – school lead plus pupil support worker	1 - Pupil support worker	2 – Class teachers	2 – Pupil support workers
Training day 2	As recruitment meeting	2 – 1 Guidance plus 1 pupil support worker (different from day 1)	2 – school lead plus pupil support worker	1 - Class teacher	2 – Class teachers	2 – Pupil support workers
Number at FU1	As recruitment meeting	As recruitment meeting	As recruitment meeting	None	None	2 – Pupil support workers
Number at FU2	staff member from learning support	As recruitment meeting	As recruitment meeting	None	None	2 – Pupil support workers
Number at FU3	As recruitment meeting	As recruitment meeting	As recruitment meeting	None	None	2 – Pupil support workers
Number at FU4	As recruitment meeting	As recruitment meeting	As recruitment meeting	None	None	2 – Pupil support workers
Diaries checked at each follow-up session?						
FU1	Yes	Yes	No	No	No	No
FU2	Yes	Yes	No	No	Yes	No
FU3	Yes	Yes	No	No	No	No
FU4	Yes	Yes	No	No	No	No

Table A6: Student follow-up survey – Do you agree or disagree with each statement?

Statement	Yes	No	Not sure	Totals
It is good that peer supporters can talk with students in my year about smoking	623 (74.5%)	37 (4%)	176 (21%)	836 (100%)
It is none of the peer supporters' business whether students in my year smoke or not	124 (15%)	232 (28%)	470 (57%)	826 (100%)
Peer supporters put too much pressure on students in my year about smoking	47 (6%)	457 (55%)	323 (39%)	827 (100%)
Most of the peer supporters I know didn't seem to talk much to other students about smoking	269 (33%)	153 (19%)	403 (49%)	825 (100%)
Having people your own age talking to you about smoking is better than having teachers do it	416 (51%)	133 (16%)	274 (33%)	823 (100%)
The sorts of people chosen to be peer supporters were not the best ones to talk about smoking	130 (16%)	213 (26%)	478 (58%)	821 (100%)
It made no difference to me	167 (20%)	157 (19%)	500 (61%)	824 (100%)

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