A synthesis and analysis of current information and evidence relating to Action 10 of the Smoking Prevention Action Plan

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TABLE OF CONTENTS

1.0 INTRODUCTION/APPROACH

1.1 Introduction

The Scottish Government's 2008 document "Scotland's Future is Smoke-Free: A Smoking Prevention Action Plan" (Donnelley RR, 2008) is set within the over-arching policy context of "A Breath of Fresh Air for Scotland" (Scottish Executive, 2004). Both have at their heart an aspiration for a smoke free Scotland. The Smoking Prevention Action Plan sets out a programme of measures and actions with the aim of preventing children and young people from smoking. The main approaches of the action plan are to promote healthy lifestyles and to reduce the attractiveness, availability and affordability of cigarettes to children and young people.

The plan sets out various targets including:

- To reduce the level of smoking amongst 13 year old girls from 5% in 2006 to 3% in 2014.
- To reduce the level of smoking amongst 13 year old boys from 3% in 2006 to 2% in 2014.
- To reduce the level of smoking amongst 15 year old girls from 18% in 2006 to 14% in 2014.
- To reduce the level of smoking amongst 15 year old boys from 12% in 2006 to 9% in 2014.
- To reduce the level of smoking amongst 16 to 24 year olds from 26.5% in 2006 to 22.9% in 2012.

Since initial funding and accompanying Scottish Executive communication in April 1999 for setting up smoking cessation services with young people on the back of "Smoking Kills: A White Paper on Tobacco" (Department of Health, 1998), children and young people have been identified as one of the 3 priority groups for smoking cessation. This is in recognition that although smoking rates among young people have decreased over the last 20 years there is an ongoing need to minimise the numbers of smokers in the next generation (NHS Health Scotland and ASH Scotland, 2007).

1.2 Policy & Societal Interventions

The focus of this research is to explore what works in youth smoking prevention and cessation at the level of individualistic and community based interventions. However, it is important to acknowledge that the strongest evidence for effectiveness in youth smoking prevention and cessation relates to policy and societal interventions (NICE, 2010; Grimshaw & Stanton, 2010; Amos et al. 2009; NICE (2008a). This includes comprehensive bans on tobacco marketing, well structured

and co-ordinated mass media campaigns, increasing price through taxation, increasing adult cessation etc. This policy approach includes multi-component interventions which address the three levels of influence identified in the review of youth smoking in England (Amos et al. 2009) i.e. individual factors, social and community factors and societal factors. Examples of this approach were provided by respondents including the development of work-based smoking policies for youth organisations and residential care homes and projects which aim to raise awareness and understanding among staff working with young people to ensure that consistent messages are given to young people in schools and community settings.

It is also important to acknowledge that all youth smoking work is set within a context of the relatively recent ban on smoking in public places, increase in age of tobacco sale and purchase to 18 years, and the forthcoming ban on tobacco advertising at point of sale. Thus, the difficulty outlined by the Amos review (2009) regarding the lack of evidence on which aspects of multi-component interventions are the most effective, or whether the effects are additive or multiplicative is more pronounced within the Scottish context.

It is also noted that although much research has been carried out to explore rates of smoking and views and attitudes towards smoking among 11 to 15 year olds there is a lack of research into these issues in terms of 16 to 24 year olds (Amos et al, 2009; Grimshaw & Stanton, 2010). That is echoed within this report with the large majority of studies reviewed relating to interventions with young people aged 18 or under, and very few interventions with young people aged under 20 and none with those aged 20 to 24. In addition, the qualitative interview discussions focused solely on work carried out with young people aged 18 and under.

2.0 BACKGROUND & METHODOLOGY

2.1 Prevalence of youth smoking in Scotland

In 2005/06 there were over one million smokers in Scotland, approximately 26% of all men and 25% of all women (ScotPHO, 2008). Within this figure it is estimated that 166,000 are young adults (aged 16 to 24) – this accounts for 28% of young adults within this age group, and approximately 15% of the total population of smokers in Scotland (ScotPHO, 2009).

Age is a key predictor for smoking status. It is estimated that in Scotland, 15,000 young people, between the ages of 13 and 24, take up smoking each year (ScotPHO, 2008). Population studies estimate that 65% of UK smokers start when under the age of 18 and 38% start under the age of 16 (ONS, General Household Survey 2008).

Figures from the national SALSUS 2008 report (Black et al, 2009) show that 4% of 13 year olds and 15% of 15 year olds are regular smokers with 75% of 13 year olds and 51% of 15 year olds reported having never smoked. In recent years, there has been a steady decline in smoking prevalence among 13 year olds and 15 year olds.

Although studies such as SALSUS inform us that some young people smoke from their early teens, from the age of 16 there is a marked increase in the number of smokers. Between 1999 and 2004 there was a fall in the smoking rate among 16 to 24 year olds in Scotland (31% to 25%). However, this rose again in 2006 (28%) and continued to fluctuate over 2007 and 2008 (ScotPHO, 2009). Thus young adulthood is a time when many non smokers and experimental/occasional smokers become regular smokers (ScotPHO, 2009).

Key statistics for youth (under 16's) and young adult (16 to 24 year olds) smoking across the population and in sub populations are as follows:

Gender

- Among under 16's smoking is more prevalent among young females than young males. However, gender becomes less of a predictor of smoking status as people get older – as demonstrated by similar percentages of male and female smoking in the adult population (NHS Health Scotland, ISD Scotland and ASH Scotland, 2007).
- The percentage of 15 year old boys and girls, who identify as regular smokers has decreased from 1996 to 2008 (boys – halved to 14%; girls 30% to 16%) (Black et al, 2009).

- Young women generally have higher smoking rates than young men in the 16 to 19 year age group. However, male rates exceed female rates in the 20-24 age group (ScotPHO, 2009).

Socio-Economic Status/Economic Activity

- There is a greater association between deprivation and smoking among 13 year olds than among 15 year olds (Black et al, 2009). This suggests that those in the most deprived areas start to smoke earlier.

- However, among 15 year olds the number of cigarettes smoked is associated with deprivation, with young people from the most deprived communities being more likely to smoke a greater number of cigarettes.

- The highest smoking rates for those aged 16 to 24 were found to be in employment (51%) or not in education, employment or training (NEET) ((30%). With the remainder in full time education (ScotPHO, 2009).

- ScotPHO's report speculates that the majority of smokers still in education are likely to be found in Further Education (rather than Higher Education) and this is echoed by the SALSUS report (Black et al, 2009), which states that regular smokers were more likely than non-smokers to think that they would go on to further education or employment.

- Of the number of young smokers in employment, 27% were found in wholesale, retail and repair trades. Studies show that the larger the employment sector, the higher incidence of young adult smokers. In addition, there are a disproportionately high number of female smokers in the hotel and leisure industry (ScotPHO, 2009).

Ethnicity

- There is a lack of information on smoking rates and prevalence among ethnic minority groups in general, as well as among young people of such groups.

- The Scottish Government report of the smoking prevention working group states that white adolescents are more likely to smoke than adolescents from other ethnic backgrounds and girls of South Asian ethnicity are significantly less likely to be regular smokers. However, the report acknowledges that data for ethnic groups is lacking (Scottish Executive, 2006).

- A study of young people's attitudes towards smoking and cessation among ethnic minority groups found that although white adolescents smoke more than minority ethnic young people, adolescent smokers within minority groups tend to smoke cigarettes with higher tar and nicotine content. (Peters et al, 2006)

Looked After and Accommodated

- In 2008-09 15,288 children were looked after and accommodated (Scottish Government, 2010). Just under half of all looked-after and accommodated children in Scotland, aged 11-17, are estimated to be smokers (Meltzer et al, 2004).

- Looked-after children aged between 11 and 17 in Scotland are twice as likely to smoke as their English counterparts. They are also more likely to start smoking earlier, with a quarter reporting that they started smoking on or before the age of 10. (Meltzer et al, 2004).

- Triseliotis et al (1995), Griesbach & Currie (2001) Meltzer et al (2004) all report that males are more likely to smoke than females in the looked after settings.

Offenders

- 79% of prisoners smoke (Scottish Prisoner Survey, 2008) compared with 25% of the general population (or 33% in those aged 16-44 years) (ScotPHO, 2009).

- 2005 study reported prevalence rates for young male offenders (aged 16 to 24) were same as the whole prison population but female prisoners showed higher smoking rates (94%) (ScotPHO, 2009).

Young Mums/carers

- 19.2% of pregnant women (around 10,700) were recorded as smoking during pregnancy in 2008 (ISD Scotland, 2009), this rises to 3% of pregnant women aged under 20. This is the highest rate for any age group (ISD, 2009) – with smoking rates decreasing with increasing age.

- Projected figures suggest more than 2400 pregnant smokers go undetected each year (Shipton et al, 2009).

- Young women aged 17 who look after the home or family account for 10% of all young female smokers but account for more than one quarter (26%) by age 24 (ScotPHO, 2009).

Homeless

- 94% of homeless people aged 16 to 24 are smokers (22,500) (ScotPHO, 2009).

2.2 Context and Risk Factors for Youth Smoking

2.2.1 Wider Context of Young People's Lives

Social and economic transformations throughout the western world have had a significant impact on the life experiences of young people. The changing context and experience of 'youth' is constructed and reinforced by shifts in public policy initiatives and legislation affecting young people and their families. Young people's exposure to new technology and communication systems is redefining traditional notions of youth networks and peer groups and young people's experience of community and neighbourhood (MacKinnon and Soloman 2003). The commercialisation of youth culture and the targeting of children and young people as a mass consumer group have resulted in shifting lifestyle patterns and ways in which young people orchestrate and employ their leisure time (Zeijl et al 2002, Hendry et al 1993).

Changes in the labour market, education and the welfare state have resulted in protracted youth transitions that differ greatly from the characteristic pathways of school to work that were previously common (Jones 2002, Bynner et al 2002, Furlong and Cartmel 1997). Transitions from school to work – an important phase in the life cycle – has become more protracted and fragmented (Furlong and Cartmel, 1997). It has been suggested that this change in transitional experience has increased levels of stress and anxiety among young people thus partly explains the increase in mental and emotional health problems (Furlong and Cartmel, 1997). This changing complexity of youth transitions has created particular challenges for policy makers in constructing relevant and responsive policy and services (Jones and Bell 2000).

Targeting of interventions during the life stage of adolescence is partly founded upon the view that the health status of people in later life may be determined by a complex interaction of environmental, social and behavioural influences that take place during childhood and adolescence (Blane, 2006; Davey, 2003). Furthermore, adolescence for many, is considered to be a particularly vulnerable period where "support structures are few, foresight is minimal and vital information is missing" (Greater Glasgow Health Board, 1997). Therefore, adolescence is recognised as an important time to implement a range of interventions aimed at preventing the take up of risk behaviours or minimising the harm of these behaviours.

Vulnerable groups of children and young people, such as those excluded and disaffected, may present particular challenges to services and professionals in the design and delivery of interventions and the meaningful participation and engagement of young people. Exclusion and disaffection are common to the experiences of many children and young people in local authority care (Atherton 1998). Despite the fact that looked after children are identified as having a range of complex and unmet health needs, the evidence suggests that these young people are further disadvantaged than their peers in accessing universal and specialist

health services (Warner 1992, Allen 2003, Ridley and McCluskey 2003). It is accepted that particular vulnerable and excluded groups will be disadvantaged in terms of their current and future health development and status unless appropriate and targeted services and support is put in place to identify and address these multiple complex issues (Shucksmith and Hendry 1998, Tisdall 2003). It is within this context that a young person's decision to start smoking, and whether they become regular smokers, must be placed.

2.2.2 Young people & smoking

The reasons young people start and continue to smoke are complex and varied. Individual, social and community, and societal factors combine to influence a young person's decision to smoke or not to smoke, while the onset of addiction is a primary factor for continuation into adulthood. The Amos review of young people and smoking (2009) explores some of these factors in more detail and these are outlined below.

While many young people choose to smoke out of curiosity or a desire for experimentation, there are a range of individual factors which influence the likelihood of smoking uptake among young people. Amos suggests that the risk of smoking uptake increases with age, is influenced by gender and ethnicity, and young people at social, educational and economic disadvantage, as well as those with an increased disposable income are at a higher risk of smoking uptake (Amos, 2009).

Other associated factors include how young people see themselves (including self esteem and self image), their identity and their lifestyle, and their knowledge and beliefs about the risks, consequences and benefits of smoking. Additionally, evidence indicates that children and young people generally view health as being related to diet, exercise, oral hygiene and appearance (Scott J, & Hill M, 2006). This could be indicative of smoking not being a priority health issue in the lives of some young people.

A young person's personal environment and social relationships have a determining influence on smoking uptake. Young people who grow up in a home and socialise in groups where smoking is the accepted behaviour are more likely to begin smoking (NICE, 2010). Reinforced positive views towards aspects of smoking such as smoking being cool/smoking keeps you thin etc. are additional factors.

Peer pressure/ influence plays a significant role in determining smoking habits, however research suggests that many young people wrongly perceive smoking among their peers to be the norm creating a social pressure to smoke (Fuller E, 2007). For many young people smoking has a perceived social functional value and is seen as a method of bonding and forging new relationships.

Societal measures which restrict access to cigarettes such as increasing prices and reducing availability and access to cigarettes, including restrictions of tobacco use

such as the bans on smoking in public places, may be undermined by other avenues for tobacco promotion including point of sale cigarette displays and positive media representations of smoking which increase the attractiveness of smoking to young people. Young people are more at risk of smoking when cigarettes are easily available to them and where societal attitudes and norms which present a perceived acceptability of smoking (Amos, 2009).

2.3 Aim of report and methodology used

The aim of this report is **to produce a synthesis and analysis of current practice and evidence gathered relating to Action 10 of the Smoking Prevention Action Plan.**

Action 10 is:

To develop and assess the feasibility of a small number of pilot interventions designed to discourage the uptake and/or encourage smoking cessation in young people, particularly those living in disadvantaged circumstances; and, if appropriate, to evaluate the effectiveness of the most promising intervention.

The **objectives** of the report were to provide:

- A clear picture/profile of youth smoking in Scotland.
- A summary of what has been learned from previous pilot research to identify effective approaches to smoking cessation among young people.
- A short commentary on the current evidence in Scotland on the soft and hard indicators of positive behaviour change,
- A short commentary drawn from current evaluation approaches used to evaluate the effectiveness of work with young people.

At the briefing meeting with NHS Scotland and ASH Scotland it was agreed that an important role for the report was to highlight the core features of interventions which the evidence suggest work, and that the review of literature should be restricted to interventions which are targeted at the individual/community rather than policy or societal interventions. In addition, it was agreed that the report should be weighted towards gathering learning from practice or what we termed 'practice wisdom' from individuals working in the field of youth smoking.

It was felt that the objectives for this study required a two stage approach, namely:

1. A review of high level reviews documents related to youth smoking prevention and cessation (with a focus on individual and community based interventions).
2. In-depth semi structured interviews with key individuals involved in youth tobacco projects and other relevant stakeholders.

Process for reviewing literature

The process for reviewing the literature was split into two stages. Initially we reviewed the evidence in terms of trends and patterns of youth smoking and explored the following issues:

- Smoking rates overall.
- Impact of age and gender (if known).
- Impact of socioeconomic status and ethnicity (if known).
- Whether wider factors are explored and if so the impact of them i.e. residential status of young people looked after and accommodated), the employment/education status of young people (NEET group) etc.
- Quantity smoked and definition used to identify 'smokers', 'regular smokers' etc.
- Views and opinions towards smoking and the link to smoking status.
- Link between smoking and other health behaviours i.e. alcohol use, drug use and wider health issues such as mental wellbeing.

Key sources for the above information were SALSUS reports, Scottish Government policy documents, the ISD website and the ScotPHO reports.

The second stage of reviewing the literature was to explore 'what works' in terms of youth smoking prevention and youth smoking cessation. It was acknowledged that there is extensive literature on the topic of youth smoking and due to this it was agreed that this report would be informed by core review documents that relate directly to youth smoking interventions (prevention and cessation) among 12 to 24 year olds. The identified core review documents are outlined in the reference section of this report.

The review documents were evaluated to identify any approaches/ interventions that the review authors concluded to be promising. From this we then identified the primary studies cited in the review papers to explore the key features of the interventions that had been shown to be promising. This was carried out using the following headings:

Aim of research
Rigour of research (as defined by review paper)
Intervention type i.e. prevention or cessation; approach used etc.
Target group i.e. age, gender, ethnicity, specific equality group i.e. LAAC young people.
Setting i.e. school, college, youth organisation, general population etc.
Outcome indicators i.e. quit smoking or reduction in smoking, change in attitude

towards smoking, increased desire to stop smoking etc.

Findings
Conclusions
Key learning points

It should be noted that the vast majority of literature reviewed for this report are based on primary studies conducted with young people aged 18 or under with a considerably smaller number with young people aged 20 or under. In addition, the majority of the research has been conducted outwith the UK – particularly North America. These issues have implications for the transferability of the findings.

To supplement the above, a search of the Cumulative Index to Nursing and Allied Health Literature (CINAHL) PubMed, the Cochrane Library and the York CRD database was carried out to explore whether there are any specific youth smoking interventions/evaluations aimed at 18 to 24 year olds and/or with young people who are in employment. No relevant review documents were found.

In-depth interviews

In addition to reviewing the literature it was agreed with the steering group that a primary aim of this report was to incorporate the views and opinions of identified individuals working in the field of youth smoking to ensure that 'practice wisdom' was also included and reflected upon.

14 individuals were approached to take part in the interviews, however only 9 engaged in the interview process. This was largely due to the short timescales. Respondents included:

- 2 experts in the research & evaluation field
- 5 staff/managers of youth smoking projects in Scotland
- 2 smoking co-ordinators within Scottish NHS Boards

In addition to the above, informal discussion took place with a number of staff working in the field of youth smoking whilst attending the ASH youth smoking conference.

2.3.1 Limitations of Report

The aim of this report was to synthesis and analyse current information and evidence relating to Action 10 of the Smoking Prevention Action Plan to enable Health Scotland and ASH Scotland to take stock of where things are in terms of youth smoking prevention and cessation interventions.

The report itself was conducted on a tight budget and within a 6 week field work time. Therefore, this report does not present as a methodologically robust review. Although we have also taken care to ensure that it accurately reflects the core

findings of the literature reviewed and the views and opinions provided by the respondents, the limitations due to the small number of interviews and timescale for reviewing the literature should be taken into account.

Despite the limitations, we feel that this report provides a fresh perspective on the complex issues surrounding youth smoking prevention and cessation and is useful to stimulate discussion and debate in this field.

2.3.2 Layout of the report

The report has been split into seven sections with sections 3, 4, 5 and 6 bringing together the main findings.

Section 1: This introductory section is very brief and outlines the Scottish Government targets on youth smoking and also acknowledges that – although outwith the scope of this report– there is strong evidence into the effectiveness of policy and societal interventions in preventing young people from starting to smoke and/or encouraging them to stop.

Section 2: This section provides the background and context of youth smoking with key information on prevalence rates, where smoking fits into the wider context of young people's lives and information on the risk factors associated with young people smoking.

Section 3, 4, 5 and 6: The findings sections outline the evidence (from literature) and practice wisdom (from interviews) relating to the identified themes i.e. definitions and patterns of smoking; prevention and education; youth smoking cessation and outcome indicators and evaluation. Each section concludes with a general discussion and recommendations relating to the theme.

Section 7: This final section brings together the concluding remarks across all previous sections as well as the recommendations made within each section.

3.0 FINDINGS: DEFINITIONS AND PATTERNS OF SMOKING AMONG YOUNG PEOPLE

3.1 Key questions/areas of interest

i. How is 'regular smoker' defined? To what extent is the irregular nature of smoking taken into account in project design?

ii. What is the trajectory for youth smoking? What do the transitions in youth smoking look like, particularly as they move from teenage to adulthood? At what point do young people become more fixed in their smoking behaviour? What influences this?

iii. To what extent does the terminology used in projects/research, reflect young people's own experiences and perceptions?

3.2 Literature Evidence: Definitions and Patterns

3.2.1 Definition of 'regular smoker'

There is not a universal definition of a regular smoker, with studies varying widely in their definitions of what constitutes regular smoking. Definitions of 'regular smoker' include:

- at least one cigarette per week (Aveyard et al 1999; Guo et al 2009; Black et al, 2009)
- minimum of one cigarette a week within the last six months (Grimshaw and Stanton, 2010)
- at least 6 cigarettes a day (Muramoto et al, 2007)
- 7 or more cigarettes daily (Curry et al 2007)
- ten or more for a month (Patten et al 2008) or for past 6 months (Cavallo et al, 2007)

The difficulty in defining young smokers is largely due to youth smoking being less fixed than adult smoking (Grimshaw and Stanton, 2010). The review of youth smoking in England (Amos, 2009) outlines the different stages of youth smoking i.e. never to experimentation, habituation/addiction and onto maintenance or regular. The speed and approach to which a person will move through these stages was felt to be due to their smoking history, level and pattern of use and the measures of addiction/dependence. The Amos review also acknowledges that youth smoking is

more transient than adult smoking; however, it also highlights that young people can display addictive behaviour even after relatively few cigarettes.

It is interesting to note that a fifth of young people describe their smoking as a habit rather than an addiction (Amos, 2006). This suggests that young people see their smoking behaviour in a different way to that of adult smokers, and many consider addiction to be associated with other substances such as heroin, and therefore not applicable to them. A number of young people also fail to define themselves as smokers, particularly if they most commonly smoke cannabis.

3.2.2 What is the trajectory for youth smoking?

It is important to acknowledge that although research and practice has been able to highlight a number of risk/resilience factors that influence whether young people are more or less likely to become smokers there is less research that has explored in detail the factors that influence young people's micro decisions on whether to become a smoker or not. In addition, the factors that influence the changing pattern of youth smoking which leads some young people to remain 'experimenters' whilst others become more entrenched, regular smokers.

Most young people start smoking as a social activity, with SALSUS (Black et al, 2009) showing that very few young people smoke alone. As highlighted above, a wide range of individual, community and societal factors have been associated with adolescent smoking.

Two research studies (McGovern et al 2004; Soldz and Cui, 2002) have aimed to explore the smoking trajectory of young people in more detail. These studies outline four youth smoking trajectories and the associated characteristics of these different subgroups:

- Early/fast adopters i.e. young people who start smoking early and become more entrenched in their smoking at an early age (early teens).
    - High levels of novelty seeking behaviour i.e. risk takers
    - Depressive symptoms/low life satisfaction/low self-esteem/low social connectedness
    - Receptive to tobacco advertising/display favourable attitudes towards smoking
    - Peers who smoke
    - More likely to use alcohol and cannabis
    - Perform less well academically
- Late/slow adopters i.e. young people who start smoking later and become more entrenched in their smoking at a later age (mid/late teens)

    - Similar to early adopters but with some key differences i.e. tend to perform better academically than early adopters and more involved in sport teams.

- Experimenters i.e. young people who try cigarettes but do not go onto become regular smokers.
    - Show some of the characteristics as the late and early adopters but to a lesser degree. Also have more evident 'protective' factors i.e. higher rates of college attendance and parental support.

- Never smokers i.e. young people who never smoke.
    - Most conventional characteristics; greater family support; good achievers academically.

A study by Amos & Bostock (2007) considered the role of smoking in gender identity among young people. The reasons given for smoking were different amongst males and females. Young females stated that they used cigarettes to cope with being upset, low moods and stress, whilst boys cited anger, boredom, frustration and cigarettes helping them to manage their feelings and even diffuse potentially violent situations.

This study found that boys were concerned about the impact of smoking on their fitness and sporting activities, although this view changed for males who were going to pubs and clubs. Within this context smoking was seen as having an almost positive role (study pre-dated smoking ban).

Girls in the study put greater emphasise on aesthetics such as the smell of smoke on their clothes and body. Girls tended to use smoking as part of their identity formation, as a way as a way to reject the "good girl" image. Their experience of smoking was also more social, as they reported sharing cigarettes with friends and "halving in" for a packet, whereas this was not as important for boys, who had other recreational pursuits that enabled them to explore their identity and socialise.

The Development and Assessment of Nicotine Dependence in Youth (DANDY) longitudinal study (DiFranza et al, 2007; DiFranza et al, 2002) sought to explore whether there is a minimum duration, frequency or quantity of tobacco use required to develop symptoms of dependence. The overall conclusion of the paper was that there is no apparent minimum frequency or duration of smoking for symptoms of dependency to occur but that the first symptom of dependence is loss of autonomy over tobacco use.

3.3 Practice Wisdom: Definitions and Patterns

Among the interview respondents it was evident that there are a number of approaches to defining young people as smokers. Some projects ask whether young people are current smokers without giving a definition of this i.e. young people self define. Other projects ask about the frequency and pattern of their smoking.

It was felt that although not always measured by projects, it is important to know how many cigarettes young people smoke and whether they are regular smokers or occasional smokers.

The respondents acknowledge the irregular pattern of youth smoking i.e. some smoke young people smoke 'socially', only at weekends, only smoke joints, can smoke daily for period of time (school holidays) and then stop etc.

> "First of all I would separate out prevention and cessation, but then for young people you can't because they move in and out of smoking." *Respondent one*

> "Because a lot of the young people will be experimental smokers; they'll maybe only smoke when they are at school, y'know, and they've no intention of buying them. It's just to keep up a pretence. They don't see themselves as an adult smoker. In fact they all don't really." *Respondent three*

Whilst recognising the transient nature of youth smoking, respondents also felt that it was important not to assume that all young people are 'experimenters'. On the contrary they felt it was clear from practice that many young people display addictive behaviour even when there smoking behaviour is less entrenched.

> ""young people can become or display nicotine addiction symptoms well before they are a daily smoker or even a weekly smoker – they can feel that need for a cigarette very quickly because it is so addictive." *Respondent two*

What was less clear was whether this was a display of physical dependence or psychological addiction. This difference was discussed further in terms of investigating whether pharmacological interventions are appropriate or not.

Overall, it was felt that vulnerable groups of young people are more entrenched in their smoking behaviour. This was noted more specifically by community based projects that work with harder to reach young people and those working in specific settings i.e. LAAC.

> "There has been some research around life course trajectories, particularly around women….As you move through your teens and

> into your 20's and 30's there's a whole range of things that happen which are highly linked to whether you become and stay a smoker, things like early pregnancy, low education." *Respondent one*

Respondents also discussed the important link between tobacco and cannabis. It was discussed that many young people becoming tobacco smokers due to their use of cannabis (not other way around). Examples given included young people buying packs of 10 to smoke with cannabis and then smoking the cigarettes as they 'don't want to throw away and waste' the cigarettes or young people smoking a cigarette either when they don't have any cannabis or when they are in situations when they can't smoke cannabis.

> "The majority of them smoke purely because they smoke cannabis and a lot will not class themselves as a smoker. They don't even see that as tobacco use whatsoever." *Respondent three*

3.4 Summary and Recommendations

Across the evidence and in practice there is no common definition of 'regular smoker'. This is partly due to young people themselves considering this in different ways and not always identifying themselves as a smoker even when they smoke cigarettes or cannabis, particularly if they smoke irregularly.

The irregular nature of youth smoking has ramifications for prevention and cessation projects in terms of how they engage with young people and in terms of project design.

Recommendation: *Youth tobacco projects should take particular care to consider the terminology used by staff and in project materials as terms such as 'smoker', 'quit' and 'quit attempt' may not feel relevant to many of the young people the projects are seeking to work with.*

Prevalence studies show that vulnerable groups of young people have higher rates of smoking and start to smoke younger than other young people. This indicates that the culmination of different risk factors and absence of resilience factors has a greater influence on the smoking pattern of vulnerable groups. There is a lack of evidence and learning from practice as to whether young people aged 18 to 24 have different smoking patterns than older adults.

The lack of longitudinal evidence into the trajectory of youth smoking and what influences their micro decisions makes it very difficult for prevention and cessation projects to know when their project is likely to be most effective and/or whether this is different for subgroups of young people – particularly more vulnerable groups.

Recommendation: *There is a need for more studies exploring youth smoking trajectories for young people generally and sub-groups of young people i.e. more vulnerable groups and older age group (18 to 24)*.

Recommendation: *Further work is required to explore whether youth prevention and cessation projects should be targeted towards vulnerable young people and/or young people in specific settings i.e. young offender institutions; residential care etc.*

Practice wisdom indicates that projects could more effectively use their own evaluation and monitoring processes to generate data which will help to inform our understanding of youth smoking trajectories. This would ultimately enable practitioners and projects to plan interventions that are more appropriate and tailored to the realities of youth smoking in Scotland and which would hopefully then be more successful.

Recommendation: *Ways of capturing, analysing, sharing and publishing the information and data generated by youth tobacco projects relating to youth smoking trajectories and influences should be explored and implemented nationally. This should include outcome measurement as well as qualitative exploration.*

4.0 FINDINGS: PREVENTION & EDUCATION

4.1 Key Questions

- What works and what doesn't work within individual/community based prevention programmes? Within specific settings?
- What behaviour change approaches/harm reduction messages are appropriate within prevention and education sessions?
- To what extent is holistic or topic specific youth work an effective prevention approach? What (if any) are the tensions between these approaches?

4.2 Evidence: Prevention and Education

4.2.1 School-Based Approaches

The recent NICE public health guidance 23 (2010) into school-based interventions to prevent the uptake of smoking among children and young people recommends that educational establishments should integrate information about the health effects of tobacco use, as well as the legal, economic and social aspects of smoking, into the curriculum. In addition, interventions which aim to prevent the uptake of smoking should be part of personal social and health education (PSHE). The guidance identifies a number of key features for prevention interventions including developing decision-making skills through active learning techniques and strategies for enhancing self-esteem and resisting the pressure to smoke from the media, family members, peers and the tobacco industry. In addition, it advocates that schools encourage parents and carers to become involved in school based tobacco education (through homework assignments) and that smoking inputs begin in primary school and continue throughout the school 'career'.

Although NICE provides some guidance the related effectiveness review (Uthman et al, 2010) acknowledges that no single intervention or programme can prevent children and young people from starting to smoke. Due to this it is important that a comprehensive approach that encompasses individual, social, community and societal issues is adopted. This includes the provision of training to all staff involved in smoking prevention work. It is also important to note that many of the studies reviewed as part of the NICE guidance development were not conducted within the UK. This has implications for interventions within the UK not least because the tobacco control policy context is very different. Due to the lack of research within the UK the NICE guidance gives specific recommendations for future research. These include:

- Exploring the impact a range of factors (age, socio-economic group, gender, ethnicity, additional support need, high risk group) have on the effectiveness of school-based interventions to prevent the uptake of smoking in the UK.
- Which interventions are most effective within 6th forms and further education colleges.
- Are school based 'de-normalisation' approaches to smoking i.e. US 'Truth' campaign effective in the UK.
- Is smoking prevention more effective along or delivered as part of broader substance misuse programme.
- Are targeted interventions (to high risk groups) more effective than universal provision.
- Does peer support and peer education within educational establishments help discourage uptake of smoking?

The review by Amos (2009) outlines that there is consistent evidence of some impact and/or some evidence of high impact for interactive school health promotion **programmes which use social skills and social influences approach which are intensive and sustained**. This is largely based on the review conducted by Flay (Flay, BR. 2007; Flay BR. 2008).

Flay's most recent review (2009) strongly critiques previous reviews including the Cochrane review into school-based programmes for prevention smoking (Thomas & Perera, 2008). Flay outlines a number of flaws within the Cochrane review, commenting on the inclusion criteria being too restrictive and being focused on one outcome only i.e. non uptake of smoking by previous non-smokers.

Flay (2009) concludes that programmes that demonstrate significant short term benefit and have the following features can impact on long-term behavioural outcomes:

- Programmes which include interactive social influences or social skills components i.e. discussion on social norms and influences on decisions, training and practice in the use of refusal and other life skills and public commitment not to use cigarettes.
- Programmes which contain 15 or more sessions over multiple years including some in high school.

He further adds that most benefit comes from programmes which also incorporate the use of peer leaders as well as teachers and other adult inputs.

Although Flay is positive about the potential long term impact for prevention programmes it is important to note that previous review findings have been more critical about the impact of prevention programmes.

Key findings from the Cochrane systematic review into school-based programmes for preventing smoking (Thomas & Perera, 2008), include that there is little evidence

that information alone works and no evidence of school-based programmes having a long term effect (half of the included RCTs had short-term effects on children's smoking behaviour but longitudinal studies (only one) found no long term effect). Despite this the review concludes that combining a social influences model with community intervention and general social competence training may improve effectiveness of school-based programmes.

4.2.2 ASSIST programme

The NICE public health guidance 23 (2010) recommends the implementation of peer-led interventions and makes specific reference to the ASSIST programme. The review by Amanda Amos (2009) also identifies the ASSIST programme under the category 'promising but with limited evidence to date'. This is in recognition that although the ASSIST programme has been shown to have an effect on smoking behaviour in the medium term (2 years) there is a need for more studies as this is the result of one pilot project in south Wales (Bloor et al 1999) and one randomised control trial in South Wales and Bristol area (Audrey et al 2004; Campbell et al 2008).

ASSIST is a peer-led programme where young people are trained to intervene in everyday situations and through informal conversations to encourage their fellow students not to smoke.

We explored the primary research studies for the ASSIST programme and have identified the following key features:

- Peer supporters are peer nominated i.e. pupils nominate students who they respect, consider to be good leaders in sports and group activities, and who they looked up to.
- Programme is delivered to 12 and 13 year olds. Peer supporters are same age.
- Training to peer supporters is delivered by professional health educators over 2 days with 4 follow up sessions throughout the delivery period.
- The training programme aims to increase knowledge about the health, economic, and environmental risks of smoking; to emphasise the benefits if remain smoke-free; and to develop the peer-supporters skills to promote smoking prevention and cessation among their peers.
- Peer supporters do not input into PSHE programme but intervene in informal, non-confrontational and supportive environments.

4.2.3 Multi-component approaches

The NICE public health guidance 23 (2010) recommend an organisation-wide or whole school approach to smoking prevention. In addition the review by Amos (2009) concludes that '*comprehensive, multi-component, well-funded, sustained,*

tailored prevention approaches that address all three levels of influence' are one of the most effective approaches to youth smoking.

Multi-component approaches incorporate co-ordinated policy led interventions and school based and community based interventions aimed at the individual. It is acknowledged in both documents that it is not clear which aspect of these interventions are most effective as part of this co-ordinated approach. It is only evident that this is more effective than school based or community based interventions alone.

The effectiveness of community based and multi-component programmes was explored specifically within an earlier Cochrane systematic review (Sowden and Stead, 2008) and within a review by Muller-Riemenschneider and colleagues (2008). Both of these reviews were included in the work of Amos and the NICE guidance. Although Muller-Riemenschneider and colleagues report strong evidence of long-term effectiveness of community-based and multi-sectorial programmes the Cochrane systematic review concluded that there is some limited evidence for community interventions preventing the uptake of smoking by young people.

4.2.4 Parenting skill programmes for parents of preteens/young adolescents

The review by Amos (2009) outlines that there is consistent evidence of high impact for parenting skill programmes for parents of preteens/young adolescents. This conclusion was based on the Cochrane systematic review (Thomas et al 2008) into family-based programmes for preventing smoking by children and adolescents and a systematic review by Petrie et al (2007) looking at the effectiveness of parenting programmes on preventing tobacco, alcohol or drugs misuse in children under the age of 18.

The Cochrane systematic review (Thomas et al, 2008) outlined that better executed studies have shown that family interventions may prevent adolescent smoking, however less well executed studies had mostly neutral or negative results. Overall, the review concluded that children and young people's smoking behaviour may be influenced by the behaviour of their families and that it may be possible to help family members strengthen non-smoking attitudes and promote non-smoking in children and other family members. In addition, that the training of staff and their delivery of the programme may relate to effectiveness but number of sessions in programme does not seem to make a difference.

The review by Petrie (2007) concluded that parenting programmes can be effective in reducing or preventing substance use and that the most effective appeared to be those that shared an emphasis on active parental involvement on developing skills in social competence, self-regulation and parenting.

From the review by Petrie (2007) and the Cochrane systematic review (Thomas et al, 2008) we looked at the primary studies that involved adolescents and were considered to be effective. Key features of these studies include:

- Active parental involvement; from activities with young person, interaction with teachers or health educator, or group work with other parents
- Provision of information to parents through mailings/brochures home, group skills training or videotape on related topics on communication skills, consequences, behavioural advice and supporting young people with refusal or peer resistance skills
- They promoted communication and interaction between parent and young person
- They encouraged a discussion or setting of rules or sanctions regarding adolescent smoking

4.2.5 Self-Esteem and smoking

We explored the evidence into the link between self-esteem and smoking because it was raised in the interviews that projects are using an approach which aims to raise the confidence and self esteem of young people. The assumption behind this approach is that increased confidence and self-esteem has an impact on prevention and education messages and ultimately reduces smoking rates.

It is acknowledged in research (Glendinning, 2002; McGee and Williams, 2000) that low self esteem is often associated with health-compromising behaviours such as substance misuse and early sexual activity. However, it is also acknowledged that there is little longitudinal research into this issue and that the relationship between low self-esteem and smoking is at best weak (Glendinning, 2002).

Within the Amos review (2009) the conclusion was that the relationship between self esteem and smoking rates is very unclear. Therefore, at the moment, we are unable to say whether raising self esteem impacts positively on smoking behaviour. The work of Anthony Glendinning (Glendinning, 2002; Glendinning & Inglis, 1999) has explored the relationship in more depth and has found that to fully understand the relationship between self esteem and smoking you must take the wider context of peer status and youth culture into account.

4.3 Practice Wisdom: Prevention and Education

4.3.1 Rationale for Model

When exploring the rationale for the model/approach towards youth smoking, many respondents were less able to articulate this for prevention and education work. The overall feeling was that it is still not clear what works. Some of the respondents discussed the lack of clarity in terms of the evidence being confusing and unclear and the difficulty this gave to smoking projects implementing an evidence based approach. In addition, all of the respondents reported frustration about being able to 'prove' that interventions being delivered in Scotland work. In particular, the difficulties of projects being able to measure whether their intervention leads to fewer young people taking up smoking in the long term and being able to attribute this to the intervention alone.

Excluding two interviews with researchers, there was considerable difference in the extent to which respondents made reference to research and evidence. One respondent made direct reference to the work of Amanda Amos and felt that this work had informed their decision to use a multi-component approach. In addition, two further respondents indicated that they had adopted a peer-led approach due to evidence that this works. The general theme of the discussion was the difficulty in measuring whether prevention and education inputs are effective.

> "How do we prove that we have prevented someone from taking up smoking, do we measure one year in the future or five or 10 years. How do we measure if somebody is better able to make an informed choice?" *Respondent two*

> "It's not like cessation where you can count quits; you're working against an increase. So all you can show, in one year smoking rates will have gone up whatever you do unless it's something miraculous." *Respondent one*

This was reflected in the difficulty some respondents had in articulating the assumptions that underpin their outcome measures. It was also reflected in the lack of consistency across projects on the interim outcomes they hoped would lead to reduced smoking overall. The interim outcomes discussed by the respondents were:

- increase in knowledge about smoking harm
- increase in negative attitudes towards smoking (reduction in positive attitudes)
- intention to smoke in future
- increase in self confidence and/or self esteem;
- increase in refusal skills/resisting social pressure
- enjoyment of programme

There was a sense from the majority of respondents that evaluation design is a work in progress – with few outlining whether evaluation takes place before and after interventions or just after.

The lack of consideration of assumptions was demonstrated in discussions about the development of self confidence and self esteem as components of a smoking prevention and education project. One respondent made reference to the current evidence for the link between self esteem and smoking prevalence being weak, and another that the link was unclear.

One respondent outlined the rationale for developing the self esteem and confidence of young people is the belief that this is essential for all work with young people irrespective of the topic. It was felt this is an important principle underpinning all good youth work. Another respondent felt that it was logical to think that a more confident young person would have the skills to say no or to quit cigarettes

> "We've found from that project is the most important thing is to develop young people's self confidence and their self respect….If a young person is more confident, they've got the information, they feel more able to say 'no, I don't want to start smoking' or 'actually, I'm now willing to quit smoking'." *Respondent six*

4.3.2 Policy & Culture Change

When exploring 'what works' the respondents discussed the importance of tobacco control policy and taking a culture change approach. This included implementing work-based smoking policies within youth clubs, schools and wider settings such as residential care. In addition, providing staff training to ensure that staff have up to date knowledge on smoking and youth smoking services but also to highlight the important role they have as role models, and ensuring that smoking is discussed with young people.

> "Most agencies that we speak to don't actually speak to young people about smoking, they speak to them about illegal drugs but smoking is just not really on the agenda. " *Respondent two*

> "I think the fundamental idea was to try and create a cultural change within care placement, wanting to promote the importance to carers of being positive role models and the importance of smoke free environments as well." *Respondent seven*

Staff training was also important in terms of challenging the culture of staff smoking alongside young people as a way of developing a bond. It was felt that this practice has changed in recent years partly due to the increased focus on tobacco at a policy level which has raised awareness and encouraged many adults to stop smoking. However, there was still work to do in developing the role of youth workers and other

staff who work with young people so they can provide information on smoking and challenge myths and misconceptions discussed by young people.

> "When we used to go out to the projects a few years ago, there was a lot of collusion going on; youth workers would take kids out to speak to them while they were having a fag. However I think there has been a big change." *Respondent five*

4.3.3 Session Content

When discussing the delivery of prevention and education sessions and what is included, two respondents highlighted that the participants of their sessions - particularly within secondary school - include non-smokers as well as young people who smoke and that due to this there is a need to include cessation messages within prevention and education sessions.

Overall, there was a range of content for prevention and education sessions reported by respondents. It was apparent that this changes depending on the wants and needs of young people. In addition the number of sessions and the length of each session was not clear and seemed to be influenced by issues such as time available in schools, youth clubs etc. The different sessions delivered by respondents included some (or all) of the following:

- increasing knowledge about short and long term health impact
- dispelling smoking myths
- exploring why young people smoke and what influences them
- alternatives to smoking i.e. ways to manage stress, relaxation techniques etc.
- impact of tobacco production process

The need to engage young people was clearly identified. One respondent felt that if projects only focus on health messages there is the potential for young people to disengage. If was felt that many young people may feel that they already know about the dangers of smoking. Within this project they engaged young people by focusing on the environmental justice and tobacco production process in developing countries. They felt that this approached tapped into the social conscience of young people.

> "I think that where a health message might not work with those young people who are disenfranchised and hacked off, looking at the tobacco industry and how cynically and aggressively it targets young people might actually spark a bit of interest". *Respondent two*

It was evident from the interviews that projects deliver within a range of settings. Two respondents made reference to the different strands of their prevention and education work which included delivering sessions within mainstream school as part of PSHE and also more targeted work with young people in residential schools,

social, emotional and behavioural difficulty (SEBD) schools, and community settings (with young people who wouldn't engage in school). Another project was based from a youth health service, although also had good links with schools.

Within the interviews with projects who deliver across a range of settings there was no clear indication as to whether the sessions delivered differ in content depending on the setting; reference was made to other differences such as the number of young people involved and the number of sessions. There was a sense from the respondents (particular those that deliver in community based settings) that the number of sessions is often dictated by the young people themselves.

4.3.4 Peer- led approach

Of those who were adopting peer-led approaches the main rationale for this was a sense that that it had worked in other areas of Scotland (particularly Dundee) with some recognition that the evidence suggests that peer led approaches are effective. However, it is important to note that the peer-led models being implemented by some projects are peer education models where young people (in one instance 6th year pupils) deliver to primary pupils or those in lower years in secondary. This differs considerably from the approach reviewed in the evidence, particularly ASSIST. Within the ASSIST model the pupils are the same age and do not deliver within class but through discussion in informal settings during the school day.

> "There seems to be a lot of interest in peer education projects and that's come up from particularly one study, but what that then means, how people translate that, I think that's when things can become a little bit more murky." *Respondent one*

When discussing their peer-led approach, respondents did not indicate that they were aware that their model was different from the evidenced approach. The focus of discussion within the two interviews where peer led approaches were being used was about the need for innovative approaches to be adapted to meet local need and to 'fit' with the existing structures and resources available locally. Key considerations were:

- willingness of local schools to implement a peer-led project
- resources available for the training and support of young people
- time available within the curriculum for the peer education inputs etc.

Across a number of interviews there was a sense that local fit was a greater consideration for projects when rolling out their approaches than the evidence base.

4.3.5 Harm reduction[1] messages

Overall, there was some uncertainty among respondents about the appropriateness of including harm reduction messages as part of a prevention session – as opposed to an education session delivered as part of a cessation project where harm reduction messages were felt to be important. One respondent discussed this in terms of feeling that if young people had not yet started to smoke it was more appropriate to focus on the reasons they should remain non-smokers.

> "If I was doing a prevention thing and trying to prevent folk from taking up smoking then I would certainly be saying "Definitely, no smoking is the best!" *Respondent three*

When discussing harm reduction messages it was clear that for many projects prevention, education and cessation are a continuum rather than separate projects. This is discussed more fully in the final section.

4.3.6 Holistic v topic based

The debate around taking a holistic or topic based approach to work with young people wasn't discussed extensively by respondents. This is perhaps reflective of the majority of respondents being closely aligned to the youth smoking world. Across the majority of interviews there was a sense that smoking specific work with young people is crucial, as there is a danger of it getting lost when part of a wider substance misuse input. However, it was also acknowledged that smoking is only one aspect to a young person's life and may not be their top priority. In addition, it was felt that although smoking-specific work is important for sustainability it needs to be delivered within generic youth settings.

> "I would always argue that you would need smoking specific as well because there are very specific aspects to smoking and tobacco that more generic approaches just don't really address, but we know that on the other hand a lot of the reason why young people start to smoke are linked with a whole lot of other behaviours and coping strategies, so it should be linked." *Respondent one*

> "I think the strengths are when it's taken seriously and it's seen as something that's looked at holistically rather than, you go into your PSE lessons and you do non-smoking in 3rd year and that's that." *Respondent two*

[1] Harm reduction within this context included any messages which discuss cutting down the number of cigarettes or being safer in how you smoke rather than a message not to smoke or to stop.

4.4 Summary & Recommendations

There continues to be a lack of evidence into what works to prevent young people from starting smoking and/or from experimental smokers from becoming more entrenched. This is more pronounced in terms of evidence specific to practice within the UK. However, the evidence does provide some indication as to the approaches which show greater promise than others.

Although not across the board, this report suggests that projects don't always have a clear rationale for their smoking prevention and education approaches and that this is not always thought through in advance of delivering a project. In many instances the thinking is done while rolling out a programme with pragmatic issues having a greater influence on the delivery model than evidence in some instances.

Recommendation: *Prior to delivering smoking prevention initiatives organisations should spend time outlining the approach that they want to use and the rationale for adopting this approach. The stated rationale should take account of both what is known and unknown according to the evidence and be clear about where compromises based on local factors or innovative approaches are being used*

It is apparent that there is currently no consistency in the content of prevention and education sessions or the number of sessions delivered within or across projects. Although reference was made by respondents to different components of their programme such as dispelling myths, media literacy approaches and developing young people's skills in managing stress there was no clear indication as to whether these were core elements of their programme. It is clear from the evidence that a social influences approach – which develops resistance skills and explores social norms - is a core component of successful prevention programmes.

It is important to note that although the evidence suggests that the ASSIST programme is effective this is based on the findings of one UK based randomised control trial (RCT). Thus, there is a need for peer-led programmes to be carefully monitored locally and perhaps be evaluated nationally within Scotland. In addition, it is clear that the ASSIST programme is different from the peer- led approach being implemented by projects. Due to this it would be beneficial to provide guidance to projects on the core elements of the peer-led approach advocated by research.

Recommendation: *Guidance should be provided which clearly outlines the evidence on what works for prevention interventions and importantly the key features of the proven or more promising (but unproven) interventions.*

A number of barriers were identified for implementing interventions suggested by evidence as effective. These were the internal and external pressures such as resources available, 'buy in' from schools or local agencies, time available to deliver sessions etc. In addition it is clear from practice that projects need to be flexible so

that they can engage with young people and respond effectively to local need. This suggests that the most realistic expectation of projects is for them to be evidence informed i.e. the design of their approach takes cognisance of the evidence alongside wider issues such as identified local need, resources available etc.

Recommendation: *Using the term 'evidence informed' could help to better reflect the relationship between projects and research and the expectations of projects to work in a way that takes account of research as well as other local factors.*

By providing clear information on approaches which the evidence suggest work this would help a project to clearly articulate what evidence it is basing it's approach on and/or where it is trying an innovative/unproven approach. For either approach i.e. evidenced or innovative, the projects can then outline their rationale for thinking that this approach will be effective. This approach could then be supported by a monitoring and evaluation system to see if the evidence they can collect is supportive of the rationale they are using.

There is a recognised gap in the evidence on prevention approaches with more vulnerable groups of young people who may be more likely to start smoking. This is reflected in the projects which seem to use the same approaches irrespective of their target audience. In addition, it would appear that currently projects aren't set up to be able to evaluate whether interventions are more or less effective in different settings and/or with different age groups. This relates to the measurement of outputs and outcomes. It may be beneficial to have more projects with a specific remit to work with targeted groups of more vulnerable young people or to develop evaluation systems which can enable projects to collate information in these terms.

Recommendation: *There is a need for more research exploring the impact of prevention and education interventions on more vulnerable groups of young people who have higher rates of smoking*.

Recommendation: *Further consideration should be given to the balance between universal and targeted prevention and education work. In addition, the potential for projects to inform the evidence – particularly in relation to work in different settings and with harder to reach groups - should be harnessed*.

Overall, a robust monitoring and evaluation strategy for each project is key to exploring whether the results of the project are supporting the original rationale or whether changes should be considered. This is explored in more detail in the section 6 of this report.

5.0 FINDINGS: YOUTH SMOKING CESSATION

5.1 Key questions

- What works and what doesn't work within youth cessation programmes? Within specific settings?
- To what extent are young people (particularly those who are not daily smokers) physically dependant on nicotine? Or is their smoking 'addictive' in terms of behaviour/habit/coping mechanism etc.
- What informs the use of pharmacotherapy?
- What role does biochemical verification play in addressing smoking with young people? How might it best be used?
- What behaviour change approaches (e.g. CBT, MI) and harm reduction messages are appropriate within cessation programmes?

5.2 Evidence: Youth Smoking Cessation

It is acknowledged within current guidance (NICE, 2008b) and evaluations and reviews (Platt, 2006; Gnich, 2008; Amos, 2009; Grimshaw and Stanton, 2010) that the evidence into youth smoking cessation is weak with little indication about what approach is most effective.

5.2.1 Use of Pharmacotherapies

The most recent Cochrane systematic review into tobacco cessation interventions for young people (Grimshaw and Stanton, 2010) reviewed 24 trials with 5000 young people all under the age of 20, examining both behavioural support and pharmacotherapy use. The key findings relating to the use of NRT were that there is little evidence that pharmacological interventions work

These findings are largely supported by the earlier work of Amos et al (2009) which concludes:

- Use of pharmacotherapies or NRT with psychosocial support not sufficiently tested
- Overwhelming barrier to quitting is continued use of cannabis
- Bupropion has not shown to be effective in adolescent cessation
- NRT unlikely to be effective, largely due to poor adherence to therapy

Although, youth specific reviews into the use and effectiveness of NRT with young people have been inconclusive NICE public health guidance 10 (2008b) into smoking cessation services in primary care, pharmacies, local authorities and workplaces, particularly for manual working groups, pregnant women and hard to reach communities recommended that NRT should be used with young people aged 12 to 17 who show a strong commitment to quit, with the following guidance:

- Discuss with the young person, and use professional judgement, to decide whether or not to offer NRT to young people aged 12-17 who request it or who show clear evidence of nicotine dependence. If NRT is prescribed, offer it as part of a supervised regime
- Varenicline and bupropion are not licensed for, and therefore should not be used by, people under the age of 18 years

The NICE recommendation is based on two small scale studies (one RCT) that suggest potential benefit of NRT patches (compared with gum and placebo) with regular young smokers and no existing evidence to suggest that the use of NRT with under 18's is harmful and/or that it isn't effective with some young people if wider intensive support (to encourage adherence) is also provided.

5.2.2 Approach of cessation projects

A national programme of 8 pilot smoking cessation services aimed at young smokers wanting to stop took place between 2002 and 2005. The pilot projects included a range of target groups (from vulnerable or social excluded young people, to young pregnant women, to those in rural and island communities, to further education students, to young offenders) in a range of settings (informal youth/community, NHS, further education, education, young offenders' institution) with a range of approaches (smoking cessation support, web-based chat-room, peer workers, mobile bus, provision of alternatives to smoking, relapse prevention, training). Although cessation rates from the pilots were low, the evaluation of the pilots (Gnich, 2008; Platt, S et al, 2006) identified useful learning points as follows:

- The programme should be flexible but structured, based on 1:1 or group support (in accordance with young people's needs and wishes) and addressing broader aspects of mental health and well-being (demand-led)
- There is a need to address the diversity of young smokers' understandings of smoking and levels of motivation to quit
- Limited/brief interventions are unlikely to meet most young people's needs
- The approach should embody an understanding of the role of smoking in young people's lives (e.g. concerns about the possible loss of position in the peer group following quitting smoking)
- Young people need to know and trust the service provider(s); they do not want a service delivered by strangers.

The evaluation reports also highlighted good practice in terms of the wider approach of projects including having good partnership working and a strong multi-agency

steering group, a project ethos based on a holistic person-centred approach, involving young people at all stages of the project development and recognising the on-going importance of raising awareness of the project and the time required to recruit young people.

Some of the issues highlighted above were supported by additional learning points that emerged from the Cochrane review into tobacco cessation interventions for young people (Grimshaw and Stanton, 2010). This included recognition of the difficulties in recruiting (& retaining) young people within youth smoking cessation studies. Other learning points which emerged from this Cochrane review related to the issues of measuring smoking status and cessation.

The gold standard for measuring smoking status was felt to be self reports with biochemical verification. However, it was acknowledged that among a youth population problems exist with biochemical verification because of the changing nature of youth smoking i.e. only smoke at weekends meaning that young people who consider themselves to be smokers are 'missed' by the CO measure.

The authors also highlighted that the measurement of success for cessation interventions differs across studies. They outlined different approaches to measuring cessation including cessation over a pre-set length of time (varying from one day to 30 days); 90 day abstinence or continuous cessation. They felt that continuous cessation was the gold standard that should be applied to measure the success of youth cessation interventions.

5.2.3 Settings based approach

Overall there was little discussion within the evidence on the impact different settings have on the success of youth smoking cessation interventions. NICE public health guidance 5 into smoking cessation in the workplace (NICE, 2007) suggested that the workplace might be an appropriate setting for target younger smokers but that they may require more intensive support than employees of other ages.

5.2.4 Behavioural Support

The Cochrane review (Grimshaw and Stanton, 2010) suggests that cessation models which use motivational enhancement and/or cognitive behaviour therapy and are sensitive to the stages of change model may be effective.

Not all the primary studies cited within the Cochrane review outlined in detail what their approach actually consisted of (other than describing it as motivational enhancement or Cognitive Behaviour Therapy). However the following features were referred to:

- CBT approach: a behavioural intervention that seeks to challenge and change negative client cognitions about events and life circumstances. Can be helpful

for building deficient skills in young smokers including developing alternative behavioural responses, lifestyle changes and problem-solving skills.

- Motivational Interviewing: Directive client-centred style which aims to encourage reflection on the risks associated with behaviours such as drug use, in the context of personal values and goals.
- Transtheoretical Model: A stage based theory of behaviour change[2]. It involves applying processes like contingency management, counter conditioning and stimulus control to people in pre-contemplation.

5.3 Practice Wisdom: Youth Smoking Cessation

5.3.1 Rationale for cessation model

Across the respondents the reason for developing a youth cessation project was attributed to smoking cessation being identifying as a need by young people locally and/or awareness of national strategy and policy drivers such as the HEAT target and/or the national action plan.

When discussing what shaped the design and development of their project respondents gave varying rationales for the approach/model they were using; with few making direct reference to the evidence base for cessation work with young people. However, some respondents did make reference to statistical information available through SALSUS and highlighted their awareness of a lack of research and evidence on 'what work's' for youth smoking cessation.

> "The SALSUS report and Scottish household survey, the figures in that for the smoking with young people, that had a lot to do with the project being started up in the first place. But there's not a lot of actual research for young people. When we first started out we just worked it the way that the adult cessation services worked." *Respondent five*

The most common rationale discussed was using a model or approach that was informed by practice with adults or that seemed to be effective elsewhere; this included learning from projects in other parts of the country and from other areas of youth work (particularly substance misuse).

> "I think a lot of the time people who are told to go and do youth smoking cessation have maybe come from the adult world and are

[2] Stages are pre-contemplation (not intending to change soon); contemplation (change is being considered but not definitely planned); preparation (behaviour change is intended imminently); action (behaviour change has been achieved in the short term) and maintenance (long-term behaviour change has been achieved.)

> not comfortable working with young people or don't feel that they have the skills to work with them and that is something that is really missing…using youth work methods to target youth using youth methods for smoking prevention and cessation." *Respondent six*

In addition, there was a strong sense from projects that their approach had developed from trial and error, from the needs and expressed wants of local young people (via local needs assessment) and from the resources (or lack of) they had at their disposal.

5.3.2 What works and doesn't work?

Across the respondents there was recognition that when working with young people it is how a project engages them that is important; not just what is delivered. Approaches which were felt to help engagement included building trust with young people, using innovative and engaging techniques and being flexible. Two respondents felt that sustained engagement of young people with their project was a success measure in itself.

> "We have made it very flexible so that the young people feel that if the young people feel they've made a quit attempt and they've started smoking again, they can come back in and that's okay. We're very open about that, and because we have built a very open relationship with them, a very trusting relationship, then they know they won't be judged if they do come in and say well I had a cigarette over the weekend." *Respondent six*

Three respondents indicated that they based their cessation approach on the Maudsley model i.e. NRT with 7 weekly sessions; whilst two other respondents described their approach as 'small group work'. It wasn't clear how these approaches differed as those using the Maudsley model had made significant changes to the model.

> "We were quite quick to find out that a rigid model like that [Maudsley] doesn't work for young people. They don't go through the cycle of change like adults do. I think 9 out of 10 times when an adult comes to a smoking cessation service they have reached that point where they are ready to quit whereas young people come into me one week and they are looking to quit and they hate their fags and it's disgusting and then the next week they're back to being happy smokers." *Respondent five*

In addition, all of projects outlined that a large group work approach that brings strangers together (as per the Maudsley model) does not work with young people. Therefore they deliver their programmes on a one to one basis or in small friendship groups.

> "It's based loosely around the Maudsley model, with the seven support sessions and what you do at each session. However the Maudsley is for groups really. We only provide one to one as we think that's most suitable for our young people." *Respondent seven*

One project had extended this further and discussed how they had opened their cessation programmes to friendship groups of smokers and non-smokers. They felt that this was beneficial. However, as all aspects of the programme was not fully described it isn't clear whether every young person was involved in the whole programme or whether the smokers were given specific sessions (on a one to one) on parts more relevant to their own smoking behaviour i.e. discussing goals, ways to stop, coping strategies etc.

> "It works really well if young people that are smoking are in with their friends who don't smoke. The young people who don't smoke can be a really big benefit to a young smoker in terms of supporting them, and we found that really useful. That peer pressure, that negative peer pressure, turned into a much more positive peer pressure." *Respondent six*

It was clear that projects did not provide their cessation programme over a set number of weeks; they used a more flexible approach. This included weekly drop-in sessions as well as arranged meetings with young people over a varying number of weeks. In addition, all of the respondents from projects highlight the importance of including wider education messages in their cessation programmes.

> "I think the flexibility that is the key aspect of our approach. Young people come in and out of the service, I mean sometimes you can turn up to a unit and they don't want to see you, so sometimes you have to go and make another appointment to come back, because they are very vulnerable groups, their needs are very complex and multi faceted." *Respondent seven*

Overall the duration of engagement and approach to delivery of each project (i.e. weekly meetings or drop in) seemed to depend on individual need and practicalities within the setting they delivered. The extent to which pharmacotherapy was used by projects also varied and is discussed further below.

It was clear from discussion that the content of the cessation sessions was not based on any one set programme. As outlined within the prevention section many respondents discussed the importance of incorporating wider education messages within their cessation programme. This approach commonly involved the delivery of broader educational inputs following which the young people who want to quit would come forward or be identified.

Specific approaches within cessation programmes which respondents felt were important or innovative included:

Exploring why and when they smoke and influences on decision
All respondents (who had cessation elements in their project) highlighted this as an important factor for cessation programmes.

> "I think try to get them thinking about why they are smoking. Because of the vulnerability of this group of people and they are living in a group environment…it's a lot to do with forming relationships their smoking, parts of it are peer pressure, but mainly a sort of bonding thing between the young people." Respondent seven

Alternative coping strategies
All respondents made reference to the importance of providing young smokers with alternative ways to deal with stress. One respondent described the use of alternative therapy i.e. massage whilst two additional respondents made reference to the use of the emotional freedom technique or 'tapping[3]'. This latter approach was felt to be an innovative way to deliver an important aspect of cessation i.e. coping strategies. Although the respondents were enthusiastic about this it wasn't clear how the use of EFT was being monitored or evaluated and what constituted this working 'really well'.

Media Literacy/Environmental Justice
Two respondents discussed what they felt to be an innovative approach to smoking education; to move beyond the health impact of tobacco to look at the tobacco industry and the wider impact of the tobacco trade.

> "When we do cessation with the older kids we try to do the education stuff and go over it again, the costs, the taxes on cigarettes, environmental problems and things…Just making them aware of the whole tobacco industry and when they buy fags that's not the full story. I think it's important to do that, I think that's one of the main strengths [of programme]." *Respondent five*

5.3.3 Use of pharmacotherapy

Alongside the use of educational inputs, alternative therapy and on-going support the respondents made reference to the use of NRT with young people.

[3] Emotional Freedom Technique is described in the literature as being similar to acupuncture but instead of using needles a person lightly taps on special points in the body which are thought to have a de-stressing effect on the nervous system. The individual themselves can use the technique to manage feelings of anxiety, craving or stress. It should be noted that there is currently no evidence of the effectiveness of this approach with young people or adults.

This discussion highlighted that currently projects have different approaches to ascertain the level of dependence/addiction among young smokers and how they gauge whether NRT is appropriate or not to use. There was no sense that they had previously considered questions relating to whether young people were physically dependant on cigarettes or more psychologically addicted. This was raised due to our question as to whether the use of pharmacotherapy with young occasional smokers may increase their level of nicotine intake.

CO verification

Some respondents felt that a positive CO reading was an important indicator of dependence and would shape their decision on whether to provide NRT or not. However, a larger group of respondents felt that the current NHS guidance that a CO reading of anything under 5 indicates non-smoking status was not always appropriate for young people. Two respondents felt the need to verify smoking status with CO readings as a requirement for the minimum data set[4] is restrictive for youth smoking projects. This was due to the view by all participants that CO readings aren't useful for detecting smoking among less entrenched smokers because their smoking pattern is less fixed.

> "It's helpful to the kids when they are coming in as a motivational took, but I wouldn't say it was helpful as a definition of a smoker or a non-smoker. If they are coming in and seeing their reading going down they are usually over the moon to see how much." Respondent five

Fagerstrom questionnaire

Two respondents made reference to the Fagerstrom questionnaire. They used this as the basis for determining whether NRT would be appropriate. However, the weaknesses of the tool were acknowledged, particularly questions about how soon a young person can have a cigarette when many are restricted due to parents being unaware that they smoke.

Hooked on Nicotine Checklist (HONC)

One respondent referred to the use of HONC as their approach to determining nicotine addition within young people before providing NRT. This was felt to be more suited to young people than the Fagerstrom as it asks about the onset of cravings rather than the timing of the first cigarette.

[4] For further information on the national data set for Scottish Smoking Cessation Services see ASH website http://www.ashscotland.org.uk/ash/4241.html

Informal approach

The most common approach for ascertaining a young person's level of nicotine dependence and the appropriateness of NRT provision was an informal one. This approach was based on practitioner discretion having taken time to get to know the young person, and explored their motivation to stop and the number of cigarettes they smoke.

> "We don't give it [NRT] out willy nilly... we tend to give out inhalators, but without the actual cartridges in them…A lot of the kids chew on them and it's just something to replace the hand to mouth action and for them to have something in their mouth. The inhalators and gum work quite well for that. So we often work with those kind of products rather than patches." Respondent five

5.3.4 Motivation to stop

Respondents from youth smoking projects discussed the different motivators for young people attending services and how young people's views towards stopping smoking can change frequently. In some instances it was felt that the provision of education sessions to groups of young people (smokers and non-smokers) can prompt young people to consider their use of cigarettes and decide that they no longer want to smoke; others attend the service due to a referral from a school or agency or independently approach a service as they have decided that they want to stop smoking.

The use of cannabis alongside tobacco was felt to complicate this picture. Some young people may want to stop smoking cigarettes but have no intention to stop using cannabis. In addition, some young people who smoke cannabis may not consider themselves to be smokers.

> "Cannabis is a massive question that comes up routinely. I would say the young males; the majority of them smoke purely because they smoke cannabis and a lot will not class themselves as a smoker. They don't even see that as tobacco use whatsoever." *Respondent three*

Motivation was felt to be problematic when young people see the service as a way of getting out of class or when pupils are 'sent' to projects as a consequence of getting caught smoking in school. This was raised by two respondents. Although referral as a kind of punishment was recognised as not being ideal, one participant felt that their service was able to work with the young person if they were willing to attend, even if they had initially accessed the service in these circumstances.

5.3.5 Setting specific work

From discussion it was clear that youth cessation services work in a number of different settings including schools, youth clubs, community venues and youth health

drop-in services. In addition, projects work with different groups of young people including harder to reach groups and more vulnerable young people. Specific groups mentioned by the respondents included young parents with children under 5, young people who are looked after and accommodated, young people who are excluded from school and the more choices more chances group. Some of the respondents outlined the importance of targeting harder to reach groups due to the evidence of higher smoking rates.

Although it was evident that there was work going on in different settings it wasn't clear whether the approaches differed from setting to setting or whether an approach within a school was the same as that used in a youth club.

There were also differing views on which settings were most appropriate for the delivery of cessation services. Although some of the respondents were successfully running services from schools two participants questioned whether schools were an appropriate setting. This was largely due to the restrictions placed on service provision in schools, such as time available. One respondent also felt that it was very important to deliver cessation services from places where young people meet informally. In their view, this better enabled smoking to be addressed within the wider framework of that young person's life.

One respondent who delivered a service specifically for young people who are looked after and accommodated discussed the specific difficulties of engaging with young people who are within residential care. Key considerations included:

- The transient nature of some young people's lives, for example moving from the unit to home or foster care and so on means that it can be hard for the service to 'track' them.
- Young people in care are experiencing many issues in their lives and for a large proportion stopping smoking is not a priority (for young people or staff).
- Being mindful that non-smoking young people in the residential unit do not view the one to one support provided by the cessation service as young smokers getting greater attention or preferential treatment.

5.3.6 Harm Reduction Message/Behaviour Change Approach

Across the interviews there was a sense that harm reduction messages are an important aspect of a youth cessation service. However, there was disagreement on what these messages should be. Harm reduction messages referred to by the respondents included:

- *How you smoke a cigarette/type of cigarette*

Respondents indicated that this was important harm reduction information. This would include providing information on the composition of cigarettes, hygiene factors relating to sharing cigarettes, how to smoke a cigarette i.e. don't take very large draws and debunking myths about 'light' cigarettes.

- *Reduction in cigarettes*

There was disagreement on whether this was an appropriate harm reduction message for young people. One respondent felt that cutting down was only appropriate when smoking in pregnancy and another that it was only appropriate when seen as a pathway to quitting. This was due to their awareness of evidence which suggests that cutting down can lead to people inhaling more deeply on their cigarette/finishing more of each cigarette that they do smoke and concern about the tobacco industry promoting the view that occasional smoking is okay. However, overall more respondents felt that reducing the number of cigarettes smoked was an appropriate harm reduction message to give to young smokers; and questioned whether the evidence about inhaling more deeply was as applicable to young people as it was to adults.

> "If its cessation, then you're working with people who are already smoking and I think there is a huge thing in cutting down, definitely. If someone smoked ten a day and they're now down to five a day then that's a big jump. So yeah, it should be recorded and it is important." *Respondent three*

- *Cannabis without tobacco*

Three respondents discussed the importance of discussing how young people can use cannabis without tobacco. This was recognised as being controversial but also important where young people indicate their desire to stop smoking tobacco but continue with their cannabis use. This included providing information on non-tobacco options. One respondent made reference to work they are hoping to implement which tackles cannabis and tobacco use using a brief intervention approach.

> "We do tackle the cannabis issue but there's no good practice out there that we can find to try and tackle that. We know that a lot of young people [who access service] are using cannabis and some of them will try and give that up." *Respondent six*

- *Smoke-free environment*

Two respondents felt this was an important area for behaviour change and harm reduction messages. This included informing smokers about the effects of second hand smoke. For one of the respondent's this work was focused on young parents with babies and children under 5. For them a significant behaviour change was for smokers with young children to only smoke when completely outside of the house.

> "I think positive role models, having a smoke free environment, some people think smoking out of a window or smoking out of a door constitutes a smoke free environment but the evidence shows it has

little effect. So to really classify what that is, though it's probably mainly for staff." *Respondent seven*

5.4 Summary & Recommendations

There continues to be very little evidence on what works within youth smoking cessation. Despite this respondents were better able to describe the origins of the design and delivery of their cessation project; particularly in comparison to discussion on rationale for prevention work. This is perhaps due to the guidance available on adult smoking cessation and participants finding it easier to articulate the outcome measures for youth smoking cessation.

Despite this, only two respondent made reference to project paperwork where the rationale as to how the project 'worked' was formally outlined or described. Generally, participants seemed to respond from their own thoughts rather than drawing on an agreed rationale set out in advance of delivering the project. This is similar to the finding for prevention outlined in Section 4 above.

Recommendation: *Prior to delivering youth smoking cessation initiatives organisations should spend time outlining the approach that they want to use and the rationale for adopting this approach. The stated rationale should take account of both what is known and unknown according to the evidence and be clear about where compromises based on local factors or innovative approaches are being used.*

It was apparent that the approaches used across and within projects differ considerably depending on the individual needs of the young people and factors associated with the setting. Few participants discussed cessation work in terms of a set programme with agreed number of sessions or agreed content. This raises a number of issues in terms of devising an evaluation framework for projects that can accurately capture the different approaches being used. In addition, a framework that captures whether interventions are more or less effective with different groups of young people, including young adults.

Practice suggests that a cessation model should not be restrictive in terms of number of sessions – which explains why the Maudsley model was not felt to be effective. This is largely because an individualistic and flexible approach is what encourages young people to engage in the first place. It was also felt that using innovative approaches also helps to engage young people.

Recommendation: *Due to the lack of research on 'what works' in youth smoking cessation projects should be encouraged to explore innovative approaches to engage young people. In addition, they should be supported to adequately evaluate these outcomes so that learning can be shared.*

Encouraging young people to engage with cessation projects is clearly an important element for youth smoking cessation and is likely to have significant impact on the success of a project. However, it is also important to separate out factors that help young people engage with projects from factors exploring 'what works' in terms of them stopping smoking.

There is very little evidence in terms of what works for youth cessation group work. The Cochrane systematic review suggests that interventions that incorporate a motivational interviewing approach or cognitive behaviour therapy and are sensitive to the stages of change model are likely to be more effective. However, this finding seems to contradict practice where it was expressed that the stages of change model is too rigid and unsuitable for young people. However, on reflection, we conclude that this seeming contradiction may be due to two different ideas of what 'working to the stage of change model' actually means.

The criticism of the stages of change model seems to stem from the view that people need to have made a stable decision to quit i.e. contemplation or action stage of change in order to engage with cessation services in the first place. However, what has emerged from practice is that with young people the decision to attend a cessation service/input may not be due to their view about quitting but about how interesting or engaging the project seems to be. In these instances a true stages of change/motivational interviewing approach would be important as it recognises that motivation is not constant but is fluid and changing. Thus for young people who engage with a project for wider reasons but are still ambivalent about their smoking a Stages of Change (SOC) approach that enhances motivation and confidence and equips them to change no matter what stage they're at may be very appropriate.

Recommendation: G*uidance should be provided with suggestions from practice on how best to engage young people in cessation projects and an outline of the evidence in terms of 'what works' in youth smoking cessation. This should clearly describe what a CBT or MI techniques approach along with a stages of change approach actually look like*.

Evidence suggests that pharmacotherapy is not effective with young people for a range of issues; including poor adherence to treatment. However, in practice it is clear that NRT is an important (but not only) part of the cessation model. In addition, there is no consistent approach to using NRT and it is not clear if projects have fully considered issues such as whether young people are physically dependant and whether NRT could increase nicotine dependence in some circumstances.

This issue links to the lack of longitudinal research exploring youth smoking trajectories, the difficulty in defining a young regular smoker and the lack of knowledge into when and how young people move from being experimental smokers to a more regular, entrenched smoker. An important question to ask is what are appropriate indicators to detect physical dependence to nicotine in young people?

When considering this question it is important to reflect on the views expressed by respondents about the limitations of adult measures and CO verification. These limitations are also acknowledged within the evidence.

Recommendation: *CO readings should be used with caution as a tool for measuring young people's smoking status and in particular in considering whether or not to provide NRT.*

Recommendation: *Guidance should be provided on definitions for young regular smokers, indicators of dependence (in youth) and when NRT should be considered (or ruled out) for use with young people. This guidance should highlight the lack of clear evidence relating to these issues and the consistent evidence that NRT is not effective with young people.*

It is clear from practice that there is a strongly held view that existing outcomes for measuring the success of youth smoking cessation projects are not appropriate. There is also disagreement with evidence (particularly the Cochrane review) on what appropriate measures should be. This links to the view that harm reduction messages and behaviour change are important aspects of youth cessation projects. The issue of outcome measurements is explored in the following section.

6.0 FINDINGS: OUTCOME INDICATORS AND EVALUATION

6.1 Key Questions

- To what extent are the goals and outcomes of youth tobacco prevention and cessation projects similar or different?
- What outcomes are appropriate for youth tobacco projects and what outcomes are currently being measured?
- How can evidence and practice be better linked?

These questions are considered in turn below by outlining practice wisdom, evidence where available and discussion of each issue.

6.2 Distinguishing Goals and Outcomes for Prevention and Cessation

6.2.1 Distinguishing Goals and Outcomes - Findings

Most respondents felt that it was difficult to separate prevention and cessation when working with young people and that both approaches were part of one and the same process.

> "First of all I would separate out prevention and cessation, but then for young people you can't because they move in and out of smoking." *Respondent one*

While one respondent raised concerns about resources if they were expected to do cessation work as well as educational inputs, it was apparent that there was no clear difference between descriptions of prevention and cessation in terms of what the projects or approaches hoped to achieve. Cessation projects were seen to have a role in providing knowledge, skills and confidence as were prevention/education projects. Similarly it was acknowledged that prevention projects were delivering inputs to mixed groups of young people (smokers and non-smokers) and some cessation projects even reported working with non-smokers. One respondent described how their work is divided into three strands: prevention (with primary school children where they felt most were non-smokers); education (with secondary school age children potential smokers and non-smokers) and cessation.

> "No matter if I'm doing prevention or working with a group of young people who've said they want to stop, I'll always do a prevention session first. It's like awareness raising... Then after that, if there's people who smoke who say they'd like to stop, then we move onto

> the next stage and meet them again and do a cessation course which has different things." *Respondent three*
>
> "I think they should be the same; you should be educating people while you are trying to help them stop, or educating them in the first place. " *Respondent five*

The exception to this view came from the researchers who were interviewed. In contrast with the findings from the project respondents, they felt that prevention and education had different outcomes or that the activities of prevention and cessation were very different. Their concern was also that if prevention and cessation work were done together, there was a danger that cessation would take precedence. They felt this might happen because of their view that the impact of cessation, in terms of quit rates, is easier to measure.

> "I think I'd probably be keen to see them separated out to give prevention its actual place. I suspect that the ways you stop people starting smoking are really going to be very different from actually helping people once they're smokers. They're quite different things, so lumping them together, in my view, isn't very helpful." *Respondent four*

We were unable to find any specific discussion in the evidence relating to this question however it is clear that the interventions reported in the research are almost always designed to focus on prevention or cessation (not both) and the measured outcomes reflect this. The one exception to this is the evidence around multi-component community based 'prevention' where support to stop smoking is included as part of an overall approach that encompasses prevention and cessation across different levels of intervention.

We do not know therefore what impact a project supporting young people to quit smoking might have in terms of preventing or encouraging others to smoke or to what extent prevention projects may result in quit attempts. One project which worked with children in residential care expressed concern that non-smoking young people may see smokers getting attention and perceived preferential treatment by cessation services and that this may create a reason to smoke. In addition, some cessation projects reported taking young people out of class to attend sessions and were aware that in some instances this in itself was a motivation for attending cessation support.

6.2.2 Distinguishing Goals and Outcomes – Discussion & Recommendations

There are two questions to consider here:

i. <u>Does it make sense for the projects or approaches to be separated into prevention or cessation?</u>

ii. To what extent is there a need to develop different outcomes for each approach?

In our view, the first question of whether prevention and cessation projects should be separate depends on whether projects are described by what they provide (the approaches/techniques they use) or by what they seek to achieve (their goals). The discussions with respondents outlined above make it clear that prevention and cessation projects are often working with the same groups of young people and have similar goals.

This also chimes with the youth work principles, which were the basis of the approach reported by more than one project, where ongoing holistic support would be provided to a young person even if they successfully quit smoking. The logical extension of this is that it is possible that prevention/education projects could result in quit attempts in the smokers they deliver to and that cessation projects may actually be supporting abstinence in never-smokers/previous smokers. Therefore, it is felt that projects should not be labelled simply as prevention or cessation without qualification. The descriptions of projects given by respondents in this research imply that the best projects are flexible and broad enough to be able to provide elements of both. Such segregation can also be unhelpful from a monitoring and evaluation perspective as it can lead to a false understanding that prevention projects only prevent smoking and cessation projects only help people to quit. Such a misunderstanding would lead to incomplete evaluation as other outcomes may not be measured.

It may be logical to move towards describing all projects covered by this research as 'youth tobacco projects' and to subdivide them in terms of what kind of approaches they offer, such as one to one work, informal youth work, small group work or classroom-based work rather than simply in terms of prevention or cessation. It may be that some projects which work directly with individuals or small groups could be described as 'support' projects whereas others that only deliver classroom inputs could be described as 'education' projects but it would appear that best practice would involve offering both education and support.

Another option would be to consider describing projects on the basis of whether they wish to work primarily with smokers or non-smokers. Individual projects may aim to work primarily with smokers but in this case they would ideally continue to provide support to ex-smokers after the 'quit' especially if this is measured by abstinence for four weeks. The terminology of 'cessation project' could be used in this context but ought to be qualified to acknowledge where prevention of re-uptake is also a goal and where non-smokers are also involved. In considering traditional 'prevention' projects, most will find it impossible to work exclusively with non-smokers, unless working with very young children. It would seem wrong to ignore the smokers who receive these inputs when considering appropriate outcomes and so the description 'prevention project' is particularly problematic.

In conclusion, we feel that it is unhelpful to conceive of youth tobacco projects as being split clearly into two separate types 'prevention' and 'cessation'.

Recommendation: *In general, 'youth tobacco projects' is a useful umbrella term to describe projects which provide support to individuals and/or groups who wish to avoid ever smoking, avoid re-starting smoking or give up, and/or education for groups or individuals including those who have never smoked, once smoked or are currently smoking.*

Recommendation: *While individual youth tobacco projects may focus primarily on particular goals, target groups or activities, simply using the terms 'cessation' or 'prevention' without qualification to describe a project does not provide a clear or consistent indication of their goals, target groups or activities.*

Recommendation: *Where the terms 'cessation' and 'prevention' continue to be used in the context of youth tobacco work, they should be defined in such a way that provides clarity on the goals, target groups and activities that each term is intended to encompass.*

Recommendation: *While youth tobacco projects will naturally not all offer the same range or type of service, they should be aware of the potential crossover of their work from prevention to cessation and vice versa and should monitor and evaluate accordingly.*

The actual focus of the work of any individual youth tobacco project should still be planned in view of the available evidence and the local context and whether it is possible to implement evidence-informed approaches to achieving their goals regardless of whether prevention or cessation.

ii To what extent is there a need to develop different outcomes for each approach?

In relation to the second question, it follows from the above conclusion that although there are outcomes that are specifically relevant to the *goals* of prevention and cessation, in most cases youth tobacco projects should be considering their impact on aspects relevant to both. Both approaches have the ultimate goal of abstinence (whether continuing abstinence or four week abstinence e.g. following a period of smoking) and both also aim to build knowledge, confidence and skills. Ideally a monitoring and evaluation framework would look at all of these issues.

Given our earlier conclusion that projects are rarely purely prevention or cessation focused, it follows that there will be considerable overlap in the outcomes that are relevant to projects that at first glance may seem quite different in their goals. For this and all of the other reasons above, we conclude that a single broad range of consistent outcomes and indicators should be developed from which all youth tobacco projects could select those most relevant to them.

6.3 What outcomes are appropriate for youth tobacco work

6.3.1 What Outcomes are Appropriate - Findings

In discussing appropriate outcome and output indicators with respondents there was a wide variation in how much thought they had given to which outcomes to measure and how best to record/measure these. As reported above, most projects did not seem to have developed their rationale or have defined the outcomes they wished to achieve or measure in advance of delivering their service. The exception to this was cessation projects which use the national standard one month quit rate as their key outcome indicator.

Among respondents whose projects offered cessation services, the feeling was that quit rates were by far the most important measures for cessation projects because they are the ultimate measure of success and they are required by the NHS reporting system.

> "Because it's funded by the NHS we have to use one month quits, well the NHS use one month quits for our funding, which is exactly the same as adults." *Respondent five*

> "We used the minimum data set, which is very NHS, about quit rates, so that was kind of used and validated with carbon monoxide readings and all that kind of thing." *Respondent six*

There were mixed feelings however about how appropriate the national measure of a successful quit, i.e. abstinence for one month, was for work with young people. This was seen by one respondent as challenging when working with young people as even shorter periods of abstinence were felt to be valuable. On the other hand, another respondent felt that such a short duration of abstinence was perhaps even less reliable as an indicator of future abstinence with young people than it is with adults.

> "It's really difficult with young people to get quits for a month. We tend to feel they've done well if they can manage a couple of weeks and if they had a lapse after that we'd work with them again. But when we're handing our audit sheets back in for our figures, the NHS don't take notice of ... these soft indicators." *Respondent five*

> "We really don't know the history of the uptake of smoking is, even if a young person does quit however we define that, what will happen in the next month/6 months/ a year. Now with adults there's been lots

> of research showing well what happens after, what's the likely success rate, what then is the drop off you know over the next year… 50% will quit at one month, through cessation services we'd expect it to be 15% in one years time. Young people we know nothing." *Respondent one*

Respondents felt that quit rates, currently measured by self-reported abstinence for four weeks, did not adequately reflect the range of outcomes they were trying to achieve in cessation work and that outcomes other than abstinence (whether for four weeks or any other period) were also important for prevention work. The most common suggestions for appropriate indicators were reductions in smoking and increased knowledge and confidence (either in general or about negotiation skills).

> "If its cessation, then you're working with people who are already smoking and I think there is a huge thing in cutting down, definitely. If someone smoked ten a day and they're now down to five a day then that's a big jump. So yeah, it should be recorded and it is important." *Respondent three*

Other suggestions were:

- Number of quit attempts/re-attempts
- If the young person feels that they can talk to someone about cigarettes
- Knowing somewhere they can go and trust and feel safe for a future quit attempt
- Knowing how to stop for a future attempt
- Knowing how to use NRT for a future attempt
- Intentions to smoke
- Higher self-esteem
- Higher levels of confidence
- Levels of cannabis use
- Better communication with each other/adults
- Resilience
- Ability to cope with stress
- Likelihood of stopping when they're older,

Some of these suggested outcomes were perceived as 'softer' and not all respondents were sure it was a good idea to measure them:

> "I think from a sort of pragmatic, evaluation point of view, I'd always want to measure quit rates and I think it's fine and well for people to say 'yes, we'd like to look at things holistically', but I think that's fine as long as its a very clear theory or rationale of exactly what is the connection; that if you make people confident they will therefore stop smoking or not start smoking. Now, if it inoculates them, their

> confidence, then yes, then there's a theory there. But if its just touchy feely stuff, in terms of measurement, then you're not going to get anything out of it, is my own view." *Respondent four*

The need to back up abstinence (in the context of one month quit rates) with CO measurements was noted by one respondent (as quoted above). However, as noted in Section 5: Findings: Youth Cessation there is wide acknowledgement (in practice and evidence) about the limitations of CO readings with young people.

There was a sense from one respondent that the focus on quit rates was missing an opportunity to learn about a young person's journey. This links to the discussion in Section 3.4 about the gaps in evidence relating to youth smoking trajectories.

> "Obviously with cessation its a definite quit or no quit and that is awful because I think it's the person's journey [that matters], so I think you should take it from when they first enter the service and then to the end point, which can be then if they've cut down, maybe they have quit but went back to smoking and they're still wanting support." *Respondent three*

In the research literature, the primary outcome measure used to explore the success of prevention work is smoking prevalence (with varying definitions of smoking i.e. one cigarette in last month). Less frequent outcomes referred to include intention to quit, improved knowledge and skill development, increase in negative attitudes towards smoking and more qualitative outcomes such as the views of young people and key staff groups i.e. teachers on the acceptability of the programme, knowledge levels (Audrey, et al. 2004) etc.

In evaluations of cessation project, the Cochrane review (Grimshaw & Stanton, 2010) described a variety of different approaches to measuring cessation including: cessation over a pre-set length of time (varying from one day to 30 days); 90 day abstinence; or continuous cessation. They felt that continuous cessation was the gold standard that should be applied to measure the success of youth cessation interventions.

Although a variety of outcomes were mentioned by respondents in discussing what they felt was important, it did not appear that the projects were currently measuring these outcomes. The one exception was the work just beginning in the project described by respondent seven.

> "We made a data base that we input all our data into, we record the end of program status whether they're a non smoker/ cut down/ still a regular smoker/ occasional /withdrawn... We also record the number of reattempts they've had. We've only just developed the data base." *Respondent seven*

Respondents reported barriers to monitoring and evaluation including: the unsuitability of adult paperwork for working with young people, the large number of questions young people had to answer and restrictions due to funders only accepting a strict outcome of one month quit rates. However, some of these barriers could be overcome as shown by one project that had successfully engaged young people in designing their own paperwork. This included all the information that was necessary for national reporting but in a youth friendly format.

> "One of the problems was the absolute practicalities...The questionnaire the young people had to fill in was still several pages long...We had discussions about what was feasible for young people to fill in, particularly with literacy issues and all that, so adding in anything more would have just been overwhelming and people just wouldn't have filled it in." *Respondent one*

> "The paperwork, from our pilot we used the adult paperwork, which basically young people were not happy with using...We took [out] all the stuff the young people didn't think was relevant in the adult paper work and designed our own." *Respondent six*

Overall respondents felt that it would be very difficult for them to prove that their work has any impact.

> "Young people are in situations which change constantly; they move environments constantly so it's going to be extremely difficult to prove the different we've made." *Respondent two*

6.3.2 What Outcomes are Appropriate – Discussion & Recommendations

Evaluation serves many purposes in addition to the most obvious purpose of judging the success or failure of a project. The last quote above illustrates the common misunderstanding that evaluation is only about 'proving that what we're doing works'. This belief can make evaluation seem impossible or appear to be only concerned with criticising what project staff believe to be good work. This misses one of the key purposes of evaluation, to help projects to improve by learning more about why and how the project may be working. A recent guide sums this up:

> Evaluations should focus on learning and improvement. They should look at what is not working and why. They should check whether the original logic that activity X will lead to outcomes Y was accurate. They should critically appraise whether short-term outcomes are likely to be sustained.
>
> Halliday and Marwick, 2009

Of course if projects are to be evaluated in this way, they need to have articulated their logic from the start and have clear outcome indicators that can be measured. As this was not happening, there was a sense that most projects were measuring

and monitoring very minimal data on the progress of the young people they are working with. It was therefore very difficult to judge or understand the success or failure of education/prevention work and although quit rates were measured for cessation projects, this would result in little learning unless other factors were also explored and monitored.

Recommendation: *Logic modelling should be used by projects to develop monitoring and evaluation frameworks for their work, based on their stated rationale.*

It was also clear that the current national requirements for smoking cessation projects to measure one month abstinence ('quit rates') were helpful in establishing a consistent measure that is used nationally. This measure could also be used by prevention projects but should not in either case be seen as sufficient evaluation without other measures.

We support the view of respondents that softer and interim outcome indicators are important when monitoring and evaluating youth tobacco projects. Based on the findings from participant interviews and the literature review and our own reflections on this subject, we have pulled together a list of outcomes which could be considered for monitoring or evaluating youth tobacco projects. However, it should be noted that the evidence base is not currently sufficiently developed to fully understand which of these outcomes are most important for success in reducing overall smoking rates or how they are linked.

It would be useful for further work to be done to investigate which of the suggested outcomes are appropriate and which indicators can be measured in a sufficiently robust way to make them useful.

Some valuable evidence could begin to be generated if existing and future youth tobacco projects put in place systems to robustly measure some of these outcomes where possible. It should be noted that it is not being suggested that projects would measure all of these and it may be that for some of the softer outcomes, there is no suitable/robust way to measure them. The outcomes measured by any one project should be selected based on their stated rationale.

Possible Outcomes for Youth Tobacco Projects

- Increased accurate knowledge about smoking and recognition of own risk.
- Increased knowledge of the myths about smoking.
- Increased negative and decreased positive attitudes about smoking.
- Increased skills, confidence and strategies specifically to cope with social influences and stresses which increase smoking.
- Increased intention not to smoke.
- Increased motivation to quit smoking.
- Decreased smoking occasions for (frequency/days per week).
- Decreased number of cigarettes smoked on typical day.
- Decreased number of cigarettes smoked per week.
- Decreased frequency/quantity of cannabis use.
- Increased awareness & skills to help quitting & options for quitting.
- Decreased cravings for nicotine.
- Decreased numbers of cigarettes smoked while using NRT.
- Increased abstinence in past 4 weeks compared with age-adjusted expected/control levels.
- Increased abstinence in past 3 months compared with age-adjusted expected/control levels
- Increased abstinence in past year compared with age-adjusted expected/control levels.
- Knowledge/trust of services for future quit attempt.

While not included in the table as not specific to tobacco work, other outcomes suggested by respondents relate to self esteem, communication skills and resilience.

Recommendation: *All youth tobacco projects should seek to measure levels of abstinence at set intervals before, during and/or after the intervention period.*

Recommendation: *A range of standard national outcome indicators should be developed (e.g. by ISD) from which youth tobacco projects could choose which outcomes they will measure. Guidance should be provided on how to measure these outcomes as well as on how to choose which outcomes to measure. This range should include softer and interim outcomes where possible similar to those suggested above.*

Recommendation: *Youth tobacco projects should be encouraged to give careful consideration to the potential value of collecting and publishing data about reductions or changes in smoking (in addition to measurements of abstinence) in order to build our understanding of youth smoking patterns and trajectories.*

Recommendation: *Qualitative data should be collected and published where possible to explore and record young people's own experiences of their smoking*

journey in order to better understand their decision-making processes and ultimately to inform and develop better youth tobacco work.

We recognise that recommending that projects measure reductions in smoking as part of their evaluations may be seen by some practitioners as controversial. This concern seems to arise from a sense that we cannot be certain that reductions in smoking levels are associated with any improved health outcomes. We would argue that this does not mean that reductions in smoking should not be measured for the following reasons:

- Abstinence (for a set period) must always be the gold standard by which youth tobacco projects are judged but measuring reductions in tobacco usage does not undermine this.

- It is not known if young people who are trying to give up smoking adjust their way of smoking/inhaling when they cut down in order to maintain high levels of nicotine (as has been shown is the case with adult smokers). While it may be the case for some young people, it seems less likely that this would be done by individuals who are only occasional smokers/fluctuating smokers (who may be less dependent on nicotine). In any case, regardless of adjustments in smoking, it is logical that large reductions in the number of cigarettes smoked, or repeated short periods of abstinence are likely to have some health benefit.

- Where young people are trying to give up smoking, they are still vulnerable to the factors which may have influenced them starting such as peers who smoke, families who smoke and so on. Stopping requires them to make different decisions in situations where they would previously have decided to smoke. Therefore any reduction in smoking is indicative that they have managed to not smoke in situations/occasions when they previously were smoking. This is a positive behavioural change that is important as a step to quitting and may demonstrate skills necessary for ultimate abstinence. It is therefore important to capture this to be able to judge whether those young people may be better equipped to successfully quit in future even if an initial attempt fails.

- There is a gap in our understanding of how youth smoking changes over time and how/why young people evolve into smokers. Collecting interim outcome data such as that suggested above along with qualitative data would start to fill this gap.

6.4 Links between evidence and practice

6.4.1 Links between evidence and practice - Findings

There was a clear sense from respondents that projects need support and guidance on how they should be monitoring and evaluating their work including what outcome indicators to measure and how best to measure them.

> "Not everybody has done research in their university degree so they've maybe not touched on it and don't understand it, so no, you shouldn't think that just because a person's got that post, they should have that knowledge. All they need, I suppose, is training or being put in the right place to say well this is where you get all that." *Respondent three*

> "My own view is that people are so busy working that they don't have time to go into the evidence and I think that it's really the job of people like Health Scotland and academic researchers to help people to link in with that evidence so that they are using good practice." *Respondent four*

6.4.2 Links between evidence and practice – Discussion & Recommendations

It is clear from our discussions with respondents and from their own comments above that there is a great need for support with outcomes measurement and outcomes-focused planning, monitoring and evaluation in general. Despite Respondents including senior tobacco professionals as well as frontline practitioners there was very little sense that this kind of work was being carried out well at the moment. If projects are to be ready to be externally evaluated at some point in the future, it will be crucial that they develop more robust rationale and monitoring frameworks. While there is a wealth of information on outcome focus planning, practitioners did not seem to be accessing and using this. It is likely that projects will need hands on support to successfully shift their way of working to an outcomes based model as well as national exemplar work in relation to logic models and guidance on ways of measuring the standard outcomes as recommended above.

Recommendation: *A programme of support is needed to build the capacity of youth tobacco projects to articulate their project rationale, develop tailored logic models for their work, select outcome indicators to measure and plan how to measure them. The best way to provide this support should first be investigated along with an exploration of the value of existing written/online resources.*

Having reflected on the findings in this chapter, we felt it would be useful to seek to represent our thoughts on outcomes for youth tobacco projects as a logic model. This is presented in Appendix A. This logic model is intended to represent a wide range of youth tobacco projects with differing goals, target groups and activities but

does not include an exhaustive list of possible outputs or outcomes. It is not necessarily evidence-based (i.e. we don't know for sure that 4-week abstinence/quit rates in young people lead to long-term abstinence) but represents possible hypotheses by which youth tobacco projects might reduce overall smoking rates. It could be used as a tool for youth tobacco projects to create their own hypothesis based logic models, in which they would choose outputs and outcomes from those suggested. At the very least, it can be used to generate discussion about the issues and questions raised in this chapter.

7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1 Concluding Remarks

Despite the large body of evidence in this field, there are still many gaps in our understanding of youth smoking and how to effectively support prevention or cessation with young people.

The problems that exist with the evidence are multiple including inconsistent definitions of what constitutes smoking or quitting, lack of understanding of what underpins youth smoking decisions and progression and a general lack of research work with 18-24 year olds and more vulnerable groups.

While the evidence is in places lacking and potentially confusing, it is perhaps unsurprising that this research, while involving only a small number of respondents, suggests that youth tobacco projects may not often have a clear rationale for their work or have thought about this rationale in advance. This was particularly evident for prevention projects.

For prevention and cessation projects, there also appeared to be a wide variation in practice across projects. One example of this was a range of different policies in relation to the provision of NRT for young people, despite at best inconclusive evidence as to its effectiveness.

There are a number of barriers to implementing interventions in practice which are suggested by evidence as effective. This includes internal and external pressures such as resources available, 'buy in' from schools or local agencies, time available to deliver sessions and the need to be flexible in order to engage with young people.

It is clear from practice that there is a strongly held view that existing outcomes for measuring the success of youth smoking cessation projects are not appropriate. This links to the view that harm reduction messages and behaviour change are important aspects of youth cessation projects.

The findings in this report indicate that projects require support to develop effective outcome focused planning and robust evaluation frameworks. It is also clear that projects would welcome this support.

From the views and opinions given by the respondents we believe that the approach, goals and outcomes of youth prevention and youth cessation projects have more similarities than difference. In particular, the current outcome measure for youth smoking cessation of 'quit rates' is actually a measure of self-reported abstinence for the previous 4 weeks and we can see no reason why this would not also be relevant to smoking prevention. The current terminology of prevention project and cessation project does not clearly distinguish the goals, target groups or activities of youth

tobacco projects and is often not reflective of the range of work conducted by projects or the smoking status of the young people they work with. For this reason, we feel that a single set of outcomes and outcome measures should be developed for youth tobacco work in general, from which individual projects could select the outcomes most appropriate to their focus.

In general, the issues and questions raised in this report about the links and differences between youth cessation and prevention work in theory and in practice would merit further consideration and consultation nationally and locally.

Recommendation: *It would be valuable to present these findings to youth tobacco professionals and relevant strategic stakeholders, including funders and researchers, in order to generate further discussion on how best to plan, deliver and evaluate future youth tobacco work.*

7.2 Recommendations

7.2.1 Definitions and Patterns of Smoking among Young People

Recommendation: *Youth tobacco projects should take particular care to consider the terminology used by staff and in project materials as terms such as 'smoker', 'quit' and 'quit attempt' may not feel relevant to many of the young people the projects are seeking to work with.*

Recommendation: *There is a need for more studies exploring youth smoking trajectories for young people generally and sub-groups of young people i.e. more vulnerable groups and older age group*.

Recommendation: *Further work is required to explore whether youth prevention and cessation projects should be targeted towards vulnerable young people and/or young people in specific settings i.e. young offender institutions; residential care etc.*

Recommendation: *Ways of capturing, analysing, sharing and preferably publishing the information and data generated by youth tobacco projects relating to youth smoking trajectories and influences should be explored and implemented nationally. This should include outcome measurement as well as qualitative exploration.*

7.2.2 Prevention and Education

Recommendation: *Prior to delivering smoking prevention initiatives organisations should spend time outlining the approach that they want to use and the rationale for adopting this approach. The stated rationale should take account of both what is known and unknown according to the evidence and be clear about where compromises based on local factors or innovative approaches are being used*

Recommendation: *Guidance should be provided which clearly outlines the evidence on what works for prevention interventions and importantly the key features of the proven or more promising (but unproven) interventions.*

Recommendation: *Using the term 'evidence informed' could help to better reflect the relationship between projects and research and the expectations of projects to work in a way that takes account of research as well as other local factors.*

Recommendation: *There is a need for more research exploring the impact of prevention and education interventions on more vulnerable groups of young people who have higher rates of smoking*.

Recommendation: *Further consideration should be given to the balance between universal and targeted prevention and education work. In addition, the potential for projects to inform the evidence – particularly in relation to work in different settings and with harder to reach groups - should be harnessed*.

7.2.3 Cessation

Recommendation: *Prior to delivering youth smoking cessation initiatives organisations should spend time outlining the approach that they want to use and the rationale for adopting this approach. The stated rationale should take account of both what is known and unknown according to the evidence and be clear about where compromises based on local factors or innovative approaches are being used.*

Recommendation: *Due to the lack of research on 'what works' in youth smoking cessation projects should be encouraged to explore innovative approaches to engage young people. In addition, they should be supported to adequately evaluate these outcomes so that learning can be shared.*

Recommendation: *guidance should be provided with suggestions from practice on how best to engage young people in cessation projects and an outline of the evidence in terms of 'what works' in youth smoking cessation. This should clearly describe what a CBT or MI techniques approach along with a stages of change approach actually look like*.

Recommendation: *CO readings should be used with caution as a tool for measuring young people's smoking status and in particular in considering whether or not to provide NRT.*

Recommendation: *Guidance should be provided on definitions for young regular smokers, indicators of dependence (in youth) and when NRT should be considered (or ruled out) for use with young people. This guidance should highlight the lack of clear evidence relating to these issues and the consistent evidence that NRT is not effective with young people.*

7.2.4 Outcomes and Evaluation

Recommendation: *In general, 'youth tobacco projects' is a useful umbrella term to describe projects which provide support to individuals and/or groups who wish to avoid ever smoking, avoid re-starting smoking or give up, and/or education for groups or individuals including those who have never smoked, once smoked or are currently smoking.*

Recommendation: *While individual youth tobacco projects may focus primarily on particular goals, target groups or activities, simply using the terms 'cessation' or 'prevention' without qualification to describe a project does not provide a clear or consistent indication of their goals, target groups or activities.*

Recommendation: *Where the terms 'cessation' and 'prevention' continue to be used in the context of youth tobacco work, they should be defined in such a way that provides such clarity on the goals, target groups and activities that each term is intended to encompass.*

Recommendation: *While youth tobacco projects will naturally not all offer the same range or type of service, they should be aware of the potential crossover of their work from prevention to cessation and vice versa and should monitor and evaluate accordingly.*

Recommendation: *Logic modelling should be used by projects to develop monitoring and evaluation frameworks for their work, based on their stated rationale.*

Recommendation: *all youth tobacco projects should seek to measure levels of abstinence at set intervals before, during and/or after the intervention period.*

Recommendation: *A range of standard national outcome indicators should be developed (e.g. by ISD) from which youth tobacco projects could choose which outcomes they will measure. Guidance should be provided on how to measure these outcomes as well as on how to choose which outcomes to measure. This range should include softer and interim outcomes where possible similar to those suggested above.*

Recommendation: *Youth tobacco projects should be encouraged to give careful consideration to the potential value of collecting and publishing data about reductions or changes in smoking (in addition to measurements of abstinence) in order to build our understanding of youth smoking patterns and trajectories.*

Recommendation: *Qualitative data should be collected and published where possible to explore and record young people's own experiences of their smoking journey in order to better understand their decision-making processes and ultimately to inform and develop better youth tobacco work.*

Recommendation: *A programme of support is needed to build the capacity of youth tobacco projects to articulate their project rationale, develop tailored logic models for their work, select outcome indicators to measure and plan how to measure them. The best way to provide this support should first be investigated along with an exploration of the value of existing written/online resources.*

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Appendix