

NHS Health Scotland Commentary on NICE Public Health Intervention Guidance	
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Date signed off:	12 December 2007

NICE ref:	Public health intervention guidance 4 (PHI4)
HS ref:	NICEPHIG4
Title:	Community-based interventions to reduce substance misuse among vulnerable and disadvantaged children and young people
Date issued:	March 2007

Subject area:	Substance misuse
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Background to this Commentary

The National Institute for Health and Clinical Excellence (NICE) in England produces two types of guidance on public health topics: Public Health Intervention Guidance (interventions being defined as involving single measures, eg GP advice to patients to be more active) and Public Health Programme Guidance (on broader activities, eg strategies for smoking cessation). In Scotland, such Guidance has no formal status but attracts interest and provides a useful source of reviewed evidence.

As part of its role in promoting and supporting evidence-informed action for health improvement in Scotland, NHS Health Scotland (HS) produces Commentaries on NICE Public Health Guidance. Each Commentary, with Comments/Conclusions on the Recommendations set out in the NICE Guidance, is produced in collaboration with an appropriately constituted specialist Reference Group with members from within and beyond HS. The process involves consideration of the evidence cited and the Recommendations presented in the NICE Guidance, in the context of policy and practice in Scotland.

Purpose and limitations of this Commentary

By offering Comments/Conclusions on NICE Guidance, this Commentary is intended to help organisations, professionals and others make use of that Guidance in a Scottish context. It does not in itself constitute formal Guidance or Guidelines.

The scope and contents of the Commentary are limited by those of the NICE Guidance on which it is based. The Commentary should not be seen as a full action plan or full basis for a health improvement strategy on the subject area concerned, but rather as one evidence-informed contribution to such an action plan or strategy. By not only addressing the NICE Recommendations but also presenting in an accessible way the cited evidence statements on which these are based, the Commentary gives decision makers the opportunity to formulate their own action points informed by the evidence statements, combining these with evidence from other sources and taking account of other relevant considerations.

The Commentary

General HS Notes:

- 1. In developing the Recommendations set out in NICEPHIG4, NICE's Public Health Interventions Advisory Committee (PHIAC) considered a review of evidence of effectiveness, an economic appraisal, stakeholder comments and the results of fieldwork. In this Commentary, the evidence statements cited for each of the NICEPHIG4 Recommendations are presented immediately under the corresponding Recommendations, for ease of reference. The term 'Inference derived from the evidence' is used by PHIAC where a Recommendation is not directly taken from the evidence statements but is inferred from the evidence.*
- 2. It is important to note that there was a lack of evidence on how to prevent substance misuse among particular groups of vulnerable and disadvantaged children and young people, including: children in care; those who are homeless; those with parents who misuse substances; young offenders; those excluded from school; those involved in commercial sex work; those with mental health problems; and those from black and minority ethnic groups.*
- 3. NICEPHIG4 acknowledges limitations to the economic analysis due to its being subject to very large uncertainties.*
- 4. NICEPHIG4 indicates: that the relationship between a practitioner and the child, young person or family is critical to the success of interventions to reduce substance misuse; and that practitioners may face confidentiality issues relating to illegal substance misuse, especially if the individual is a minor.*
- 5. The term 'reduce substance misuse' as used in NICEPHIG4 includes reducing the prevalence of drug misuse in the population. It should be taken to cover the prevention of substance misuse, not just reduction in individuals' consumption levels.*

General HS Notes, contd:

6. *NICEPHIG4 emphasises that omission of a community-based intervention from the Recommendations does not necessarily mean that it should be discontinued. The Recommendations are based on the available evidence, and a range of interventions have not yet been evaluated.*
7. *PHIAC expressed concern that some group-based prevention activities may encourage, rather than discourage, substance use (including the use of alcohol and tobacco). For example, this might happen where participants with little or no experience of substance misuse are put together with experienced users.*
8. *Overall Scottish contextual points:*
 - *This Commentary should be read together with Hidden Harm (Scottish Executive, 2004), Hidden Harm: Next Steps (Scottish Executive, 2006), Getting It Right for Every Child (Scottish Executive, 2007), Looking Beyond Risk. Parental Substance Misuse: Scoping Study (Scottish Executive, 2006), and the National Quality Standards for Substance Misuse Services (Scottish Executive, 2006).*
 - *Key players in the Scottish system of care and justice for children and young people are the Children's Panels within the Children's Hearings system (www.childrens-hearings.co.uk).*
9. *Other specific Scottish contextual considerations are highlighted where relevant in this Commentary.*

Definitions used:

The following definitions are used for the purposes of NICEPHIG4.

- Drugs: generally refer to illicit compounds although the term is often used interchangeably with 'substances'.
- Substances: agents that, when ingested in sufficient doses, alter functioning.
- Substance misuse: intoxication by – or regular excessive consumption of and/or dependence on – psychoactive substances, leading to social, psychological, physical or legal problems. It includes problematic use of both legal and illegal drugs (including alcohol when used in combination with other substances).
- Community-based interventions: interventions or small-scale programmes delivered in community settings, such as schools and youth services. They aim to change the risk factors for the target population.
- Selective interventions: interventions that target subsets of the population at an increased risk of substance misuse.
- Indicated interventions: interventions that target people who already misuse substances and are considered to be at increased risk of dependency.
- Motivational interviewing (MI): a brief psychotherapeutic intervention. For substance misusers, the aim is to help individuals reflect on their substance use in the context of their own values and goals and motivate them to change.

HS Comments on definitions used:

1. *For the sake of clarity and consistency, the above definitions have been adopted for the purposes of this Commentary, even though in Scotland the term 'substance misuse' is generally taken to include alcohol misuse (whether or not combined with misuse of other substances) and, in its widest sense, use of tobacco.*

<p>Scope of the Guidance:</p>	<p><u>Groups covered</u> Everyone up to the age of 25 years who is vulnerable or disadvantaged, including (but not limited to):</p> <ul style="list-style-type: none"> ▪ those whose parents or other family members misuse drugs ▪ young offenders (including those who are incarcerated) ▪ those with behavioural conduct disorders ▪ those with mental health problems ▪ those who are – or have been – looked after by local authorities or in foster care ▪ those who are – or have been – homeless or who move frequently ▪ school excludees and truants ▪ those involved in commercial sex work ▪ members of some black and minority ethnic (BME) communities ▪ members of some socioeconomically deprived groups. <p><u>Areas covered</u></p> <ul style="list-style-type: none"> ▪ Community-based interventions, selective and indicated, that aim to prevent or delay the initiation of substance misuse ('primary prevention') by vulnerable and disadvantaged young people, or which aim to help these groups to reduce or stop their misuse of substances ('secondary prevention'). ▪ The substances covered in the studies include illicit drugs, volatile substances and prescription drugs. ▪ Poly-substance misuse involving alcohol and tobacco is covered, provided that outcomes relating to drugs and volatile substances are reported. <p><u>Primary outcomes</u></p> <ul style="list-style-type: none"> ▪ Among children and young people who are at risk of misusing substances: <ul style="list-style-type: none"> - reduction in the numbers who start misusing - delay in the time before initiation. ▪ Among children and young people already misusing substances: <ul style="list-style-type: none"> - an increase in the number who stop misusing - a reduction in use or frequency of use. <p><u>Secondary outcomes</u></p> <ul style="list-style-type: none"> ▪ Changes in the pattern of substance use, eg changes in the method used, and the range or type of substances used (eg moving from class A to class B drugs). ▪ Changes in risk or protective factors – eg change in: knowledge, intentions and attitudes toward substance use; school attendance; family cohesion; homelessness; and social exclusion. At a community level, could include improved access to services, social capital and community cohesion. ▪ Positive changes in physical, mental, emotional and sexual health, and the adoption of a healthy lifestyle. ▪ The engagement of communities and/or vulnerable or
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<p>Scope of the Guidance, contd:</p>	<p>disadvantaged children and young people in an intervention or strategy.</p> <ul style="list-style-type: none"> ▪ Drug-related hospitalisations or deaths. ▪ Changes in relation to prosecutions, incarcerations, anti-social behaviour or offending behaviour. <p>Effectiveness was assessed at five intervals ranging from immediate term (up to and including 7 days) to long term (1 year or more).</p> <p><u>Key question</u> What interventions are effective and cost effective in reducing substance misuse among the most vulnerable and disadvantaged children and young people, compared with one another, no intervention, or usual practice?</p> <p><u>Target audiences and settings</u> The Guidance is for NHS and non-NHS practitioners and others who have a direct or indirect role in – and responsibility for – reducing substance misuse. This includes those working in local authorities and the education, voluntary, community, social care, youth and criminal justice sectors.</p>
<p>HS Comments on scope:</p> <ol style="list-style-type: none"> 1. <i>HS welcomes the acknowledgement in NICEPHIG4 that substance misuse interventions should be but one component of a care plan that takes the child or young person’s full range of needs into account. This reflects a wider point, that substance misuse is influenced by a number of factors, including family life, individual experiences, mental health, and education. It is important that the specific focus of NICEPHIG4 does not deflect from continued recognition of the need for multifaceted and broad-based approaches to the prevention of substance misuse.</i> 2. <i>The breadth of NICEPHIG4’s target audiences and settings reflects existing practice and is welcomed. However, the implications of Recommendations may differ between professional groups, who may have different standards, training resources and routes for delivering services.</i> 3. <i>The focus on vulnerable and disadvantaged children and young people is welcomed. However, as acknowledged in the document itself, the categories of such children and young people listed in NICEPHIG4 should not be seen as exhaustive.</i> 4. <i>The wide age range covered by the Guidance (up to 25 years) has implications for the applicability of evidence, and that should be borne in mind when considering the Recommendations.</i> 	

<p>Study selection criteria etc:</p>	<p><u>Review of effectiveness evidence</u> A number of databases were searched for primary studies and reviews published between 1990 and April 2006.</p> <p>Studies were <u>included</u> if they:</p> <ul style="list-style-type: none"> ▪ described <i>selective</i> or <i>indicated</i> small scale, community-based interventions that aimed to prevent, delay the initiation of, reduce or stop substance use ▪ targeted vulnerable or disadvantaged children and young people up to the age of 25. <p>Studies were <u>excluded</u> if they described an intervention that:</p> <ul style="list-style-type: none"> ▪ was delivered to <i>all</i> children and young people, regardless of their likelihood of misusing substances ▪ focused on preventing or reducing the adverse physiological and psychological effects of substance use ▪ aimed to prevent or reduce alcohol or tobacco use alone, <i>unless</i> it was delivered as part of a broader strategy to reduce concurrent use of multiple substances (including illicit drugs). <p>222 studies were included in the review: 14 systematic reviews, 103 randomised controlled trials, 52 controlled non-randomised trials, 18 controlled before and after studies, and 35 [non-controlled] before and after studies.</p> <p>Editorials, non-systematic reviews and letters were excluded. Qualitative studies were considered for review only if they reported on relevant primary or secondary outcomes.</p> <p><u>Economic appraisal</u> The economic appraisal consisted of a review of economic evaluations and a cost-effectiveness analysis. The review involved a systematic search using relevant databases, supplemented by material found in the effectiveness review and studies identified via the ESRC Evidence Network and consultation with experts. The inclusion criteria were as for the effectiveness review.</p>
<p><i>HS Comments on study selection criteria etc:</i></p> <ol style="list-style-type: none"> 1. <i>Overall approach supported.</i> 2. <i>Scottish contextual point: in Scotland, relevant local infrastructures and activities tend to be based around Alcohol and Drug Action Teams. The exclusion of interventions on alcohol from NICEPHIG4, except where other substances were also addressed, limits the value of the Guidance in the Scottish context.</i> 	

<p>Study appraisal methods etc:</p>	<p><u>Review of effectiveness evidence</u> Included evidence sources were assessed for methodological rigour and quality using the NICE methodology checklist, as set out in the relevant NICE technical manual.</p> <p>Each evidence source was categorised as one of four <u>types</u>:</p> <ol style="list-style-type: none"> 1 Meta-analyses, systematic reviews of randomised controlled trials (RCTs), RCTs (including cluster RCTs) 2 Systematic reviews of, or individual, non-randomised controlled trials, case control studies, cohort studies, controlled before-and-after (CBA) studies, interrupted time series (ITS) studies, correlation studies 3 Non-analytic studies (eg case reports, case series) 4 Expert opinion, formal consensus. <p>Each study was <u>quality</u>-rated as ++, + or - according to the risk of potential bias arising from its design and execution/other criteria as applicable.</p> <p>Study type and quality were combined. Thus, eg, an RCT fulfilling most criteria for minimisation of bias would be classed as 1 (++), and a type 2 study fulfilling very few criteria as 2 (-).</p> <p>Interventions were also assessed for their applicability to the UK, and the evidence statements were graded accordingly, as follows:</p> <ol style="list-style-type: none"> A likely to be applicable across a broad range of settings and populations B likely to be applicable across a broad range of settings and populations, assuming they are appropriately adapted C applicable only to settings or populations included in the studies – broader applicability is uncertain D applicable only to settings or populations included in the studies. <p>The findings from the studies were synthesised and used as the basis for a number of evidence statements relating to each population, type of intervention, and primary and secondary outcomes, and reflecting the strength (quantity, type and quality) of evidence and its applicability to the populations and settings covered.</p> <p><u>Review of economic evaluations</u> Studies were assessed for quality using a specifically designed checklist, and rated as ++, + or -.</p>
<p><i>HS Comments on study appraisal methods etc:</i></p> <p>1. <i>Supported.</i></p>	

<p>Recommendation 1:</p>	<p><u>Target population</u></p> <ul style="list-style-type: none"> ▪ Any child or young person under the age of 25 who is vulnerable and disadvantaged. <p><u>Who should take action?</u></p> <ul style="list-style-type: none"> ▪ Local strategic partnerships. <p><u>Recommended action</u></p> <ul style="list-style-type: none"> ▪ Develop and implement a strategy to reduce substance misuse among vulnerable and disadvantaged people aged under 25, as part of a local area agreement. This strategy should be: <ul style="list-style-type: none"> - based on a local profile of the target population developed in conjunction with the regional public health observatory; the profile should include their age, factors that make them vulnerable and other locally agreed characteristics - supported by a local service model that defines the role of local agencies and practitioners, the referral criteria and referral pathways.
<p>Evidence base for Recommendation 1:</p>	<p>'Inference derived from the evidence.'</p>
<p><i>HS Comments/Conclusions on Recommendation 1:</i></p> <ol style="list-style-type: none"> 1. <i>No specific evidence cited, but Recommendation considered appropriate and supported subject to: 1) insertion of 'the prevalence of' after 'reduce' in the first sentence, in the interests of clarity; and 2) adaptation to fit Scottish organisational and partnership arrangements, local-level infrastructures (urban and rural), and Scottish health information/public health observatory arrangements.</i> 2. <i>Scottish contextual point – This Recommendation has implications for strengthening coordination of infrastructures at local level.</i> 	

<p>Recommendation 2:</p>	<p><u>Target population</u></p> <ul style="list-style-type: none"> ▪ Any child or young person under the age of 25 who is vulnerable and disadvantaged. <p><u>Who should take action?</u></p> <ul style="list-style-type: none"> ▪ Practitioners and others who work with vulnerable and disadvantaged children and young people in the NHS, local authorities and the education, voluntary, community, social care, youth and criminal justice sectors. In schools this includes teachers, support staff, school nurses and governors. <p><u>Recommended action</u></p> <ul style="list-style-type: none"> ▪ Use existing screening and assessment tools to identify vulnerable and disadvantaged children and young people aged under 25 who are misusing – or who are at risk of misusing – substances. These tools include the Common Assessment Framework and those available from the National Treatment Agency. ▪ Work with parents or carers, education welfare services, children’s trusts, child and adolescent mental health services, school drug advisers or other specialists to: <ul style="list-style-type: none"> - provide support (schools may provide direct support) - refer the children and young people, as appropriate, to other services (such as social care, housing or employment), based on a mutually agreed plan. The plan should take account of the child or young person’s needs and include review arrangements.
<p>Evidence base for Recommendation 2:</p>	<p>‘Inference derived from the evidence.’</p>
<p>HS Comments/Conclusions on Recommendation 2:</p> <ol style="list-style-type: none"> 1. <i>No specific evidence cited, but Recommendation supported subject to extension of the list of the services and actors cited under the second bullet above to include adult mental health services and other relevant adult services, and adaptation to fit Scottish organisational arrangements.</i> 2. <i>Scottish contextual point – The Scottish Advisory Committee on Drug Misuse (SACDM) has a sub-group that is considering the range of assessment tools currently used in Scotland. The outcome of this work is likely to influence future use of assessment tools in Scotland.</i> 	

<p>Recommendation 3:</p>	<p><u>Target population</u></p> <ul style="list-style-type: none"> ▪ Vulnerable and disadvantaged children and young people aged 11–16 years and assessed to be at high risk of substance misuse. ▪ Parents or carers of these children and young people. <p><u>Who should take action?</u></p> <ul style="list-style-type: none"> ▪ Practitioners and others who work with vulnerable and disadvantaged children and young people in the NHS, local authorities and the education, voluntary, community, social care, youth and criminal justice sectors. In schools this includes teachers, support staff, school nurses and governors. <p><u>Recommended action</u></p> <ul style="list-style-type: none"> ▪ Offer a family-based programme of structured support over 2 or more years, drawn up with the parents or carers of the child or young person and led by staff competent in this area. The programme should: <ul style="list-style-type: none"> - include at least 3 brief motivational interviews each year aimed at the parents/carers - assess family interaction - offer parental skills training - encourage parents to monitor their children's behaviour and academic performance - include feedback - continue even if the child or young person moves schools. ▪ Offer more intensive support (eg family therapy) to families who need it.
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Evidence base for Recommendation 3:

1. There is evidence from one RCT (+) to suggest that a tiered, multilevel prevention strategy focusing primarily on parenting practices (the most recent version of the 'Adolescent transitions program') that is delivered according to the needs and motivation of the family can produce long-term decreases in overall substance use in young people. Applicability rating B.
2. There is evidence from one RCT (+) to suggest that a brief, family-focused intervention (the 'Family check up' programme; the selective prevention component of the most recent 'Adolescent transitions program') designed to target family management and parental monitoring through motivational interviewing, individual consultation and feedback, can produce significant long-term reductions in overall tobacco, alcohol and cannabis use in young people. Applicability rating B.
3. There is evidence from one RCT (+) and one non-randomised controlled trial (+) to suggest that interventions that aggregate high-risk peers (such as the teen-focused peer support element of the older version of the 'Adolescent transitions program', or the parent and teen-focused elements combined) may have negative effects on smoking behaviours. Applicability rating B.
4. There is evidence from one RCT (+) to suggest that a brief, school-based family-focused intervention (the 'Family check up' programme; the selective prevention component of the most recent 'Adolescent transitions program'), comprising individual and group-based family behavioural therapy, motivational interviewing, individual consultations and feedback on their child's behaviour, and parent/student activities designed to enhance family management, can produce long-term increases in parental monitoring of their child's activities. Applicability rating B.

HS Comments/Conclusions on Recommendation 3:

1. Recommendation supported with the following riders –
- The evidence cited in support of the recommendation that interventions should be drawn up between the parents or carers of the child, or young person and intervention provider, is very limited.
 - Infrastructural and financial implications of this Recommendation are major and should be carefully analysed in local contexts, and viewed against other priorities.
 - Chaotic lifestyles that often accompany substance misuse are likely to interfere with the implementation of any programmes.
 - Given the unusual life circumstances that are often associated with substance misuse, careful attention should be given to the definition of ‘family’.
 - As well as the academic performance, parents should be encouraged to monitor the social, psychological and physical development and wellbeing of their children.
 - The importance and the contribution of kinship care to the health and wellbeing of children and young people affected by drug misuse should be acknowledged.

Recommendation 4:

Target population

- Children aged 10–12 who are persistently aggressive or disruptive and assessed to be at high risk of substance misuse.
- Parents or carers of these children.

Who should take action?

- Practitioners trained in group-based behavioural therapy.

Recommended action

- Offer the children group-based behavioural therapy over 1 to 2 years, before and during the transition to secondary school. Sessions should take place once or twice a month and last about an hour. Each session should:
 - focus on coping mechanisms such as distraction and relaxation techniques
 - help develop the child’s organisational, study and problem-solving skills
 - involve goal setting.
- Offer the parents or carers group-based training in parental skills. This should take place on a monthly basis, over the same time period (as described above for the children). The sessions should:
 - focus on stress management, communication skills and how to help develop the child’s social-cognitive and problem-solving skills
 - advise on how to set targets for behaviour and establish age-related rules and expectations for their children.

<p>Evidence base for Recommendation 4:</p>	<ol style="list-style-type: none"> 1. There is evidence from two RCTs (+) to suggest that a multi-component parent and child programme, the 'Coping power' programme, can have an immediate and medium-term impact on reducing use of alcohol, tobacco and cannabis, compared to no intervention, in children with aggressive and behavioural problems. Applicability rating C. 2. There is evidence from six RCTs (one [++], four [+] and one [-]) to suggest that multi-component programmes (including child and parent components) targeting children with behavioural and aggressive problem behaviours can have a positive impact in reducing some problem behaviours compared to no intervention. Applicability rating C.
<p>HS Comments/Conclusions on Recommendation 4:</p> <ol style="list-style-type: none"> 1. <i>Recommendation supported subject to recognition that children at high risk of substance misuse will not all be 'persistently aggressive or disruptive' and therefore may not be identified as children who would benefit from this Recommendation.</i> 	
<p>Recommendation 5:</p>	<p><u>Target population</u></p> <ul style="list-style-type: none"> ▪ Vulnerable and disadvantaged children and young people aged under 25 who are problematic substance misusers (including those attending secondary schools or further education colleges). <p><u>Who should take action?</u></p> <ul style="list-style-type: none"> ▪ Practitioners trained in motivational interviewing. <p><u>Recommended action</u></p> <ul style="list-style-type: none"> ▪ Offer one or more motivational interviews, according to the young person's needs. Each session should last about an hour and the interviewer should encourage them to: <ul style="list-style-type: none"> - discuss their use of both legal and illegal substances - reflect on any physical, psychological, social, education and legal issues related to their substance misuse - set goals to reduce or stop misusing substances.
<p>Evidence base for Recommendation 5:</p>	<ol style="list-style-type: none"> 1. There is evidence from one SR (+), two RCTs (one [+] and one [-]) and one non-randomised controlled trial (-) to suggest that motivational interviewing and brief intervention can have short-term effects on the use of cigarettes, alcohol and cannabis. Applicability rating A. 2. There is evidence from one RCT (+), however, to suggest that motivational interviewing does not have a significant medium-term impact on the use of cigarettes, alcohol or cannabis, although there is a non-significant trend favouring intervention compared with control. Applicability rating A.

<p>Evidence base for Recommendation 5, contd:</p>	<ol style="list-style-type: none"> 3. There is evidence from one RCT (+) to suggest that a single session of motivational interviewing can have a positive impact on attitudes, intentions and behavioural outcomes related to substance use in the short term. However, there is evidence from one RCT (+) to suggest that these positive effects do not last in the medium term. Applicability rating A. 4. There is evidence from one RCT (+) to suggest that brief intervention, enhanced with additional support, can have a positive impact on attendance at community treatment agencies and psychological wellbeing compared to usual hospital treatment. Applicability rating B.
<p>HS Comments/Conclusions on Recommendation 5:</p> <ol style="list-style-type: none"> 1. Recommendation <u>not</u> supported in the Scottish context. Given the lack of cited evidence of long-term effectiveness of motivational interviewing in this area of application, it is not considered that a sufficiently strong case can be made for the major investment that would be required to implement the Recommendation on the required scale especially given the limited numbers of sufficiently trained practitioners/registered motivational interviewing trainers in Scotland. The situation can be reassessed if further relevant effectiveness evidence emerges. 	

<p>Recommendations for Research, and gaps in the evidence:</p>	<p><u>Recommendations for Research</u> NICEPHIG4 recommends that the following research questions should be addressed in order to improve the evidence relating to community-based interventions to reduce substance misuse among vulnerable and disadvantaged children and young people in the UK:</p> <ol style="list-style-type: none"> 1. What characteristics of groups of vulnerable and disadvantaged children and young people increase their risk of substance misuse? Are some groups more at risk than others? 2. Which community-based interventions are most effective and cost effective at preventing or reducing substance misuse among the following high risk groups? <ul style="list-style-type: none"> ▪ vulnerable and disadvantaged children aged under 10 ▪ looked after children and young people ▪ children whose parents/carers or other family members misuse substances (interventions could be aimed at family members and/or children) ▪ vulnerable or disadvantaged children and young people from black and minority ethnic groups ▪ young offenders ▪ those involved in commercial sex work. 3. How can substance misuse interventions be designed and delivered to ensure they do not increase misuse among vulnerable and disadvantaged children and young people? 4. What is the most effective and cost effective way of providing family-based interventions (for example, family therapy) for vulnerable and disadvantaged children and young people who are misusing substances? How do group-based interventions compare with individual or no intervention? 5. What parts of a multi-component intervention for vulnerable or disadvantaged children and young people are most effective at reducing substance misuse? How does the effectiveness of these individual components vary according to the target population or the intervention itself (including design and delivery)? <p><u>Gaps in the evidence</u> Based on an assessment of the evidence, stakeholder comments and fieldwork, NICEPHIG4 identified the following gaps in the evidence.</p> <ol style="list-style-type: none"> 1. Almost all studies of interventions to reduce problematic substance misuse have looked at the effects achieved over the short term, reporting within weeks, months, or 1 or 2 years. However, almost all the desired outcomes relate to issues that persist over many years. Assumptions which extrapolate short-term effects to the long term are subject to considerable uncertainty. 2. Few rigorous evaluations have been carried out in the UK on the effectiveness and cost effectiveness of community-based interventions to reduce and prevent
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<p>Recommendations for Research, and gaps in the evidence, contd:</p>	<p>substance misuse among vulnerable and disadvantaged children and young people. Future studies should be sufficiently powered to detect any reduction in use or delay in the onset of substance misuse. In addition, the outcome measures used should be consistent across studies.</p> <ol style="list-style-type: none"> 3. Few studies compare the relative effectiveness of different practitioners working in different settings to deliver interventions. (For example, few studies compare the effectiveness of specialists with generic practitioners, or compare delivery in schools with delivery in youth and outreach or custodial settings.) 4. There is a lack of evidence on the specific components of a substance misuse intervention that make it effective. 5. Generally, evaluations do not report on factors which make particular at-risk groups vulnerable (eg black and minority ethnic groups, looked after young people or young people in custodial settings). 6. There is little evidence on the characteristics which make certain vulnerable and disadvantaged children and young people particularly susceptible to substance misuse. 7. Few evaluations have examined the possible iatrogenic effects of interventions to prevent/reduce substance misuse among vulnerable and disadvantaged children and young people. (As an example, increasing young people's awareness of substances or 'normalising' misuse may encourage, rather than discourage, use.) 8. A dearth of evidence means it is difficult to derive utility scores that can then be used to generate accurate QALYs [Quality Adjusted Life Years]. These are needed to carry out cost-effectiveness analyses in relation to children and young people who misuse substances. 9. There is little evidence on whether interventions aimed at parents or carers who misuse substances help to reduce, prevent or delay the onset of substance misuse among their children. 10. There is limited evidence on the impact of substance misuse interventions on wider outcomes, for example greater personal and social independence. Also, there is limited evidence on whether improving educational self-efficacy can help to reduce substance misuse, or whether there is a link between educational attainment and substance use among school excludees and truants.
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HS Comments/Conclusions on Recommendations for Research, and gaps in the evidence:

1. *Recommendations for Research and identified evidence gaps/needs supported with the addition of the following notes expanding on evidence gap number 6 –*
 - *While numerous factors have been found to be associated with increased drug misuse, the observed associations only explain a small amount of variability in the data. From the methodological point of view, more in-depth exploratory research could help to fill this gap by identifying new variables to input in an explanatory model for substance misuse.*
 - *Even when associations between drug misuse and (potential) risk factors are strong, the cross-sectional nature of most studies documenting such associations does not allow for distinction between cause and effect. From the methodological point of view, therefore, more longitudinal studies should be encouraged.*

Members of Reference Group for NHS Health Scotland Commentary on NICE Public Health Intervention Guidance 4

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