



Cochrane
Tobacco Addiction

Cochrane Tobacco Addiction Group

20th Anniversary Priority Setting
Project (CTAG taps)

FINAL REPORT

Prioritising the unanswered
questions in tobacco control



UNIVERSITY OF
OXFORD

NUFFIELD DEPARTMENT OF
PRIMARY CARE
HEALTH SCIENCES



Celebrating

20 years



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Cochrane Tobacco Addiction Group

20th Anniversary Priority Setting Project (CTAG taps)

FINAL REPORT

The CTAG taps team*^a, April 2017

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Project summary

The Cochrane Tobacco Addiction Group (TAG) gather evidence on a particular topic, appraise it, and make conclusions in a process called systematic reviewing. The aim is to inform smokers and healthcare providers about the best ways to prevent or stop smoking. Previously TAG's priorities have been decided by researchers; however, including other groups in decisions about future directions enable findings to be better applied to those who need them, and have a higher global impact.

To mark their 20th anniversary TAG carried out a priority setting exercise involving policy makers, clinicians, other associated health professionals, smokers, former smokers, researchers and research funders. Participants were asked to identify questions that still need answering in tobacco control via an online survey, and were then asked to rank these questions in order of importance in a second survey. 43 stakeholders also attended a workshop hosted by Cochrane TAG to discuss where TAG and other researchers should focus their efforts in the future, and the best ways to inform people about the findings of their research.

The survey and workshop resulted in 183 unanswered research questions in the areas of tobacco and quitting smoking and eight priority research areas, including:

- 'addressing inequalities',
- 'treatment delivery',
- 'electronic cigarettes',
- 'initiating quit attempts'
- 'young people'
- 'mental health and substance abuse',
- 'population-level interventions',
- 'pregnancy'.

Stakeholders who attended the workshop also discussed ways that the public health community and Cochrane TAG could act to move the field of tobacco control forward.

Through this report, Cochrane TAG want to share the identified unanswered questions with the wider tobacco research community to help them to decide the most important research to focus on in the future, and to decide the most important things to work on for Cochrane TAG. This will involve updating existing reviews, beginning reviews on new topics, and looking in more detail at Cochrane TAG's research methods.

Abstract

Background

The Cochrane Tobacco Addiction Group (TAG) conducts and facilitates systematic reviews and meta-analyses of the research evidence for tobacco cessation and prevention interventions. The group was founded in 1996 and in 2016 conducted a priority setting, stakeholder engagement project to celebrate the 20th anniversary of the group, and to identify future research priorities for the group and the wider tobacco control community.

Objectives

To raise awareness of Cochrane TAG, and what has been achieved so far; to identify areas where further research is needed in the areas of tobacco control and smoking cessation, through stakeholder involvement; to identify specific goals for Cochrane TAG; and to explore novel ways to disseminate the findings of tobacco research, and Cochrane TAG's findings specifically.

Methods

The project was made up of two surveys and a workshop. All elements were completed by a range of Cochrane TAG's stakeholders, including members of the public (smokers and ex-smokers), clinicians, researchers, research funders, healthcare commissioners and public health organisations. The first phase of the survey was designed to identify unanswered research questions in the field of tobacco control, the second phase asked participants to rank these, and the workshop was designed to allow attendees to discuss prioritisation of topics and questions in more depth with accompanying reasons for this, and to suggest effective dissemination strategies. Workshop discussions were transcribed and analysed thematically.

Results

304 stakeholders identified 183 unanswered research questions in the first phase of the survey. These were categorised into 15 research categories, comprising of between 3 to 21 questions each. 175 participants went on to prioritise these categories and questions in the second phase of the survey, with 'electronic cigarettes'; 'addressing inequalities'; and 'mental health and other substance abuse' prioritised as the top three categories. 43 stakeholders attended the workshop and discussed themes related to reasons for and against category prioritisation, as well as suggestions for action for the wider tobacco community and Cochrane TAG more specifically. Prioritised research categories largely mirrored those in the survey stage, with the exception of 'treatment delivery', which emerged as a key category at the workshop. Five cross-cutting themes also emerged during the workshop: efficacy; relative efficacy; cost effectiveness; addressing inequalities; and evidence from studies other than randomised trials. New methods of disseminating findings were also discussed.

Discussion

There are many important unanswered questions in the field of tobacco control. In addition, the answers to important questions that have been answered are not always reaching their intended targets. Tobacco control stakeholders provide a rich source of information on how these uncertainties should be prioritised, and by using this resource we can maximise the likelihood that the findings of research are useful and implemented. We hope that researchers and research funders will be able to use the priorities identified to inform their future practice, in the same way that Cochrane TAG will use them to inform new review topics, updates of reviews and methods development. These findings and their implementation should be considered alongside the existing evidence base and clinical expertise.

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Background

Cochrane is a large, not for profit, global organisation dedicated to carrying out systematic reviews to gather and summarise the best evidence to inform healthcare decisions. It is made up of a number of satellite groups dedicated to different health problems, such as tobacco addiction. These groups provide editorial support for authors who are conducting reviews in the relevant area, and the resulting Cochrane reviews are deemed to be the gold standard for systematic reviews of healthcare evidence. The Cochrane Tobacco Addiction Group (TAG) was formed in 1996 in the Nuffield Department of Primary Care Health Sciences at the University of Oxford, and publishes reviews of interventions for smoking prevention and cessation to inform healthcare policy, guidance and practice.¹ The aims of Cochrane TAG's research are: 1) to inform tobacco control policy internationally; 2) to inform research in tobacco control and to help ensure new research is focused on important unanswered questions; and 3) to contribute to reducing tobacco use. TAG have published over 70 reviews, which have contributed to national guidelines (such as those produced by the UK National Institute for Health and Care Excellence (NICE), and the US Department of Health and Human Services) and professional clinical training programmes (such as the UK-based National Centre for Smoking Cessation and Training (NCSCT)). This work is important as reducing smoking prevalence has the greatest impact of any health behaviour change.²

In order to maintain Cochrane TAG's momentum and high quality contribution to the field of tobacco and smoking research the group is dedicated to developing a programme of research and publications that most effectively respond to worldwide public health needs and demands over the coming years. This will include developing new protocols for systematic reviews, publishing new reviews, prioritising the update of existing reviews and adapting these updates by responding to changes in methodology, the needs of the user, and the uses of existing treatments. It also includes feeding into the research agenda for primary studies.

Health research priority setting is important as it helps to effectively target research that will provide the greatest benefit to public health and maximises the impact of financial investment.³ The James Lind Alliance is an example of an organisation which encourages patients and clinicians to work together to identify research priorities, on the basis that researchers and industry do not always identify and address research questions deemed most relevant to patients and clinicians, i.e. those most affected by the results.⁴ To mark the milestone of the twentieth anniversary of the founding of Cochrane TAG (2016), the group thought it fitting to promote the high quality work of the group so far, and to plan specific future directions through a health research priority setting exercise. The project was inspired by the approach of the James Lind Alliance and centred on the involvement of Cochrane TAG's stakeholders.

Methods

We planned our approach with guidance from the James Lind Alliance Guidebook.⁵ However, we did not adopt this approach in its entirety for the following reasons:

- The James Lind approach involves the public and clinicians in priority setting, however after identifying all TAG's stakeholders and mapping them on a power/interest matrix, a useful and popular combination used in strategic planning⁶, we followed an approach of involving a wider range of stakeholders, based on their interest in our research outputs, and their position as influencers of public policy in this area. These included public health representatives, such as members of local authorities and Public Health England (PHE). Cochrane is also a driving force in influencing guidelines, so we also planned to include representatives in this area, i.e. NICE, and Action on Smoking and Health (ASH). Furthermore, we still wanted to involve researchers in the exercise, as although this group are likely to have influenced Cochrane TAG's approach most over their initial twenty years, their input is still valued and has not been maximised;
- The output of the James Lind approach is 10 questions that should be prioritised in research in a particular area. Although we covered this in the questionnaire element of our project we also planned to prioritise the work of Cochrane TAG more specifically, and we asked participants to take this into account;
- The James Lind process most commonly takes over a year (18–24 months). Our aim was to carry out this work as part of our anniversary celebration in 2016; therefore 12 months in total.

The key aims of the project were to:

1. Raise awareness of Cochrane TAG, and what has been achieved so far;
2. Identify areas where further research is needed in the areas of tobacco control and smoking cessation, by involving our stakeholders;
3. Identify specific goals for Cochrane TAG;
4. Explore novel ways to disseminate the findings of tobacco research, and Cochrane TAG's findings specifically.

Although it was important to establish priorities for TAG, the project was also seen as an opportunity to identify potential research priorities and dissemination strategies for the wider field, which is reflected in the second and fourth aims.

The key aims were fulfilled through a three-stage process, which consisted of two surveys and a workshop. The objective of the first survey was to get stakeholders to identify questions that they believe to still be unanswered by tobacco control research. The objective of the second survey was to amalgamate these unanswered questions and to ask stakeholders to rank them in order of priority. Finally, the objectives of the workshop were to allow stakeholders to discuss the prioritised questions, prioritise them further, and discuss their reasoning, as well as asking them for their ideas on the best ways to effectively disseminate the findings of tobacco research in the future. More detail on the methods used for each stage are provided below.

For all of the project's stages Cochrane TAG's stakeholders were deemed to be made up of anyone with any interest in the area of tobacco and smoking, with key examples being: smokers and former smokers, carers of people with smoking related illness, policy makers, healthcare guideline developers, healthcare providers, researchers (policy- and clinically-based), research funders, healthcare commissioners, and public health campaigners and charities.

Phase 1 survey - Identifying uncertainties

We developed the first survey based on the James Lind survey.⁵ The survey asked participants which questions they would still like to see answered by tobacco control research. Participants could provide between one and four questions and were asked to supply the reason that they thought each question was important (Appendix 1). Participants were also asked to supply a small amount of information about themselves (age, gender, type of stakeholder, country of residence), and name and email address were collected so that participants could be contacted for the second wave of the survey. After initial development, the project and the survey were presented to the 'UKCTAS smokers' panel'. This is a Patient and Public Involvement Group, made up of current and former smokers, which was set up and is managed by the UK Centre for Tobacco and Alcohol Studies (UKCTAS). Participants were invited to complete the questionnaire and provide feedback on the content and layout. The survey was adjusted in response to this feedback.

The survey was built using open-access, web-based, online survey building software (www.surveymonkey.com), which meant that it could be disseminated via a web-link. We promoted the first survey from mid-February 2016 to mid-March 2016, targeting TAG's stakeholders. This involved emailing Cochrane TAG's mailing list, as well as asking other key

stakeholder organisations, such as ASH, the US Food and Drug Administration (FDA) and PHE to circulate among their members and/or send out to their mailing lists. We also shared the web-link on social media via the Cochrane TAG Twitter account (@CochraneTAG) and a Facebook advertisement (specifically designed to target members of the public), promoted it at the Society for Research on Nicotine and Tobacco (SRNT) annual international conference (Chicago, USA), and wrote blog posts promoting the group and highlighting the survey. We aimed to recruit participants internationally.

When the survey closed, all responses were collated and processed in three steps:

- 1) Three authors and members (JHB, LH, NL) of Cochrane TAG (at least two were available at any time to make each decision) screened the submitted questions to remove duplicates, and, in some cases, rephrase to improve readability. Where there was indecision or disagreements, agreement was reached through discussion with the third person;
- 2) Five authors and members (JHB, LH, LS, NL, PA) of Cochrane TAG then classified each of the de-duplicated questions as either 'unanswered' by research to date; already 'answered' by research; or 'non-empirical', and thereby could not be answered through scientific enquiry. Each question was assessed by two people independently, with agreement reached through discussion with a third person if necessary. Questions were classified as 'answered' if there was already an up-to-date, reliable systematic review of research evidence addressing the question that did not show ongoing uncertainty, or if there was already robust healthcare guidance on the specific issue. This was informed by the methods described by the James Lind Alliance.⁵
- 3) Those questions classified as 'unanswered' were then sorted into research categories by three authors and members (JHB, LH, NL) of Cochrane TAG (at least two were available at any time to make each decision), in order to facilitate the next stages of the project. Where there was indecision or disagreement, agreement was reached through discussion with the third person. This third step was a post-hoc decision, made due to the large amount of unanswered questions generated by the first phase of the survey.

Phase 2 survey – Prioritising uncertainties

All original survey respondents, who provided an email address, were sent an email in April 2016 with a web link to the second phase of the survey (See Appendix 2). The survey asked participants to rank the 15 research categories identified in the first phase in order of their importance (1–15), where 1 was classed as 'most important' and 15 as 'least important'. For each of the categories ranked in their individual top 3, participants were then asked to rank the questions within that category (again 1 was classed as most important).

Participants were provided a window of 2 weeks to respond, and were sent an interim reminder to complete the survey. As an incentive participants had the option of being entered into a prize draw for one of three £20 (or equivalent) Amazon vouchers.

After the survey was closed and responses collated, missing data was dealt with as follows:

- Where participants had not attempted a ranking at all, i.e. no categories/questions in a set were ranked, the participant was excluded from the analysis for that set
- Where one value was missing in a ranking set and all others had been completed this was assumed to be through user or system error and the remaining, unused value was inserted.
- Where more than one value was missing in the ranking set, the median of the missing values was calculated and inserted into the missing data points.

After dealing with missing data, the total ranks for each category/question were added together. These total scores were then ordered within their ranking set and given an overall rank (where 1 was deemed most important and higher numbers less important).

Workshop

Potential workshop participants were identified from survey respondents, and through Cochrane TAG members' knowledge of tobacco experts within appropriate stakeholder groups. Due to funding constraints (the workshop was only funded to provide travel expenses for members of the public to attend), potential participants based in the UK were prioritised, in order to maximise feasible attendance. Potential attendees were contacted via email and informed that the aims of the day were to: 'develop future priorities for research, and look back on and celebrate the successes of the Cochrane Tobacco Addiction Research Group to date'. In total, 104 people were invited and 47 confirmed their attendance.

The workshop took place on the 17th June 2016, at Somerville College, University of Oxford. There were 4 drop-outs on the day, and therefore 43 attendees. These included 16 members of the public (current smokers, ex-smokers & a carer of a person with smoking related illness); 9 researchers; 6 clinicians; 2 members of funding bodies; 1 public health campaigner; 2 healthcare commissioners; 1 policy maker; 1 science journalist; and 5 stop smoking service providers.

The event was split into two sessions: 1) a session of presentations and background information; and 2) the workshop. The purpose of the presentations was to provide attendees with a context for the day, as it was not assumed that participants had any prior knowledge of Cochrane or the Tobacco Addiction Group more specifically. The presentations were given by members of Cochrane TAG, i.e. the Co-ordinating Editor, Managing Editors and Editors on the topics of: the history of Cochrane TAG; the history of tobacco research; the purpose of a Cochrane TAG review; how Cochrane TAG works; and The Cochrane TAG taps project and survey findings. The workshop session was introduced by the independent facilitation company (Hopkins van Mil), who had also designed the session. During this session members of the Cochrane TAG editorial team left the room so attendees did not feel influenced by their presence, with the intention of reducing the likelihood of bias. Attendees sat around tables in seven groups of six or seven and each table was led by a facilitator. The full workshop plan developed by Hopkin van Mil can be found in Appendix 3, however a summary of the session can be found below:

1. Round-table introductions
2. Prioritisation:
 - Individuals to identify their top 2 priority research categories (from the top 10 identified from phase 2 of the survey)
 - Each table split into 2 teams and asked to discuss and identify their top 3 categories
 - Table as a whole asked to discuss and come up with a joint top 3 priority categories
 - Table asked to discuss the top 3 priority questions (identified from phase 2 of the survey) for each of their top 3 categories and asked to decide what the key focus should be of each of their top 3 categories
3. Dissemination: table asked to discuss the best ways to disseminate research and put it into practice by answering the following questions: 1) What is the best way to publicise the findings of tobacco addiction research? 2) What can be done to help ensure research findings make their way into clinical practices and health policy? 3) What can be done to help ensure research findings lead to changes in consumer behaviour?
4. Each group presented a summary of their discussions to other tables and Cochrane TAG (who re-entered the room at this point)
5. Each individual was asked to vote on the three research categories they thought should be prioritised in future research at the end of the workshop

This final voting activity was carried out as follows. A card with each of the research categories deemed to be in the top 3 priority categories for each table were displayed. Each workshop attendee was provided with 5 sticky green coloured dots and 1 sticky red coloured dot. They were then asked to stick one green dot on each of the three cards corresponding to the three research areas they felt should be given greatest priority. They were asked to use the two remaining dots to give extra weight to their preferences where they wished. Attendees were asked to use the red dot to indicate the research category they felt should be given least priority at this moment in time.

All round table discussions and the final summary feedback session were audio-recorded, and then transcribed. The round-table research priority transcripts were then reviewed by two of the authors (NL & LH). The first author charted the arising using the Framework approach⁷, with representative quotes under the following headings, for each of the research categories discussed:

- Why should this category be a research priority?
- Why shouldn't this category be a research priority?
- Suggested action for the general field relating to this category
- Suggested action for Cochrane TAG relating to this category.

The second author checked this charting and provided additional suggestions. A third and fourth author (JHB & DRD) then provided a final review of the charts.

One author (NL) reviewed the transcripts of the discussions relating to the dissemination of tobacco-related research and translating this into practice. Each recommendation for dissemination and translation was identified and then these were grouped into common themes. The results of this exercise were reviewed by a second author (JHB).

The results of the final voting activity were analysed by adding up the total number of green dots on the category cards, deducting the number of red dots, and ranking the categories.

Results

Phase 1 survey - Identifying uncertainties

304 survey respondents submitted 681 questions in the first phase of the survey. 301 of these 304 respondents provided demographic information about themselves (See Table 1). Participants identified as a range of different stakeholders (each participant could specify more than one type). Although 34.2% (103/301) identified as researchers, there were also participants who identified as part of other groups, such as health professionals, smokers and ex-smokers, guideline developers, research funders and policy makers (see Table 1). Participants fell into a range of age groups, but most commonly (92/301; 30.6%) were aged 51–60 years, and females were slightly more likely to respond (171/301; 56.8%). The majority of respondents were living in the UK (169/301; 56.2%); the USA was the second most represented country of residence (49/301; 16.3%). The remaining participants (83/301; 27.6%) resided in a range of 26 other countries.

Table 1: Phase 1 & phase 2 survey participant characteristics

Characteristic	Category	Survey 1 N=301	Survey 2 N=174
		N (%)	N (%)
Stakeholder type*	Doctor	43 (14.3)	28 (16.1)
	Nurse	19 (6.3)	12 (6.9)
	Pharmacist	6 (2.0)	4 (2.3)
	Stop smoking advisor	48 (16.0)	28 (16.1)
	Other treatment provider	14 (4.7)	12 (6.9)
	Current smoker	14 (4.7)	6 (3.5)
	Ex-smoker	88 (29.2)	54 (31.0)
	Never smoker	53 (17.6)	33 (19.0)
	Health service commissioner	19 (6.3)	12 (6.9)
	Healthcare guideline developer	9 (3.0)	6 (3.5)
	Researcher	103 (34.2)	61 (35.1)
	Research funder	2 (0.7)	1 (0.6)
	Policy maker	12 (4.0)	8 (4.6)
	Other	73 (24.3)	44 (25.3)
Age	18–30	32 (10.6)	23 (13.2)
	31–40	64 (21.3)	30 (17.2)
	41–50	73 (24.3)	43 (24.7)
	51–60	92 (30.6)	58 (33.3)
	61–70	33 (11.0)	18 (10.3)
	71+	7 (2.3)	2 (1.2)
Gender	Male	130 (43.2)	74 (42.3)
	Female	171 (56.8)	100 (57.7)
Country of residence	Australia	12 (4.0)	8 (4.6)
	Belgium	1 (0.3)	0 (0.0)
	Brazil	2 (0.7)	1 (0.6)
	Canada	14 (4.7)	8 (4.6)
	China	1 (0.3)	0 (0.0)
	Colombia	1 (0.3)	1 (0.6)
	Croatia	2 (0.7)	0 (0.0)
	Denmark	1 (0.3)	1 (0.6)
	Egypt	1 (0.3)	1 (0.6)
	Finland	5 (1.7)	3 (1.7)
	Germany	4 (1.3)	2 (1.2)

Characteristic	Category	Survey 1 N=301	Survey 2 N=174
	India	7 (2.3)	4 (2.3)
	Ireland	2 (0.7)	2 (1.2)
	Israel	3 (1.0)	3 (1.7)
	Italy	1 (0.3)	0 (0.0)
	Malaysia	1 (0.3)	1 (0.6)
	Netherlands	4 (1.3)	4 (2.3)
	New Zealand	7 (2.3)	3 (1.7)
	Norway	3 (1.0)	2 (1.2)
	Philippines	1 (0.3)	1 (0.6)
	Poland	1 (0.3)	1 (0.6)
	Spain	2 (0.7)	2 (1.2)
	Sweden	3 (1.0)	3 (1.7)
	Switzerland	2 (0.7)	2 (1.2)
	UK	169 (56.2)	90 (51.7)
	USA	49 (16.3)	29 (16.7)
	Uzbekistan	1 (0.3)	1 (0.6)
	Venezuela	1 (0.3)	1 (0.6)

**multiple responses permitted*

After duplicates were removed from the 681 questions a list of 258 remained. Of these, 60 (23%) were classified already answered, 15 (6%) unempirical and 183 (71%) unanswered (See Appendix 4 for these lists). The 183 unanswered questions were separated into 15 research categories, (see Table 2 for a list of these categories and their definitions). Each category included between 3 and 21 unanswered questions (See Appendix 5 for a list of the categorised unanswered questions).

Phase 2 survey – Prioritising uncertainties

Of the 278 participants sent the survey link, 175 people completed the survey (63% of those invited); with 154 full responses (i.e. with no missing data). 174 of the 175 participants had provided demographic information in the first phase (see Table 1). The characteristics of respondents to the second survey were similar to those responding to the first survey, suggesting dropout was even across demographic groups. Participation was again most common in those aged 51–60, of female gender, and who were resident in the UK. Participants were most likely to identify as researchers; however, again a range of types of stakeholder were represented.

The rankings of all the categories and questions that participants provided, and the size of the sample each set of rankings were based on, are provided in Appendix 5. The top three categories were: 1) Electronic cigarettes; 2) Addressing Inequalities; and 3) Mental health and substance abuse.

Table 2: Categories of unanswered questions

Research category	Definition
Addressing inequalities	Research which focuses on reducing differences in tobacco use behaviour and health across different groups, so that some groups are not more at risk of health problems than others. For example, low versus high income groups
Alternative tobacco products	Research which focuses on products other than cigarettes which contain tobacco, such as snus, chewing tobacco and waterpipes
Digital interventions	Research which focuses on digital interventions for tobacco. Digital interventions are any intervention that is accessed and used by tobacco users in the form of a computer, mobile phone, or internet-based programme or app
Electronic cigarettes	Research focused on e-cigarettes. E-cigarettes are battery operated devices designed to deliver nicotine to users. The nicotine is based within a liquid which is turned into a vapour. E-cigarettes do not contain tobacco
Illness & chronic disease sufferers	Research focused on tobacco users who have a short or long term illness
Initiating quit attempts	Research focused on a tobacco user's decision to quit using tobacco
Medications	Research focused on medications used to help people change their tobacco use
Mental health and other substance abuse	Research focused on tobacco users with mental health problems and/or other substance abuse issues (for example cannabis or alcohol abuse), or to investigate issues related to mental health
Nicotine and tobacco risk	Research focused on the risks, associated health problems and addiction potential of tobacco and nicotine. Including ways to reduce harm in tobacco users who can't quit (harm reduction)
Population level interventions	Research focused on interventions related to tobacco use which are targeting whole populations rather than individuals, for example government policies
Pregnancy	Research focused on tobacco use and quitting during pregnancy
Smoking bans and second-hand smoke	Research focused on tobacco smoking bans and the second-hand and third-hand smoke given off by cigarettes
Smoking treatment methods excluding medications	Research focusing on any treatment methods for tobacco use, apart from treatments in the form of medications, but including research into behavioural support interventions
Treatment delivery	Research focusing on the best ways to deliver treatment for tobacco dependence
Young people	Research focusing on tobacco uptake, use and treatment in young people

Workshop

Priority research categories

Although each round table discussion was separate, the discussions produced similar research priorities (see Table 3 for the top three priority research categories identified by each table of workshop attendees). Therefore, overall there were eight priority categories across all workshop attendees: addressing inequalities; electronic cigarettes; initiating quit attempts; mental health and other substance abuse; population-level interventions; pregnancy; treatment delivery; and young people (in no particular order). Seven of these priorities (i.e. all but 'treatment delivery') matched with the top

seven categories identified through the first and second stages of the survey. However, 'treatment delivery' was ranked 12th of 15 in the second stage of the survey.

Table 3: Top 3 research categories identified during round table workshop discussions for each table

Table	Top 3 priority categories
1	1. Addressing inequalities 2. Electronic cigarettes 3. Population-level interventions
2	1. Addressing inequalities 2. Population-level interventions 3. Electronic cigarettes
3	1. Addressing inequalities 2. Young people 3. Electronic cigarettes
4	1. Treatment delivery 2. Addressing inequalities 3. Electronic cigarettes
5	1. Addressing inequalities 2. Pregnancy 3. Young people
6	4. Initiating quit attempts 5. Addressing inequalities 6. Mental health and other substance abuse
7	1. Addressing inequalities 2. Mental health & other substance abuse 3. Electronic cigarettes

During the round-table discussions to reach a consensus on the most important research categories (Table 3), eleven categories were discussed (those identified as the top 10 in the survey, plus 'Treatment delivery', which was ranked 12th). The categories in Table 3 were discussed, with the addition of three: 'illness and chronic disease sufferers'; 'alternative tobacco products'; and 'nicotine and tobacco risk'. Below is a summary of the key points raised in these discussions, with illustrative quotes, under their category headings. For context, we also provide the top three questions prioritised through the survey for each category (these were available to workshop attendees as they discussed their priorities). More in-depth charting of themes and associated quotes is available in Appendices 6 & 7.

Please note, in this section we report what was said verbatim. Therefore, this may not reflect the evidence base or clinical guidance. It also means we can only report on the specific categories discussed, and headings under each category reflect what was discussed (or not) within the discussion surrounding each category.

Addressing inequalities

Top 3 questions according to survey

1. What are the most effective stop smoking interventions for smokers who are part of a hard-to-reach group?
2. Which interventions reduce the difference in the number of smokers in low socioeconomic compared with high socioeconomic groups most effectively?
3. Which interventions are the most effective to help people stop smoking in communities where smoking as a group has cultural and social value?

Why should this be a research priority?

There were a number of different reasons that delegates thought 'addressing inequalities' should be made a research priority. It was thought to currently be a neglected area for research and public health actions, despite being seen as a UK National Health Service (NHS) priority (illustrative quote: *"more needs to be done or it's just getting worse and worse, the disparity. So you look at, break down smoking prevalence according to the social grades. Smoking prevalence in the top social grade is coming towards 10% and the very bottom social grade it's stayed pretty steadily at around 70 or 80% and there's very little change so I think it's one of the biggest failings of public health"*). It was thought that it needed to be addressed, as *"smoking itself creates an inequality"*, and that by acting on this it could *"reduce inequalities in practice and in care"*, and help vulnerable groups (illustrative quote: *"Because it covers everyone then, nobody's missed out. Make Addressing Inequality two sub groups of Mental Health, Substance Abuse and I don't know Young People from, you know, I'm just trying to think of, you know, areas of deprivation, you know, super output areas"*). It was suggested for prioritisation over other areas as it can incorporate a number of different interventions, and was potentially seen as more

of an overarching theme. It was also posed as a moral issue that should be addressed (illustrative quote: *“they’re all kind of moral questions but it does seem particularly immoral to have like lower cast of society basically being told yeah f**k off and die, just smoke yourself to death basically”*).

Why shouldn't this be a research priority?

A couple of reasons were also given for why this research category related to sensitive issues, and therefore should perhaps not be prioritised over others. Firstly, there was a worry that in trying to reduce inequalities by targeting certain groups there was a risk of alienation. It was pointed out that if the people developing and providing intervention do not identify as the group they are targeting then this intervention can be ineffective and/or offensive, and thus *“more harmful than good”* (illustrative quote: *“I think you have to be careful when you characterise people that you’re not. I’m very conscious of in groups and out groups and if you become part of an out group it’s a very uncomfortable place to be. So there needs to be a lot of caution about how those groups are identified, how they are interacted with, so that it’s inclusive rather than authoritarian.”*). Secondly, there was also concern that addressing inequalities could lead to the neglect of some groups, whilst others were prioritised.

Suggested action for the general field

The discussion around ‘Addressing inequalities’ resulted in a number of suggestions for action. Firstly, it was thought that more work should be done to educate more vulnerable populations or lower economic groups about the harmful effects of smoking, and that this could be done by community leaders (illustrative quote: *“So is the question then ‘How do we get sort of leaders in those communities to help us get the message to them?’”*). It was also suggested that a good way to address the problem of smoking in ‘hard-to-reach’ communities would be to change the norms that have developed, where there may be cases of *“generational smoking- grandad smokes, auntie smokes, xxx¹ smokes, and it just continues as part of the norm”*. This was taken one step further by suggesting that, in order to do this it is important to establish what the social norms are for a particular community, as this is necessary in order to change it (illustrative quote: *“So, its understanding what ‘fine’ means, it goes back to the social norms.”*). One way to do this could be to involve members of the public in intervention development, which was discussed as another potential positive action (illustrative quote: *“we’ve got to work with the people, with these people, to work out what is meaningful for them as well. So, we can’t just say we’ve got the service you should just go for it, we need to work out why”*).

A suggested and necessary precursor to all this work was to come up with a definition of what a ‘hard-to-reach’ group actually is (illustrative quote: *“I would say we need to define the group and then hope to locate them on the definition and identification”*), as it was thought that this description was ambiguous. However, it was recognised that one of the potential reasons some groups may be described as ‘hard-to-reach’ is because there are cultural or language barriers, and providing language translations of healthcare information and evidence for these groups could have an impact. It was thought important to not just provide the translated information but also to promote its existence.

Suggested action for Cochrane TAG

The authors also deem the provision and promotion of translated evidence to be a goal relevant to Cochrane and Cochrane TAG more specifically.

Other suggested actions that could be taken on by TAG more specifically are to look in more detail at the prison population, as this was considered a group that has not received as much attention as others (illustrative quote: *“There are also sub groups aren’t there within this, for example prison population, where it is the norm to smoke, its currency, you know, it’s how you, so I think there will be hopefully some analysis, subset analysis looking at these particular groups, people on parole, mental health issues.”*), and to improve dissemination, which could be better targeted to ‘hard-to reach’ groups. For example, it was noted that *“the people who need it the most probably won’t get access to xxxxx, they’re not following Cochrane on Twitter”*

Alternative tobacco products

Top 3 questions according to survey

1. Why do some people use more than one type of tobacco product?
2. How safe is snus compared to other tobacco products and electronic cigarettes, and is it more dangerous if used alongside cigarettes?
3. Are there ways to stop young people from using nicotine and tobacco products other than cigarettes?

Why should this be a research priority?

Two themes were identified, suggesting that ‘alternative tobacco products’ should be a focus for research. Firstly it was identified as relating to recent, emergent problems that still need to be investigated (illustrative quote: *“there’s been the*

¹ ‘xxx’ used where audio recording was unclear.

emergence of tobacco use for like shisha, water pipe smoking, and it's uptake is increasing in the youth especially. So it's time that things like you mentioned, also in the youth, you need to investigate what works with them, what's stopping them from updating or initiating smoking.”), and secondly the use of alternative tobacco forms, such as shisha, were thought to potentially be a ‘gateway’ to tobacco use in the form of cigarettes. So, by addressing the issue at this point, later issues could be avoided.

Electronic cigarettes

Top 3 questions according to survey

1. How safe are e-cigarettes, and are they as safe as other products?
2. How can we educate people effectively about the risks and benefits of using e-cigarettes?
3. Are e-cigarettes an effective and cost effective aid to help people to stop smoking, and are they as effective as other products?

Why should this be a research priority?

A number of reasons why electronic cigarettes should be prioritised were discussed. The most heavily discussed of these were issues relating to safety and their potential to be used to help people to reduce their tobacco smoking or to quit completely. It was recognised that the long-term health effects of electronic cigarettes *“still need[s] to be established”*, and that this is a goal that needs to be upheld in the long-term (illustrative quote: *“...you're going to need a long term sort of longer treated ... study to assess what the risk is because, you know, we have so many treatment drugs that have gone from fantastic this is really working, and it's not until 20 years down the line that you're able to really assess things.”*). It was raised as a particular issue for health professionals, who may wish to recommend electronic cigarettes as an aid to quitting, but don't feel that they can whilst the health effects are still unknown (illustrative quote: *“as a health professional I don't want to recommend a product like e-cigarettes that aren't going to, I don't want them to harm anyone on my recommendation, so how am I gonna decide?”*).

Delegates pointed out that although smoking cessation or reduction may not be a primary aim of the products there is a potential for this, and attention should be paid to how this can be put into practice and *“which populations might respond to e-cigarettes?”* It was suggested that one of the groups that may benefit most from electronic cigarettes would be young people, as this intervention may appear more attractive to them than traditional quitting aids.

Prioritisation in this area was also deemed to be important due to attitudes in the general population that delegates perceived as barriers to electronic cigarette uptake and use. For example, some delegates suggested that the public were being provided with misleading information about electronic cigarettes, which may have arisen due to poor quality studies in the area, or a fear of the renormalisation of smoking. The risk that electronic cigarettes could be taken up by non-smokers was also raised as a concern that needed to be investigated (illustrative quote: *“I mean if readily available on the market just like shisha or any other things, people will take up e-cigarettes that's going to happen”*).

It was acknowledged that there is currently a general lack of knowledge relating to electronic cigarettes and that this needs to be addressed.

Suggested action for the general field

This was another category that resulted in a lot of discussion around suggestions for action. A proportion of this centred on the safety of electronic cigarettes. There was a more general suggestion that the safety of electronic cigarettes needed to be investigated and established, as attendees felt that there was still a lot of uncertainty around this area, and *“many potential risks still unquantified”*. It was thought that this *“wouldn't be expensive to do and is desperately needed”*. In addition, attendees thought that a safety differentiation needs to be made in the field between the electronic device and the liquids used within them, as these are distinct issues that should be dealt with separately. Two other concerns that generally arise around electronic cigarettes were also highlighted as areas that should be investigated further: 1) the renormalisation of smoking, and 2) their use as a potential gateway to smoking (illustrative quote: *“young people aren't exposed to see people smoke cigarettes xxx and they seem exposed, they get quite exposed to seeing electronic cigarettes, you see quite a lot, does that, will that initiate them starting electronic cigarettes which will lead onto tobacco addiction and smoking. I think there's a bit of work around that that has to be done”*).

Due to all of the uncertainty around electronic cigarettes, highlighted by the points where further investigation is considered necessary above, a key recommendation made for further action was improved education on the subject for the general public. However, it was acknowledged that this is likely to be a difficult task to action effectively and that research may finally need to be done on how best to achieve this.

Suggested action for Cochrane TAG

Leading on from this, the Cochrane review of electronic cigarettes (Hartmann-Boyce 2016) appeared to be considered a key source of information, and therefore potential education on the subject, that was not being disseminated sufficiently. This was highlighted as a problem that should be addressed (illustrative quote *"it's all based on fear and lack of knowledge because people don't know about the Cochrane, that's part of the problem"*)

It was also raised that due to Cochrane's general aims as a collaboration, that TAG's focus for the electronic cigarettes review should be most notably on efficacy, rather than safety and education (although these could be investigated by the wider field). However it was suggested that this could be widened to investigate the relative efficacy of cessation aids and also the efficacy of dual use, such as electronic cigarettes and NRT (illustrative quote: *"I'd be interested in E-cigarettes combined with a traditional ..., so transdermal patches plus e-cigarettes, because dual forms of NRT gets higher quit rates, so a patch and e-cigarettes get higher rates"*). However, this should also be seen as a goal for the wider field, as it is necessary for the primary studies to be conducted before Cochrane TAG will be able to amalgamate them into a review.

Illness and chronic disease sufferers

Top 3 questions according to survey

1. What is the most effective and cost-effective stop smoking intervention for smokers with long-term medical problems?
2. If smokers with illnesses that may be made worse by smoking are referred to stop smoking services does this help them to quit?
3. What is the most effective and cost-effective stop smoking intervention for smokers who are obese and have type 2 diabetes?

Why should this be a research priority?

The reasons given to prioritise research into people with smoking related illness were to improve the quality of life of people suffering with these illnesses, and also to prevent death and thereby *"prolong the life of those with chronic conditions"*. As well as reducing the burden on individuals, reducing the burden on the NHS was also seen as a benefit of focusing on this subset of tobacco research and action.

Why shouldn't this be a research priority?

However, a reason that was put forward for not prioritising this area was that there is already existing research that should be used. It was suggested that this should be a clinical priority but not necessarily a research priority (illustrative quote: *"I think just in terms of research we just need to use the research that we have... I'm not saying this would, this would be like a top priority, if I had a pot of money and I was gonna invest it in something I would want to invest it in all the things you just talked about. But in terms of the research."*)

Initiating quit attempts

Top 3 questions according to survey

1. What is the most effective way to make people want to quit smoking?
2. What makes people decide to quit smoking?
3. Why has the number of people who are trying to quit smoking reduced in the UK?

Why should this be a research priority?

The main justification for prioritising research into 'initiating quit attempts' related to a decline in quit attempts. A number of references were made to the fact that there has been a decrease in quit attempts made over recent years, and that it is difficult to motivate people to quit (illustrative quote: *"we've got this increasingly decreasing number of people setting a quit date...but we know that the proportion of people at population level who want to stop is the same."*). One suggestion given for why this may have happened is the increased use of electronic cigarettes (vaping). This was seen as an issue because *"by far the best way of getting the outcome of quitting is [to] use a service"*, and it was deemed a priority over other areas as, *"the question is not what is effective, the question is how do we get smokers to choose to quit using one of the most effective methods to do so?"* Finding new ways to motivate people to quit was suggested to be important because it is believed that multiple prompts are necessary to successfully get people to make a quit attempt, because different people may be motivated to quit in different ways, and because in general smokers need to attempt to quit smoking multiple times before they are successful (illustrative quote: *"on average people attempt to quit, it's either between seven or nine times before successfully quitting. I think it's quite important to encourage an attempt to quit"*).

Suggested action for the general field

Discussion around initiating quit attempts resulted in a couple of suggestions for the public health field and one suggestion for the tobacco research community. The first of the public health strategies suggested was to promote available stop smoking services. There was a mismatch identified between the evidence that these services can increase quit rates and the fact that people in general don't use them. It was decided on one table that *"there needs to be a greater use and uptake of information, with people approaching smoking cessation clinics in order to get the help they need"*. The second suggested action that the public health community could take was to run mass media campaigns to encourage smokers within the general population to quit. It was thought that *"these can be quite effective in xxxx quit rates"* and so should be taken further advantage of.

Finally, one of the questions identified as a priority in the survey stage of the project was 'What makes people decide to quit smoking?' It was suggested that one way of answering this would be to add secondary investigations and analyses to trials already being run to investigate smoking cessation interventions. This could focus on, *"why people decided to quit, and try and actually work out what the thought processes were as well as, you know, quit rates or something like that"*.

Mental health and other substance abuse

Top 3 questions according to survey

1. How can we encourage and help mental health workers to offer stop smoking services to their patients with mental illness?
2. What is the most effective and cost-effective way to help people with mental health problems to quit smoking inside and outside of mental health treatment settings?
3. What is the most effective and cost-effective way to help people who also have drug and alcohol problems to quit smoking?

Why should this be a research priority?

Discussions of the mental health category resulted in a number of motivations to prioritise research in this area. Firstly, the subject of addiction in general was seen as a mental health issue, and it was therefore reasoned that the two were closely linked and likely to impact on one another (illustrative quote: *"I think we all know that it [mental health] goes hand in hand with addiction and I personally would like to see mental health services working with the smoking cessation services to offer a better service all round, then I think people will be more successful with the smoking cessation."*) Another positive theme identified was that there is evidence that quitting smoking can improve mental health.

There was also a focus on impact- it was argued that although you may be focusing on a small population subgroup, the impact that work in this area is likely to have *"would have a greater impact on a smaller amount of people"*. It was also thought that this could lead to a wider societal impact, as the costs associated with mental health and substance abuse impact on society in general.

There were a number of reasons given to prioritise finding ways to help people with mental health problems to quit smoking, which were linked to positive impacts that this may have on mental health services. Firstly, that smoking is known to have an effect on the metabolism of many mental health medications; thus by helping more people to quit, their mental health treatment would likely be simplified or improved. Secondly, it was recognised that in some cases mental health workers are required to enter people's homes. If these people are heavy smokers this has health implications for the health workers (illustrative quote: *"if you're a community health worker and you're going in somebody's home, that's their home so they can smoke as much as they want and people with mental health conditions smoke a lot, they smoke a lot and so you can walk into a home with, literally you walk into a cloud of smoke and community staff can refuse under the protocols, they can refuse to go into those homes, which they don't want to do because they're community workers that's not, nobody doesn't want to go to see anybody."*). Finally there are potential misconceptions related to the effects that stopping mental health patients from smoking may have, for example that *"there's gonna be more trouble on the wards and that people are gonna kick off and be violent and aggressive"*, however *"we know that that is wrong if you're very clear and the fact that it just, if you're a mental health nurse I think when they introduced smoke free sites in [hospitals] it actually saved an hour and a half per staff member per shift, which you can then put back into doing therapeutic work with patients"*.

Why shouldn't this be a research priority?

Although the lower mass impact and higher individual impact of research into mental health and substance use was cited as a reason that this area should be prioritised above, this was also cited as a reason why it should not be prioritised (illustrative quote: *"you're not talking about addressing mental health in its own right you're talking about smoking within those ...or mental health services... it's not about the mental health problem it's not about the substance abuse...you'd only be looking at smoking."* R2: *"In that case population intervention levels would get my vote"*).

In addition, the final point given for prioritisation above was also countered by another attendee making the opposite claim- that mental health should not be prioritised, as the participant argued that cigarettes can be something that is beneficial for people with mental health problems through reducing anxiety.

Suggested action for the general field

Round table discussions which focused on mental health as a potential priority topic led to the suggestion that more work should be done to try and establish the mechanisms behind established links between mental health and smoking. It was suggested that if more was known about this then that would help to signpost the most effective treatment methods for smokers with mental health problems (illustrative quote: *"if it's nicotine, then they could get that from a patch or from, you know, something else so, yeah. If it's shown that nicotine actually does help [mental illness]... then that can be given- you know, chewing gum or patches or whatever. But if it's the physical act of smoking that...has got that calming effect, that actually lighting up and inhaling and everything else..."*).

Suggested action for Cochrane TAG

There were also a few suggestions made for Cochrane TAG specifically. Firstly, that cohort and case studies should be used, and incorporated into Cochrane reviews focused on mental health. The reason provided for this was as follows: *"the best evidence, the only available evidence, is not there in randomised trials. So the group has got to... actually could lead the way within Cochrane, pushing onto cohort studies and case controlled studies...that's where we should be going now"*. Secondly, it was suggested that Cochrane should look at the introduction of smoke-free mental health sites and investigate the effects of these, and thirdly that a Cochrane TAG review should be carried out looking at tobacco interventions in outpatient, community-based mental health settings (acknowledging that there was already a review focusing on psychiatric, inpatient settings).

Nicotine and tobacco risk

Top 3 questions prioritised in survey

1. How safe is nicotine when it is delivered in non-tobacco products, and how does this compare to when it is delivered in tobacco products?
2. How addictive is nicotine, and how does this compare between different nicotine products (e.g. smoking tobacco, other tobacco products, e-cigarettes, NRT)?
3. If smokers reduce the number of cigarettes they smoke does this reduce the harm caused by their smoking?

Why should this be a research priority?

'Nicotine and tobacco risk' was a category which was not ultimately shortlisted as a priority in the round-table discussions, but was briefly discussed. One justification was given for why this should be considered as a priority. This was that there is a *"high level of misunderstanding of the benefits and harm of nicotine outside of tobacco smoke"*, including amongst health professionals. It was suggested that more research is needed to challenge the perception that medicinal nicotine may be harmful, in order to maximise the use of nicotine replacement therapies.

Population-level interventions

Top 3 questions prioritised in survey

1. Are any current interventions aimed at the general population effective in reducing the number of people who smoke and the harms linked to tobacco use? If so, which ones?
2. Does plain packaging stop people from taking up smoking?
3. Do interventions which aim to change tobacco related social norms reduce the demand for tobacco?

Why should this be a research priority?

Participants supported prioritisation of population level interventions, as it was seen to be the most likely category to have a high mass impact (illustrative quotes: *"The biggest [impact] will be population level interventions because it's everybody isn't it."* & *"even if you improve smoking on a very small amount, but millions and millions of people that's a massive impact and that's how population level interventions work"*). Although examples were given of population-level interventions 'known' to be effective, such as taxation; it was also thought that there could be other population-level interventions that may help people to quit on a mass scale, however we do not have enough information about the most effective designs. Due to the mass application of this type of intervention it was also raised that they were likely to be cost-effective. However, it was suggested that more evidence, and better communication of effect and cost-effectiveness is needed in order to convince policy makers to implement population-level interventions. The final reason given to prioritise population-level interventions was that these types of interventions improve equity, as they are administered across population sub-groups (illustrative quotes: *"population level Interventions tend to affect people more equally than highly targeting certain groups"*).

Why shouldn't this be a research priority?

However, the opposite of the point above was cited as a reason not to prioritise population-level interventions, i.e. that these type of interventions could increase inequalities. Taxation was the intervention highlighted as an example of this, as it was thought to *"affect[s] the poorer, who are less likely to give up. It just seems cruel and ineffective."* It was also thought that it could cause those with relatively lower incomes to use black market tobacco (illustrative quote: *"what are the figures of people actually taking black market tobacco? Because if you price people out of the market..."*) Finally, although the wide impact of these types of interventions were discussed, it was also raised that although a focus on this category could help more people, it was less likely to have a meaningful impact on the individual, when compared to a category such as 'mental health and other substance abuse'.

Suggested action for the general field

In terms of population-level interventions, suggestions were made to provide and improve education on smoking in schools, so as to hopefully reduce smoking uptake (illustrative quote: *"I think maybe on the population level interventions xxx education would probably be one of the biggest things if you educate in schools so that people can just stop, prevention is always better than cure so that's where it should start"*). There were also two research suggestions which could work as actions for the wider research community, in terms of primary research, but could also be applied to Cochrane TAG's work reviewing and summarising the research in the field. The first was to investigate the cost-effectiveness of population interventions and to compare these with the cost-effectiveness of individual-level interventions, in order to inform decisions on implementation. The second was to further investigate the effect of mass media interventions and more specifically, which types of these work best (illustrative quote: *"working out what mass media works"*).

Suggested action for Cochrane TAG

As well as the suggestions above to investigate the cost-effectiveness of population-level interventions, and the effect of mass media interventions, which could be applied to the work of Cochrane TAG, other suggestions raised for Cochrane TAG to investigate further were as follows. Firstly, to assess potential harms as well as benefits of population-level interventions (illustrative quote: *"Well that would be a very valid question to ask ... What's the harm? You'd have to ask that question"*), and secondly to investigate the relative efficacy of different types of population-level interventions. Finally, as with the mental health category, it was raised that the best way to assess population-level interventions is not necessarily randomised controlled trials, and it was therefore important for the group to address the methodological challenges that are posed for Cochrane when assessing studies that investigate the success of population-level interventions.

Pregnancy

Top 3 questions prioritised in survey

1. How safe are e-cigarettes when used during pregnancy, and are they as safe as other products?
2. What are the most effective and cost-effective methods pregnant smokers can use to give up smoking?
3. Are e-cigarettes an effective and cost-effective aid to help people to stop smoking during pregnancy, and are they as effective as other products?

Why should this be a research priority?

Two main reasons were identified to prioritise 'pregnancy' as a research category. Firstly, that pregnancy is a key life stage, and quitting smoking during this time has a high and clear line of impact, as it affects both the mother and their unborn child (illustrative quote: *"we felt there was a key line of impact; the impact of quitting has a large effect in that population group."*). An important, key area for future research was identified as finding ways to prevent relapse in those smokers who quit during pregnancy, but then return to smoking after their baby is born. This led the discussion contributors to suggest changing one of the questions prioritised in phase 2 of the survey from 'What are the most effective and cost-effective methods pregnant smokers can use to give up smoking?', to *"What's the most effective and cost effective methods to help pregnant smokers to quit and remain smoke free in the long term?"*

Treatment delivery

Top 3 questions prioritised in survey

1. How can we make sure that all healthcare providers provide stop smoking treatment which research has been found to be effective, safe and cost-effective?
2. What type of health providers provide the most effective support to help people to quit smoking, and how much training do they need to be most effective?
3. What are the most effective interventions that can be used in primary care (e.g. doctors' and dentists' surgeries, pharmacies) to encourage more people to use stop smoking services and to give up smoking?

Why should this be a research priority?

'Treatment delivery' was ranked 12th of 15 research categories in the second phase of the survey; however it became the highest priority category of one of the tables as a result of their round-table discussion during the workshop. The two reasons provided for making this a top priority both centred on a need to improve smoking cessation and treatment training in healthcare trainees and professionals. Firstly, it was argued that improving knowledge in this way could increase the success of tobacco users in giving up. It was highlighted that, *"every smoker, and that includes people with mental health problems, need to get the best kinds of cessation support and treatment from their health professional. So I think the bottom line is ... is the knowledge skills and ...of professionals"*. It was argued that, at present, many healthcare professionals do not have a good understanding of how to help people to quit smoking; however if they did they would be more invested, and thereby provide more and better treatment. Secondly, it was hypothesised that if the education of healthcare professionals in the areas of tobacco use and cessation were improved then this would widen the reach of treatment to stop smoking.

Suggested action for the general field

The major issue raised in relation to the 'Treatment delivery' category was a current lack of education and training for healthcare professionals and students in the area of tobacco use and cessation. This led directly to the recommendation that health professionals should receive training in this area (illustrative quotes: *"most psychiatrists are still not particularly good with understanding smoking cessation and ...help the smokers, because if they had been trained in it they would buy into it. And that would reduce the death rate"* and *"Maybe it is this generation thing, you build it in at the level of medical schools and then ten, fifteen, twenty years down the line they are the policy makers, the ones who learned about it when they were 19."*).

Suggested action for Cochrane TAG

The belief that healthcare professionals were not always well informed about the Cochrane Library and the evidence they are able to access there was also raised (illustrative quote: *"I asked my GP, well I told her I was coming here, and she said 'what's the Cochrane Review about?' I'm like, 'you don't know?'. So I mean how far-fetched is it to employ people literally to promote..."*). Therefore, another suggestion was to further promote Cochrane evidence to health care professionals (illustrative quote: *"Well there's five or six really key journals that any clinician would be looking at....and so you'd have a Cochrane page once every two or three months in each of those"*).

Young people

Top 3 questions prioritised in survey

1. What is the most effective and cost effective way to stop young people from starting to smoke, in particular those in hard-to-reach groups?
2. Are there effective interventions to stop early trials of smoking from turning into tobacco addiction?
3. How can we stop the children of smokers from starting to smoke themselves?

Why should this be a research priority?

It is worthy of note that delegates often associated the category of young people with prevention rather than quitting.

As in the case of 'addressing inequalities' one of the reasons suggested for prioritisation was that the area had been neglected in the past (illustrative quote: *"from a local authority perspective....very little funding ... to be put towards prevention and actually trying to stop young people to start smoking, so I think that's some work we need to be doing there."*). Part of the reason given for this was that stop smoking services (in the UK) are typically assessed based on quit rates, providing no incentive for these services to focus on preventing young people from starting smoking in the first place. It was suggested that potential preventative approaches that are used are not well tailored to young people, as they focus on health problems and consequences that are only likely to occur after a period of use and later in life (illustrative quote: *"quite often the message about the harms of cigarettes aren't tailored to young people, there are things that seem, when you're 18 very, very far in the future and perhaps you're not really worried about getting lung cancer in middle age when you're 18, because it seems such an a long way off. And it's the young people taking up smoking who are becoming addicted and by that point it's, not too late, but certainly much, much more difficult."*)

'Young people' was also judged as a priority by some, as it was recognised that early use is likely to lead to addiction, which translates to long-term use. Thus by preventing use in young people in the first place this halts problems that could occur in the future (illustrative quote: *"I think if you're a young person who starts smoking and you're going to be smoking properly on and off for the rest of your life, that's gonna affect your health, it's gonna affect your finances and it's gonna affect your lifestyle."*

A couple of problems were identified with existing tobacco education interventions aimed at young people, which it was deemed important to address as a priority. Firstly, that many interventions are not based on evidence- *"aren't*

evaluated...or if they have been evaluated it's shown no effect", and secondly that there are youth tobacco education interventions and youth targeted marketing instigated by the tobacco industry (illustrative quote: *"you have to be really careful around youth education. I mean ... some of those were actually designed by the tobacco industry"*).

It was also raised that another potential challenge, which could benefit from the prioritisation of this category, is that alternative forms of tobacco (for example shisha) are becoming more popular, and these forms may be more likely to appeal to young smokers in particular (illustrative quote: *"young people are more likely to experiment with other forms of smoking, so we've seen an increase in shisha smoking in under 24's"*).

Why shouldn't this be a research priority?

In terms of reasons not to prioritise 'young people' as a category, one of the key discussion points was that a better way to prevent the uptake of smoking in young people may be to help adults to quit, rather than to invest in directly preventative youth interventions. Reasons given for this were *"you're far more likely to start smoking if your parents smoke"*; *"if you target current smokers....it has an effect on uptake on young kids as well, just because the norms have shifted right and it's not as easily available anymore"*; and *"although...ads were aimed at current smokers they actually had a bigger impact on young people...."* Smoking in young people also appeared to be seen as a less important and less immediate problem than smoking in adults. Firstly, because it was deemed to be the norm that young people partake in some forms of risky behaviour, some argued there was little that could be done about this type of rebellion, and it was likely to be a transient problem. This is at odds with the view expressed above, that trying smoking whilst young could likely lead to addiction and thereby a long-term problem. Secondly, smoking in the young was not seen as such a pressing problem health wise, and therefore it was suggested that the emphasis should be focused on getting older, more at risk smokers to quit (illustrative quote: *"there are a large number of people who are over 35 who are already smoking who are already losing months of their lives because they're apparently smoking. And young people who start smoking won't start suffering serious consequences for a bit of time yet"*).

The final reason proposed for why 'young people' should not be prioritised was that smoking prevalence has already dropped in this group due to successful intervention, and this is perhaps not where the most need lies (illustrative quote: *"prevalence in those groups are going in the right direction and they have been for the last 30 years so it's kind of historically very low now in under 18's. And politically since the age of sale which is raised from 16 to 18; that seemed to make quite a big difference"*).

Suggested action for the general field

Two suggestions were given for the field in general related to the category of 'Young people'. The first was founded on the basis that at the moment treatment for tobacco addiction is assessed largely based on quitting targets. This provides less incentive to perform preventative measures that may reduce prevalence in the first place. Therefore, one way to encourage the development and commissioning of preventative interventions for young people would be to set prevalence targets (illustrative quote: *"if we moved towards a ... target, so a percentage of the population that are smokers.... That's like the rationale to invest in stopping even if you've started smoking"*). In addition, another suggested, important step toward implementing preventative interventions for young people was to establish what works, i.e. *"you need to investigate what works with them, what's stopping them from....initiating smoking"*, which could be achieved through research intervention studies or observing what has worked in the past (either in research or practice).

Suggested action for Cochrane TAG

Finally, it was raised that the needs and characteristics of young people may have changed over time and in that context it is important that the research moves forward accordingly- including the Cochrane TAG reviews focused on young people (illustrative quote: *"you might be able to suggest that there's something different about young people today versus the evidence that's already on the Cochrane Library"; "It might be one for an update"*).

Cross-cutting themes

There were also themes identified that ran through a number of categories, which we defined as cross-cutting themes. These were:

Efficacy

Across categories a lot of uncertainty was still expressed about whether certain interventions work to help people to give up or refrain from taking up smoking, for example electronic cigarettes. This was therefore a motivator for why many categories were seen as a priority. Establishing the effectiveness of tobacco prevention and cessation interventions is one of the primary aims of Cochrane TAG, and this suggests that there is still work to be done here.

Comparing active interventions

As well as establishing the effectiveness of interventions, i.e. by comparing an active intervention to placebo or a no/brief intervention control, it was also raised across a number of categories that work was needed to focus on the relative efficacy of different interventions, for example different population-level interventions or aids to quitting, such as medications and electronic cigarettes. This could help to inform which treatments or interventions should be offered in the first instance and which should be prioritised over others.

Cost-effectiveness

Another common theme was cost-effectiveness, i.e. the effectiveness of an intervention in relation to its cost. This was raised as an important consideration when assessing the practical application of interventions in general, and one that was thought to have often not been addressed.

Addressing inequality

As well as coming up as a category in its own right, this theme also came up when discussing other categories. For example, population-based interventions were described as both a means to increase equity across groups and to increase divisions. This flags it up as an important point to investigate across topics, as the reduction of health inequalities is a major aim across health organisations, such as the WHO and UK NHS.

Using different types of evidence (non-RCTs)

Historically Cochrane have focused on summarising the evidence from randomised controlled trials to establish the effectiveness of interventions. However, it was recognised across a number of categories discussed, for example 'mental health and other substance abuse' and 'population-level interventions' that this is not always the best or only way to assess how useful an intervention may be in everyday practice. Cochrane methods increasingly recognise this, and non-RCT evidence is being used increasingly where this is the best or only way to assess an important intervention; however, workshop discussions suggested that this needs to continue to be developed both within Cochrane and the wider research and healthcare community.

Final voting on research category prioritisation

For the final workshop activity attendees were asked to vote on the eight priority categories identified through the round-table discussions, to come up with a final ranking for these categories. They did this using the green and red sticky dots provided (as described previously in Methods). See Figure 1 for a photograph of the final result, and Table 4 for the final voting scores for each category and their resulting rank (where 1 = highest priority). Addressing inequalities ranked most highly at the workshop, with a score (38) double that of treatment delivery (19), which ranked second. Addressing inequalities ranked second (to electronic cigarettes) in the second phase of the survey; therefore this consensus was similar to the one reached by survey participants, as were most other rankings. The exception to this was 'treatment delivery' which jumped from ranking 12th of 15 in the survey to 2nd in the workshop.

Suggestions for dissemination and translating tobacco-related research into practice

As described previously the transcripts of the final, round-table, planned workshop discussions on dissemination strategies were reviewed. Suggestions and thoughts around dissemination strategies for tobacco and smoking cessation research were identified. These were grouped into themes. These themes and their associated suggestions are summarised below:

Tailor the message to the audience

- Different dissemination channels should be used for different audiences, as different things will work for different people. A communications strategy should be developed for all relevant audiences
- Consider strategies outside of social media, as those people who need information the most may not have access to, or be accessing, social media

Prioritise informing healthcare decision makers about findings

- Reaching smokers directly is difficult - if decision makers can be informed and influenced to act this may mean the effects can be felt more widely, and ultimately by smokers
- When targeting decision makers the financial considerations related to policies/interventions need to be considered and communicated, as these are important drivers of use, as well as efficacy

Figure 1: Photograph of final voting results at prioritisation workshop



Table 4: Workshop final voting scores and resulting research category rankings, in comparison to survey rankings (1 = highest priority)

Category	Green dots (N)	Red dots (N)	Final score (green - red dots)	Workshop ranking (out of 8)	Survey ranking (out of 15)
Addressing inequalities	38	0	38	1	2
Treatment delivery	19	0	19	2	12
Electronic cigarettes	20	3	17	3/4	1
Initiating quit attempts	19	2	17	3/4	4
Young people	20	6	14	5/6	7
Mental health & substance abuse	15	1	14	5/6	3
Population-level interventions	10	5	5	7/8	5
Pregnancy	9	4	5	7/8	6
Illness & chronic disease sufferers	-	-	-	-	8
Alternative tobacco products	-	-	-	-	9
Nicotine & tobacco risk	-	-	-	-	10
Treatment methods exc. medications	-	-	-	-	11
Smoking bans & second-hand smoke	-	-	-	-	13
Digital interventions	-	-	-	-	14
Medications	-	-	-	-	15

- Ensure the information provided to decision makers is seen as relevant by localising it. One way to do this would be by applying research results to the relevant clinical setting, e.g. provide the numbers needed to treat (NNT) for a particular hospital.
- Ensure policy makers and healthcare commissioning representatives are involved in the research process early on, so they can ensure the outcomes of research will be relevant to them.

Educate health professionals to improve their practice

- Health professionals are not always aware of and providing accurate information. New evidence should be incorporated into Continuing Professional Development (CPD).
- Tobacco addiction and smoking cessation treatment is not being taught to all healthcare trainees at medical school. Effort needs to be made to ensure that this happens to inform better practice.
- New evidence and the principles of evidence based medicine need to be communicated directly to students, so that they are well informed not only on the subject, but on how to identify and appraise emerging research in the future.

Find ways to engage the public

- The general public are exposed to a lot of inaccurate or ill-informed information about health. This is in part because these inaccurate findings are easier to sensationalise and grab people's attention. Find ways to report accurate research findings in an exciting way to encourage accurate reporting.
- Ensure plain language summaries of research findings are indeed 'plain' and easily understood by the majority. This is often not the case at present.
- Find ways to penetrate popular culture, for example by including research and health related storylines in television/radio soap operas and recruiting media advocates to promote research findings in the public eye. One way to do this may be by encouraging celebrity spokespeople to recirculate social media posts i.e. 'retweet' on Twitter.
- Make the public better informed about the healthcare research and recommendations process, so that they are better able to understand and interpret the information that they come across.

Bridge the healthcare research to implementation gap

- Many of the research findings generated do not actually influence healthcare practice in any way. This needs to be improved, where relevant and appropriate.
- Researchers and their institutions need to partner with relevant healthcare organisations and guideline developers such as the medical royal colleges, e.g. the Royal College of Physicians, and NICE, so that the evidence can be translated appropriately into actions.
- Researchers need to work with guideline developers & register as stakeholders to optimise the likelihood of research findings being included in guidance.
- Ensure that the information and any potential actions presented appear feasible to implement. For example, taking into account cost effectiveness and time constraints.
- During the research period and the subsequent drive for implementation, clinicians, patients and members of the public should be recruited to ensure public facing materials are usable.

Use experts to help get the message out

- Make links with various groups of stakeholders, such as policy developers, the royal colleges and Public Health England, and disseminate findings directly to them.
- Work with organisations to use already established networks to disseminate more widely to stakeholders, for example existing email bulletins sent out by ASH, the NCSCCT and groups of electronic cigarette advocates.
- Researchers and their institutions should make links with, and get on the mailing lists of, journalists who contact researchers in the field to comment if there is a relevant story in the press.

Keep the message simple

- Use imagery and simplification in publicity of findings. Developing and using resources such as infographics is a way to do this, as is summarising research reports by providing one page or six slide summaries of the key information.
- Circulate regular updates of research group's activities and findings, so stakeholders are kept up to date with manageable and understandable chunks of information.

Discussion

This is a report of a priority setting, stakeholder involvement exercise carried out for the Cochrane Tobacco Addiction Group's (TAG) 20th anniversary. The project comprised of three main stages: two surveys and a workshop, through which Cochrane TAG's stakeholders were asked to identify and prioritise areas and questions that still need to be addressed in the field of tobacco and smoking research.

Statement of principal findings

The first stage of the survey generated a large number of research questions that the tobacco community felt had still not been answered by research. Review of these by the authors confirmed this was the case for a large proportion of the questions (183), according to the criteria suggested by the James Lind Alliance.⁵ These questions were categorised into topic areas by the project team. The combination of the surveys and workshop prioritisation discussions resulted in a top 8 categories: 'addressing inequalities'; 'treatment delivery'; 'electronic cigarettes'; 'initiating quit attempts'; 'young people'; 'mental health & substance abuse'; 'population-level interventions'; and 'pregnancy'. Workshop discussion themes around topic categories generally fell into four areas: reasons for prioritisation; reasons the topic should not be prioritised; action for the general tobacco control community; and action for Cochrane TAG more specifically. These took the form of ideas for primary research, actions for the wider public health community, and ideas for new or improved systematic reviews. As well as the pre-specified topic categories discussed at the workshop, a number of cross-cutting themes emerged throughout the day. These were: 1) a continued focus on research into the effectiveness of interventions to prevent or stop people from smoking; 2) research into the relative efficacy of interventions, to determine what should be implemented as a priority; 3) more research into the cost-effectiveness of interventions to inform implementation; 4) addressing inequalities as a priority across tobacco research areas; 5) using a range of research modalities to evaluate tobacco cessation and prevention interventions.

As well as discussing research and practice prioritisation, attendees were asked to discuss ways to effectively disseminate the findings of tobacco research findings, which generated a range of suggestions. One of the reasons this was thought to be an important step was that in the first stage of the survey just under a quarter of the questions submitted were judged by the research team to have already been answered. This suggests that some research findings are not being disseminated effectively, or are not reaching their intended audiences. Due to the resources that are used in carrying out research and the importance of the results, it is crucial that as much as possible is done to rectify this problem.

However, it is important to note that in the case of all findings of the project the opinions expressed are those of the participants and have not been amended at all for the purpose of this write-up. Therefore, the beliefs presented here may not always be supported by research evidence or be in-line with the opinions of those who may be regarded as 'experts' in the tobacco control community, or the scientific communications and dissemination field. For example, it was noted that smoking may be of benefit in mental health communities as it could calm anxiety symptoms. This is something that is not supported by research evidence and in fact the opposite has been found to be the case.⁸ Therefore, our findings should be considered within this context, and further steps for Cochrane TAG will include developing an action plan for the group that takes our findings into account alongside the wider body of research evidence.

Strengths of the project

This project blurred the boundaries between scientific research and public engagement activity, which made it relatively unique. As well as the potential limitations that this presented, which are discussed below, we also felt that this provided some significant benefits. Firstly, the work of Cochrane TAG, and the research community more generally, has previously been largely informed by researchers themselves. Although, these researchers sometimes have joint interests in the themes of tobacco and smoking cessation, such as clinicians or ex-smokers, this can mean that the research carried out is based on a number of assumptions. These can range from the questions that need to be answered to inform healthcare, to the outcome measures that are likely to be relevant to intervention users. Involving a range of stakeholders in the process of informing research reduces the assumptions that need to be made, and maximises the likelihood that the resulting research is needed and will ultimately be useful and inform clinical decision making and practice.

Another strength of the general methodology was that we approached the prioritisation process from two different angles- the surveys and the workshop. This allowed for the triangulation of findings- i.e. using data from a number of sources to strengthen confidence in the findings.⁹ As well as demonstrating that certain topics were consistently judged to be of high priority, i.e. 'addressing inequalities' and 'electronic cigarettes', it also allowed differing perspectives to emerge and to be explored. An example of this was the emergence of treatment delivery as a key category at the workshop, despite being ranked as 12th out of 15 categories in the survey. This appeared to be because discussion allowed some members of the group to put ideas forward that had not previously been considered by others, but when raised were deemed to be of importance.

Another example of differing results across methodologies was when no reasons were discussed for why electronic cigarettes should not be prioritised in the workshop discussions, however in the final individual ranking exercise some people did choose to down-rank the electronic cigarette category using their red dot sticker. It could be that this was a result of changing their mind as the discussion went on and other categories took priority, or could reflect that attendees did not always want to express their views in a group, but were happy to do so in an individual, more private exercise.

There were also three more specific elements of the methods used that seemed to work well. The first was the voucher incentive used to encourage participants to respond to the second wave of the prioritisation survey. This appeared to result in a good response rate, with the majority of the participants opting-in to the prize draw, and 63% of those people who responded to the first wave responding to the second wave, despite only a two-week response period. In terms of the workshop, two measures were taken to try to reduce pressure participants may have felt to discuss things in a way deemed favourable to the Cochrane TAG team, and to reduce any other bias that may have occurred through Cochrane TAG being involved in discussions. The first was the decision to employ an independent facilitation company to design and run the workshop element of the project. We had not carried out a project of this type before and so wanted to ensure that the workshop was run in a way that maximised useful output. We also wanted to ensure that there was no opportunity for any unconscious bias to creep into the process based on the team's preconceptions of what may be found. The second approach implemented to control for this was that all members of the project team left the room during the workshop process. The team did however return at the end of the sessions so that they could thank attendees, and so that delegates could briefly feedback on their discussions.

Limitations of the project

As mentioned above the mixed methodology and stakeholder engagement elements of the project presented limitations as well as benefits.

Firstly, ideally, we wanted the findings of the research to be applicable globally, particularly as Cochrane is a global organisation. Although we aimed to do this and this was reflected in our methods and recruitment procedures for the surveys, just over half of the respondents were based in the United Kingdom (which is the base of Cochrane TAG). This was due to the time and funding constraints on the project – an extension of either of these elements would have allowed us to employ more inclusive recruitment techniques. However, despite this, residents of 28 countries were represented across the survey, which was perhaps in large part due to promoting the survey through worldwide social media channels and at a well-attended international conference. We also aimed for a wide range of stakeholder representation. Again this was hard to address, with around a third of respondents identifying as researchers; however, there was a range of different groups represented and greater time and resources would have enabled us to maximise this involvement further. Due to funding constraints we were only able to fund attendance for members of the public to the workshop, meaning that attendance was more difficult for those who did not have work-based funding to attend such an event, and who may have been travelling a substantial distance to attend. It also made attendance difficult for people, i.e. clinicians, whose usual work commitments made it difficult for them to attend something that would not normally be considered part of their job role. A researcher would be much more able to justify involvement in the project as part of their everyday activities.

Secondly, we did not expect that the respondents to the first survey would generate such a large number of unanswered questions. In order to make ranking the questions feasible in the second phase of the survey a post-hoc decision was made to categorise the research questions into categories. We then only asked participants to rank the questions within their top three categories. This made the second phase of the survey a little more complex and unwieldy than it would have been otherwise, and therefore may have deterred some people from responding. It also limited the size of the samples ranking each set of questions, potentially making the results less representative of the whole sample. Finally, categorization was done by three members of the research team, and it is possible that other people would have made different decisions around defining and organizing categories.

Thirdly, at the workshop, some parts of the audio-recordings of the working groups were obscured by background room noise because all group discussions took place in the same hall. Consequently, some parts of conversations were missed.

Fourthly, there are a couple of points for consideration regarding the final dot ranking exercise at the workshop. We chose to quantify the voting by adding together the green dots on the cards and subtracting any red dots. This is only one possible method of interpreting this exercise and other methods may result in different conclusions. Therefore, we have provided all of the information necessary for readers to draw their own conclusions. We also cannot give a completely accurate account of how many workshop delegates completed this final voting exercise, as it was not enforced on the day and we did not monitor this. If it were assumed that all delegates followed instructions exactly then through counting the red dots used across the activity (1 per person) we could conclude that 27 of the 43 delegates took part. In addition, as

this was an open voting process it is possible that the group processes may have influenced the way people voted or deterred them from voting. However, this exercise was not intended to be a rigorous scientific test, and therefore should only be used as a guide to people's feelings at the end of the process, and a small part of the rich data sources available.

Finally, we have not considered the findings of this project categorised by stakeholder type, and therefore it is difficult to conclude how adding different types of stakeholder input to the prioritisation process has added to what the group would usually do to inform their outputs. It would have been impossible to do this for the workshop as we were unable to differentiate between the voices on the audio recordings. However, we are confident that this process has generated suggestions for future work beyond what would usually be generated by Cochrane TAG's typical engagement with researchers in the field. When liaising with researchers this has usually been to discuss specific potential review topics; however as well as doing this, this project has generated more general suggestions for development across the group's entire portfolio, for example the addition of cost-effectiveness information in reviews and the consideration of study types outside of RCTs.

Further learning points

As well as the learning points that can be gleaned from the strengths and limitations highlighted above, we have highlighted two further key learning points to take away from this process. The first was the positive experience of allocating a range of stakeholders to each workshop discussion table, rather than grouping attendees by stakeholder type. The project team discussed whether this would be the best approach at the outset of the project, as there were some concerns that members of the public may not express themselves fully if they were sat alongside people that they may see as experts on the subject, such as clinicians and researchers. However, the transcripts show that that discussions were not dominated by any individuals; in fact, the range of opinions appeared to enrich the discussions.

Secondly, the process was limited by the size of the budget and the time available to complete it. With greater resources, we could have run a larger survey and spent more time publicising it to potential participants. We could have translated it into languages other than English and enabled participation from participants from outside the UK. It is hard to know what impact this may have had. However, we feel the project has led to useful insights into future research priorities, nonetheless.

Implications of findings

The key motivations for carrying out this project were two-fold- 1) to inform the wider tobacco community, and 2) to inform Cochrane TAG specifically. In the first instance the project did generate many research questions for which there was a high degree of consensus that these were both unanswered and a future priority. By sharing these, we hope that we can help to inform and justify the work of researchers, and also to help research funders to prioritise the work that they fund. Discussions also led to a number of further recommendations for primary research, as well as suggestions for actions for the wider public health community, and dissemination strategies for those whose aim it is to get the findings of existing research out to a wider audience. However, as previously mentioned discussion findings need to be considered alongside existing evidence and expertise when planning implementation.

Cochrane TAG aim to take these findings forward in a number of ways. We hope to use it to inform our output over future years, in the form of new reviews, updated reviews and changing the scope of existing reviews. For example, it was suggested that we look into a review of prison populations, and this is something we will consider as a new review or as part of the scope of an existing review. It was also suggested that, as the needs and desires of youth populations change, and hence new interventions are potentially designed and tested, updates of our reviews of youth focused interventions should be considered- this will also be taken into account. We plan to map all the priority questions identified as part of the survey onto our existing portfolio and decide where this should be expanded or altered, and prioritise based on this. Results of this mapping exercise will be made available to the public. Where new reviews are commissioned we will seek author teams to carry out this work. We also plan to develop and implement a more in-depth communications strategy for our findings, and will work alongside the central Cochrane team and our department communications officer to do this.

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