An Independent Evaluation of The Filter

Andrea Meek, Dr Lisa Hurt and Dr Aimee Grant
Institute of Primary Care and Public Heath, Cardiff University

CARDIFF UNIVERSITY PRIFYSGOL CAERDYD

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## **Executive Summary**

## **Existing Research**

In 2009, a comprehensive review of evidence relating to young people and smoking was published. Few studies were identified which focused specifically on smoking prevention or cessation interventions for young people, and the majority of the existing evidence focused on school-based programmes. We searched for Cochrane reviews and peer reviewed literature from 2009-2015. There was little research on the acceptability and effectiveness of training professionals who work with young people to deliver smoking prevention and cessation messages. There was also a dearth of evidence regarding the effectiveness of direct youth involvement in smoking prevention and cessation programmes. Evidence relating to online health promotion and young people focused primarily on educational programmes involving highly structured content, with very little evidence regarding a less formal approach.

### Research design

A multi-faceted process evaluation of The Filter was undertaken. First, tweets sent to or from The Filter Twitter account were subjected to thematic analysis. Second, semi-structured interviews were undertaken with The Filter staff, professionals who had undergone training from The Filter and young people who had either interacted with The Filter online or as part of face-to-face workshops. Finally, surveys were developed based on the findings of the interview study, which asked professionals and young people about their experiences of all elements of The Filter programme.

## Results: Training for professionals working with young people

The Filter training team reported that initially they designed and delivered training based on the key tobacco topics identified in Wales. This was later amended, to include smoking cessation training, and bespoke training packages. Professionals who took part in interviews reported that they valued this flexible approach to training courses and had put some of the techniques they had learnt into practice in their work with young people. This was found to be the case by professionals who took part in the online survey. Professionals also reported that the training was relevant, enjoyable and gave them new knowledge about smoking.

### Results: Youth development, education and smoking cessation support

The Filter developed a workshop-based approach to transmitting tobacco control and smoking cessation messages, which was delivered to small groups of young people in their own communities. The Filter staff reported that delivering these sessions was unproblematic, and all respondents identified a very strong rapport between The Filter staff and young people. The range of activities included in workshops was also identified as a key way of sustaining interest from young people, and visual aids were identified as particularly engaging. Some young people suggested that their interaction with The Filter had changed their planned behaviour in relation to smoking, or encouraged them to cut down or quit if they were existing smokers.

#### Results: Online health promotion

The Filter team shared tobacco control messages via a wide range of online platforms. They have achieved some level of success in terms of reach on The Filter website and potential reach on Twitter and Facebook. However, it was not possible within the confines of this research to understand if these users fit within the target demographic for the intervention, and how much overlap there was between The Filter face-to-face services and online services. The Filter staff reported that the intervention was deliverable by using a flexible approach, including the use of multiple and changing online platforms. It was not possible to understand how acceptable this intervention was to young people, as only one of The Filter's followers agreed to take part in an online interview, and only 11 respondents to the online survey had interacted with the online resources. The evaluation of social media based interventions has been acknowledged to be a challenging area (Bailey et al., 2015) and this low response does not mean that the intervention is not reaching the targeted individuals, but that the individuals were not willing to take part in a brief evaluation.

## **Conclusion**

To carry out this evaluation, we were given full access to The Filter team and their contacts in order to gather samples for the interviews and surveys. The Filter team were adaptable in their approaches to training and the use of social media over the course of the project, ensuring smoking cessation and prevention information was maintained as up to date and relevant. Professionals noted the rapport the Filter Team developed with young people was excellent. Training was high quality and professionals were able to use what they had learned from The Filter when working directly with young people. Young people liked the visual aspects of The Filter and they preferred the informal youth work approach to school based sessions on smoking. The use of The Filter social media platforms and online resources was encouraging, showing maintained growth over the course of evaluation period. Online resources were reported to be used by the majority of professionals taking part in the evaluation, however, engaging young people in the evaluation of The Filter via social media proved challenging. The data in this evaluation suggests that The Filter is a service which is feasible to deliver. The methodology of this evaluation did not allow us to examine the effectiveness of The Filter in terms of smoking prevention or cessation.

## **Key Messages**

## **Key Messages: Existing Research**

- Although there are many evaluations of smoking prevention and cessation programmes, including several specifically designed to target young people, few have been empirically validated.
- School-based programmes are still heavily favoured, with one programme using peer supporters within schools in the UK suggesting a 22% reduction in the odds of becoming a regular smoker (odds ratio 0.78, 95% confidence intervals 0.64, 0.96).
- Smoking prevention and cessation training programmes for professionals working with
  young people and the use of novel technologies as a platform for engaging young people in
  discussions around their health and health behaviours are well-accepted, but data on their
  effectiveness is still lacking.

## Key Messages: Research Design

- Qualitative interviews, quantitative surveys, analysis of social media content and service
  user metrics were used to examine how deliverable and acceptable The Filter was to
  professionals and young people.
- Due to the methodology of the evaluation we could not assess the effectiveness of The Filter in terms of smoking prevention or cessation.

## Key Messages: Training for professionals working with young people

- A dedicated team from The Filter provided individually tailored and interactive training sessions on smoking prevention and cessation for professionals working with young people in Wales
- The Filter approach was valued by professionals. Training was reported to be high-quality, relevant and enjoyable.
- Professionals reported being able to use the training with the young people they worked with as part of services they were already delivering.

## Key Messages: Youth Development, Education and Smoking Cessation Support

- The aims of The Filter team was to provide a service which was young person friendly, branded to appeal to young people, non-judgemental and informal. Alongside this, the service aimed to be educational and to allow relationships to be built between The Filter staff and the groups they worked with.
- The visual aids used in workshops by The Filter (pig's lungs, smoking images, tar jars) were reported to be impactful by young people and professionals.

- Professionals noted that the high degree of rapport between The Filter staff and the young people was important in the effective delivery of the smoking prevention and cessation messages.
- Few young people engaged with the advice line, but this service was used by some professionals.

## **Key Messages: Online Health Promotion**

- Usage of The Filter website and social media platforms was reasonable, but it is not possible to conclude whether this was made up of The Filter's target audience
- Targeted messaging by The Filter social media team had limited success in engaging individuals in conversations about tobacco use.
- Professionals reported using The Filter website following training by The Filter team.
- Engaging young people in an evaluation of The Filter via social media was challenging.

## 1. Introduction

The Filter is a youth smoking prevention and cessation programme run by Action on Smoking and Health (ASH) Wales Cymru. It is funded by a Big Lottery People and Places Grant and a Big Lottery Innovation Grant. The Filter aimed to engage with young people aged 11-25 across Wales on the topic of tobacco smoking. The primary objective for The Filter was to prevent the uptake of smoking amongst young people and encourage young people who already smoked to reduce their use or quit altogether. The Filter had a specific focus on informing young people about the dangers of tobacco, tobacco industry tactics, promoting cessation amongst those who smoked, and offering training for young people to become volunteers. The Filter project is organised into three distinct, but sometimes overlapping, strands:

- Training for professionals who work with young people
- Youth development, including providing workshops, attending events and providing a smoking cessation advice service
- Social media campaigns and a website to promote tobacco control and smoking cessation messages throughout Wales.

In the spring of 2014, ASH Wales commissioned the Institute of Primary Care and Public Health, Cardiff University, to undertake an independent evaluation of The Filter. This report is the outcome of the research undertaken, which adopted a post-hoc process evaluation, using interviews with a range of stakeholders, analysis of social media content, surveys with professionals and young people, and existing data collected by ASH Wales relating to service usage. This evaluation aimed to provide information about the *deliverability* of the intervention from The Filter staff, and the *acceptability* of the intervention from a range of groups who had experience of receiving the intervention. However, it should be stressed that due to the methodology of the evaluation we could not examine the *effectiveness* of The Filter in terms of smoking prevention or cessation.

The report first details the existing literature, before moving on to provide an overview of the methods used. The results are split into three self-contained chapters which mirror the three strands of The Filter: training professionals, youth development work and online health promotion. Conclusions are made at the end of the report.

## 2. Existing research

### 2.1 The Amos review

In 2008, the Department of Health commissioned Professor Amanda Amos to undertake a comprehensive review of current evidence relating to young people (aged 11 -24) and smoking in England (Amos et al., 2009). The aim was to describe the prevalence of smoking in this age group and to examine the evidence for prevention and cessation programmes. The team used two methods to gather information: first, a rapid literature review; and second, an expert workshop where 26 tobacco control experts discussed the findings of the review and set-out next steps.

#### 2.1.1 General findings

The report found that there had been a consistent decline in the prevalence of tobacco use among 16 to 24 year olds over the preceding quarter of a century. The decline in younger age groups (11-15 years) was shown to have been slower, although data from 2007 onwards suggested an improved trend.

The authors found that there were few studies which focused specifically on smoking interventions for individuals under 24 years of age. They concluded that this showed that, although tobacco control had become multi-faceted and innovative, there was still a lack of investment in research on young people. Three factors were acknowledged to influence the uptake and continuation of smoking at a young age: individual (socio-demographic, attitudes, behaviour); social and community (family, friends, school); and societal (access, media, marketing). Research across all three areas was found to be limited, with few studies analysing the impact of youth smoking programmes by age, gender, socio-economic status or ethnicity. Studies had also tended to focus on short-term outcomes and there was little UK-specific research.

## 2.1.2 Evidence for specific programmes or approaches

The report found that there had been few studies which examined interventions focusing on information, cessation, advocacy and sign posting for young people. For youth smoking prevention programmes, the evidence within family settings, school settings and community settings was examined. The highest number of studies related to school-based programmes, but results from these were mixed, with little evidence that information-giving alone was effective. There was stronger evidence for programmes which also included elements on social skills development and personal responsibility. They also examined societal-level policy and interventions (changing attitudes and norms for reducing adult smoking, underage access to tobacco, price and marketing of tobacco, effect of mass media and new media for reducing tobacco use, and the use of incentive schemes). Finally they examined the literature on multi-component policy, community and societal level prevention programmes. They noted that strategies combining tobacco regulation and intervention have gone some way to benefitting young people. Tobacco control in England had not been comprehensive and more needed to be done to supplement existing strategies; however, it is clear that there was not one solution. Tobacco control policies and interventions in relation to young people need to operate on a national and regional level, be youth orientated, multi-faceted, wellfunded and long-term to be successful.

## 2.1.3 Programmatic challenges identified, and possible solutions

Studies examining youth smoking cessation programmes in the UK suggested that, despite efforts to tailor these to the needs of young smokers, there were still issues in engaging young smokers in cessation services. In addition, young people were not proactive in looking for help to stop using tobacco. The authors noted that the distinction between prevention and cessation was blurred for many young people. Despite knowing that smoking has negative effects on health, many did not see themselves as "smokers" or feel that they were addicted to using tobacco and so did not believe that smoking cessation services were relevant to them. In the workshop, these findings were converted into a recommendation for next steps:

"a realistic way forward will involve young people themselves identifying the issues that are pertinent and relevant to them but a partnership approach that will ensure that all parties take the decisions determining when initiatives require youth leadership and when other agencies take responsibility for implementing strategies". (Pg. 104)

As such, mass media and new media were identified as important strategies for allowing young people to own and embrace the stop smoking message. In fact, in their recommendations, Amos et al. suggested that the most promising approaches were those which were a blend of school, community and mass media interventions (rather than stand-alone interventions operating in a single capacity). As Sussman and Sun (2009) noted:

"In order for a successful outcome youth cessation programmes should be delivered in a context structured for young people (e.g. school, sports club, health clinic) who tend not to impose structure on themselves.... And programmes should be designed to maintain young people's interests by making the programme engaging". (Pg. 91)

Programmes should therefore use advocacy, volunteering and peer support to develop positive life-strategies for young people (including developing life skills, self-esteem and self-control).

The Amos review did not specifically include data on training for professionals that have contact with young people who smoke. However, a lack of joint working between the professionals working in the tobacco, health, drugs and alcohol services was identified as a problem, as well as the tendency to focus on single problem behaviours rather than taking a person centred approach and looking at the young person as a "whole". This way of working neglects to understand that the young person who is at risk of starting smoking may also be at risk in other areas of their lives. Joint working between professionals was also identified as beneficial to young people by the workshop participants (as evidenced by the quote below), although it was noted that there was little current evidence to support this generic approach:

"Supporting and empowering young people to take responsibility, rather than an authoritarian approach that characterises some current approaches, will require a shift in thinking of many of those currently working with young people". (Pg. 104)

## 2.1.4 Conclusions of the report

The Amos report provided a comprehensive review of current evidence to 2009. They concluded that encouraging declines in tobacco use in young people were a result of both regulation and intervention. However, further efforts were required to develop and test interventions to effectively target young people.

## 2.2 Further evidence since 2009

For this evaluation, we conducted a rapid review of literature published since the Amos report, to identify whether there is additional evidence available now to support the three strands of the Filter project: training for professionals who work with young people; advocacy and youth development work; and the use of social media to promote tobacco control and smoking cessation messages. To identify key papers, we first searched in the Cochrane Library for any completed systematic reviews relating to smoking. We then searched in Medline, using a combination of terms relating to:

- ("smoking" OR "tobacco") AND
- ("prevention" OR "cessation") AND
- ("young people" OR "adolescents") AND
- ("training" OR "advocacy" OR "development" OR "internet" OR "social media").

The search was limited to articles published from 2009 to January 2015. The search yielded a total of 429 papers, of which four described programmes which could be considered of direct relevance to The Filter (3 in the UK, 1 in Canada). Of the studies excluded, many described structured educational programmes for smoking prevention or cessation, delivered in schools or via the internet, that were relatively intensive and that often required referral by a health professional for entry into the programme.

## 2.2.1 Cochrane reviews

There had been several systematic reviews published since 2009 in the Cochrane Library which examined the evidence for interventions that may be relevant for this evaluation; however, none dealt specifically with evidence relating directly to the three strands of The Filter.

For example, a review of tobacco cessation interventions for young people (Stanton and Grimshaw, 2013) included a broad range of interventions, including pharmacotherapy, psychosocial interventions and complex programmes targeting families, schools or communities. Of interest for this evaluation were the interventions which used motivational enhancement combined with psychological support such as cognitive behavioural therapy. The review suggested mixed results, with some studies showing moderate long-term success, but no significant changes in the trials of complex interventions. The intensity of the programmes varied widely as did outcome definitions (including, for example, abstinence for 24 hours).

Civljak et al. (2013) examined the evidence for internet-based interventions for smoking cessation for smokers of all ages. They found two studies that included interventions specifically designed for adolescents (Patten, 2006 and Woodruff, 2007); both studies examined internet-delivered educational programmes for adolescent smokers and neither found an effect on cessation. Overall, in individuals of all ages, this review found mixed evidence for the effectiveness of internet-based interventions, although interactive programmes showed most promise.

A review of smoking cessation interventions delivered via mobile-phone (Whittaker et al., 2012), including text messaging, text messaging plus internet coaching, and video messaging, also suggested some benefits, although only five studies fulfilled the inclusion criteria for the review. The pooled estimate from the five trials suggested an increase in six month quit rates when compared with control programmes (pooled risk ratio 1.71, 95% CI 1.47 to 1.99, 9000+ participants). These trials included participants of all ages.

It is clear therefore that there is research being conducted on novel methods of promoting smoking cessation, using technology in combination with more traditional face-to-face counselling and education. However, despite the recommendations of the Amos report and despite many of the technologies being tested having a high uptake in young people, specific programmes targeting this group are still rare. We summarise below individual studies published since 2009 which have examined elements of particular relevance to the three strands of work included in The Filter programme, which were not included in the above reviews.

## 2.2.2 Evidence of training of professionals to work with young people

There is currently little research undertaken on the acceptability and effectiveness of training professionals working with young people on the topic of tobacco use and prevention. A Cochrane review on the effectiveness of training health professionals in the delivery of smoking cessation interventions was published in 2013 (Carson et al., 2012), although this did not specifically examine the role of health professionals working with young people. In addition, health professional contact with young people is infrequent, and this review does not therefore provide information of great relevance to The Filter.

The SmokeFree Sports programme was a sports initiative in Liverpool aimed at preventing the uptake and reducing the prevalence of smoking in children and young people. The programme included social marketing strategies alongside the provision of sports and physical activity, as well as the training of sports coaches in key messages on smoking and the skills to undertake a brief intervention to encourage smoking cessation. The training aimed to provide coaches with key messages on smoking and its impact on health and sport performance, together with information on healthy lifestyles. The eight coaches who attended the training completed a questionnaire and were interviewed to explore their views on the training and the campaign (Hilland et al., 2012). They reported that they were more self-confident in delivering accurate smoke free messages to young people after the training. However, the effectiveness of the intervention in terms of the transmission of tobacco control messages to young people, and behaviour change has not yet been published.

No other studies evaluating the training of professionals to work with young people in the area of smoking prevention and cessation were found.

## 2.2.3 Evidence for advocacy and youth work

The Amos review noted that there was limited evidence on the effectiveness of direct youth involvement in smoking prevention and cessation programmes. Since the review, interest in youth-led approaches has increased, although the evidence base for their effectiveness is still relatively limited.

The ASSIST (A Stop Smoking in Schools Trial) cluster randomised trial examined the effects of using peer supporters within schools to deliver smoke-free health promotion messages in Year 8 students in 59 schools in the south west of England and South East Wales (Starkey et al., 2009). Particular emphasis was placed on identifying the most suitable people for this role, using a peer nomination process. A balance of male and female peer supporters were recruited who were generally representative of their age group. Results suggest a 22% reduction in the odds of becoming a regular smoker (odds ratio 0.78, 95% confidence intervals 0.64, 0.96). A cost analysis of the programme concluded that the intervention was cost effective and could potentially result in 20,400 fewer adult smokers if the programme was implemented across all schools in the UK (Hollingworth et al., 2012).

Operation Smoke Storm is a school-based intervention, developed in the UK, which aims to prevent smoking uptake by school-age children by focusing on the ethics and exploitative tactics used by the tobacco industry (Szatkowski et al., 2014). The full evaluation of the programme will not be completed until 2017, but focus group discussions during the development phase of the intervention suggested that the messages were well-received by Year 7 students (aged 11-12 years) and teachers felt comfortable delivering the materials.

There are several examples of UK-based campaigns designed "for young people, by young people" to provide information to young people on smoking, including prevention and cessation information (such as <a href="http://www.w-west.org.uk/">http://www.w-west.org.uk/</a> and <a href="http://www.quit.org.uk/youth-services/">http://www.quit.org.uk/youth-services/</a>), although there are no formal evaluations of these campaigns currently available.

## 2.2.4 Evidence on the use of social media and health promotion

Social media (including any mobile or web-based technology) is increasingly used as a platform for health promotion world-wide (Neiger et al., 2013). The use of social media in general is becoming increasingly prominent amongst younger people. Figures from the Office for National Statistics show that between 2006 and 2014 the daily frequency of computer use for 16 to 24 year olds rose from 63% to 70%, with 91% of internet activities for this age group being the use of social media including Facebook or Twitter (ONS 2104). A review of current evidence for the use of social media in health promotion found that individuals of all age groups report using social media to search for health information (Korda and Itani, 2013).

It is important to distinguish between educational programmes that are delivered over the internet and the use of the web and social media to deliver health promotion messages. Programmes taking the former approach are delivered using a structured format usually to participants who have been

specifically directed to the service, whereas the latter approach relies on individuals actively seeking or happening upon the information provided. As such, the effectiveness of social media campaigns can be difficult to measure. By contrast, such approaches are flexible and can be customized and tailored to sustain participation as individual users interact (Korda and Itani, 2013). Metrics on these interactions can be used to understand the level of engagement of individuals with the campaigns (Korda and Itani, 2013; Neiger et al., 2013; Norman, 2012; Ramanadhan et al., 2013), although this is acknowledged to be a developing methodological field (Williamson et al., 2013).

We found only one study that had set-out to explore the acceptability of YouTube videos to inform young people of the risks of smoking (Bottorff et al., 2014). Gender-specific videos were developed which examined the risk of developing breast cancer in girls who smoked. No data on smoking prevention or cessation was included in this study, but they did show that young people in British Colombia (Canada) found this an acceptable form of communication. In particular, the study subjects reported a willingness to share such videos using social networking sites, suggesting that this could be a cost-effective method of distributing health promotion information in these age groups.

#### 2.3 Conclusion

Although there are many smoking prevention and cessation strategies that have been developed to target individuals under 25 years of age, few have been empirically validated. School-based programmes are still heavily favoured due to the ease of delivering programmes within these settings. New programmes are being and developed and appear to be accepted as useful adjuncts to those which are school based. In addition specific curriculum-based educational programmes using a variety of new technologies (especially interactive internet-based sessions) are also currently being evaluated. Specific smoking prevention and cessation training programmes for professionals working with young people and the use of novel technologies as a platform for engaging young people in discussions around their health and health behaviours are well-accepted, but data on their effectiveness is still lacking.

## 2.4 Existing Research: Key Messages

- Although there are many evaluations of smoking prevention and cessation programmes, including several specifically designed to target young people, few have been empirically validated.
- School-based programmes are still heavily favoured, with one programme using peer supporters within schools in the UK suggesting a 22% reduction in the odds of becoming a regular smoker (odds ratio 0.78, 95% confidence intervals 0.64, 0.96).
- Smoking prevention and cessation training programmes for professionals working with young
  people and the use of novel technologies as a platform for engaging young people in discussions
  around their health and health behaviours are well-accepted, but data on their effectiveness is
  still lacking.

## 3. Research Design

A multi-faceted post-hoc process evaluation of The Filter was undertaken. First, tweets sent to or from The Filter Twitter account were subjected to thematic analysis. Second, semi-structured interviews were undertaken with The Filter staff, professionals who had undergone training from The Filter and young people who had either interacted with The Filter online or as part of face-to-face workshops. Finally, surveys were developed based on the findings of the interview study, which asked professionals and young people about their experiences of all elements of The Filter programme. Full details of the research method are provided below. The research received ethical approval from the Cardiff University School of Medicine ethics committee.

## 3.1 Analysis of Twitter content

Tweets to or from The Filter Twitter account from a six month period (March-August 2014) were selected for analysis. The end point (August 2014) was chosen, as it was the most recent data available at the time of analysis, and a data set of around 1,000 tweets was necessary to allow analysis of key themes and approach data saturation (Grant, in press). The time period from which data was sampled covered national tobacco control and stop smoking events such as No Smoking Day and Kick Butts Day, together with several events run by The Filter and ASH Wales. Data were extracted from Twitter by The Filter and imported as a dataset into NVivo 10, which was used as a tool to facilitate thematic analysis (Braun and Clarke, 2006). Tweets were coded into themes including the likely author (The Filter or a service user), and themes related to smoking prevention (such as saying no to smoking, smoking and physical appearance) and cessation (such as providing specific advice or encouragement to those who said they were quitting). It was also recorded if tweets contained a link to an attachment, such as an image or video.

## 3.2 Semi-structured interviews

## 3.2.1 Sample and participants

Interviews were undertaken with a purposive sample of four members of The Filter staff, to enable a broad range of experiences from within the team. No members of The Filter staff declined to participate. In addition The Filter team provided the researchers with contact details for professionals who had undertaken training with The Filter who had agreed that their details could be passed on. The potential participants were sampled from The Filter's database of individuals who had been trained by them. A purposive sample was developed of 10 people: 6 who had undertaken one training course; 2 who had undertaken two training courses and 2 who had taken three or more training courses. Of the 10 people invited, 6 went on to take part; (4 who had undertaken one training course; 1 who had undertaken two training courses and 1 who had taken three training courses).

The Filter staff had not collected a database of the young people's contact details, so we were unable to approach them directly. In order to identify young people who had attended The Filter

workshops, staff at two youth centres and one educational establishment identified by ASH Wales were asked to facilitate recruitment alongside The Filter staff inviting 3 volunteers to take part in an interview. In total 13 young people aged 14 to 25 were invited to take part in a face-to-face interview, and eight of these agreed to take part. The participants were recruited from a Pupil Referral Unit (n=4), two youth clubs (n=3) and through The Filter volunteer programme (1). All of the young people were from the South Wales area.

#### 3.2.2 Data collection

Interviews with The Filter staff and young people were conducted face-to-face, and interviews with professionals were conducted by telephone, to enable the sample to be taken from a wider geographical area within the time available. Interviews were facilitated by the use of topic guides, with a different topic guide prepared for each of the groups of participants, and were audio recorded and transcribed verbatim.

#### 3.3 Online interviews

Alongside the face-to-face interviews, young people who followed The Filter on Twitter were asked to take part in an online interview about their views of The Filter via Twitter. The Filter Social Media team identified young people who had interacted with The Filter Twitter feed and selected 15 people with repeat or 'strong' interactions in the 2-3 months before the evaluation. The Filter team replied directly to the young person's last tweet to The Filter asking if they would be interested in participating in the evaluation:

Hi, we're doing an evaluation of The Filter project. Would you be up for answering some questions with our researchers?

Eight young people agreed to participate. Twitter user names were sent to the researchers but it was not possible to directly message the sample. The Filter team then sent a direct-message to each young person who agreed to participate to ask for their email address:

Thanks so much for helping us out! Pls could we have an email address for you? The research team will then email you directly:)

All of the 8 young people provided email addresses which were then supplied to the research team. The research team then followed up each young person via email, providing a list of open ended questions for individuals to complete and return. One response was received.

## 3.4 Qualitative analysis

All interview transcripts and the answers to the one online interview were uploaded to NVivo 10. An inductive (theory building) and deductive (theory testing) approach to analysis was necessary, as a

result of the lack of previous research in this area. Data were analysed by a single researcher (AM), with another researcher (AG) examining coded extracts for their fit within the coding frame.

## 3.5 Online surveys

Following analysis of the interview data, two surveys were designed; one for professionals, the other for young people. Professionals who were on The Filter email contact list (n = 1571) were invited by email to complete a short online survey (via the Bristol Online Survey tool) by The Filter. A total of 598 professionals had undertaken training with The Filter since the start of the project, with 291 of them providing email details (included in the figure above (n=1571)). This acted as consent to be contacted by The Filter following training. 46 email addresses were found to be no longer in service, therefore a total of 245 individuals who had been trained by The Filter were invited to participate in the online survey. The survey consisted of 19 questions. A link to the survey was also advertised on the ASH Wales and Filter websites, Twitter feeds and Facebook pages.

Young people were also asked to complete a short online survey, again using the Bristol Online Survey Tool. The young people's survey also consisted of 19 questions in 5 sections. As The Filter had not collected email addresses from young people who participated, recruitment occurred in two ways. First, youth workers and teachers who had organised workshops with young people were asked to disseminate the survey to those who had taken part in workshops ( $n \approx 5000$ ) Second, the surveys were advertised on The Filter website, Twitter feeds (1046 followers at the time of the research) and Facebook page (1127 "likes" at the time of the research), and the ASH Wales website.

In total 21 young people and 87 professionals completed the survey. The exact response rate is difficult to ascertain since the young people survey was advertised widely over a public domain and in addition each professional who received an invitation to complete the survey directly from The Filter was asked to forward the survey link to colleagues.

## 3.6 Service use data

Data on the use of The Filter website, Twitter account and Facebook pages were collated by The Filter using Google Analytics. Google Analytics is a popular open access application which allows the user to measure online interactions with their websites and/or mobile applications. The Filter Social Media team used Google Analytics to collate monthly and annual figures in relation to user interaction with The Filter website, including number of visitors, number of page views and ranking of the top ten pages viewed. The Filter Social Media team also collected data using Excel on the usage of The Filter Twitter feed and Facebook pages, including number of Twitter followers, total Tweets and interactions, Facebook "likes", interactions and "reach". For the purposes of the evaluation we examined at data relating to the period between January 2013 and January 2015.

## 3.7 Presentation of Results

The results of the research carried out are presented below in three distinct sections to correspond with the three strands of the Filter's remit. First, training for professionals is considered. The report then shifts to consider youth development and education. Finally, the use of social media for health promotion is described.

## 3.8 Research Design: Key Messages

- Qualitative interviews, quantitative surveys, analysis of social media content and service
  user metrics were used to examine how deliverable and acceptable The Filter was to
  professionals and young people.
- Due to the methodology of the evaluation we could not assess the effectiveness of The Filter in terms of smoking prevention or cessation.

## 4. Results: training for professionals working with young people

The results presented below are divided by the source of data. First, the views of The Filter staff are described, before moving on to outline the views and experiences of the professionals who were trained by The Filter and took part in interviews. Survey responses are then considered before moving on to draw together the overarching findings. This format will be adopted throughout the report.

As part of The Filter, a dedicated training team was created. The stated purpose of the team was to provide interactive training sessions for professionals working with young people in Wales focusing on smoking prevention and cessation. The team offered a variety of training packages including how to deliver Brief Intervention (BI) for smoking cessation and exploring prevention and cessation issues with young people, also covering a broad range of topics including: addiction and withdrawal, challenging tobacco myths and the tobacco industry, benefits of quitting smoking, the power of branding, and what is in cigarettes. The training offered was redesigned at the end of the first year of the project to expand the range of topics covered, including additional cessation content, and new packages on e-cigarettes, shisha and illegal tobacco. Between January 2013 and January 2015 The Filter training team delivered training to a total of 598 people.

## 4.1 The views of The Filter Team

The Filter staff reported that they developed the training package in-house, based on their previous experience and knowledge of the field, and focused on priority areas identified in the Tobacco Control Action Plan for Wales. The training originally focussed on smoking prevention and the tobacco industry, but following feedback from those who attended training in the early months, was adapted to include smoking cessation when required:

We were then finding that it wasn't quite enough for people. They were saying "well that's great, but I need something I can do to help someone quit." Because they, well we were going out to some groups and they were saying that this is good, but actually most of the kids in my youth club, they already smoke, so this is not really gonna be helping them.

Moreover, in year 2 of delivery training, a further redesign of the training was developed and delivered. This allowed organisations to describe the particular areas of need they had ahead of training. All of The Filter staff reported that this allowed a better working relationship with the individuals and organisations who attended the training. The Filter staff also noted that they were also able to offer training around emerging issues, such as shisha (waterpipe) smoking and electronic cigarette use and illegal tobacco.

Staff members recognised that in the future it might be necessary to charge for training to make the project sustainable. However two members of staff expressed concerns that some organisations would not be able to access the training and this could negatively impact upon young people.

## 4.2 Interviews with professionals

There was a general consensus from the six professionals who were interviewed or provided feedback via email that the training offered was worthwhile and of a high standard. Professionals appreciated that the training was tailored to their specific needs. The content of the training was viewed as up to date and appropriate and individuals noted that the training team provided a very high quality service, such as creating additional training sessions, answering additional questions and providing copies of resources at the end of the training.

Interviewees were asked if they had used the training in their day to day roles, and five out of the six respondents said that they had made use of the training, for example:

It was good and I took that back and all the information they had in the training sessions, the little games and things like that, if we wanted them, they would email them through to us. So we had the equipment to go back and use it in the centre as well.

(Professional 4)

The training style adopted was also acceptable to interviewees:

The training in particular is aimed at young people and it looks at staff who work with young people so it's providing awareness training for staff ...... and of course it looks at resources and teaching new skills which would enable the staff when working with young people.

(Professional 5)

Professionals were asked if they felt any changes should be made to the training. Minor changes were suggested by three individuals. One individual suggested that accreditation of the training¹ would be helpful as an extra incentive for staff to attend the sessions. A second person commented that they felt the amount of equipment and stationary containing The Filter logo passed out was unnecessary. A concern raised was that the trainers did not appear to have any first-hand experience of smoking themselves which was deemed as necessary in order to empathize fully with the young people²:

There did also seem to be a slight issue in that the workers had not had experience with regards smoking themselves, which I know, in this particular field and subject can be hard to overcome as an engagement issue with certain individuals/service users.

(Professional 1)

<sup>&</sup>lt;sup>1</sup> The Filter team have provided accredited training on cessation since June 2014.

<sup>&</sup>lt;sup>2</sup> This concern is often raised in relation to NHS Stop Smoking Services' advisors, providing smoking cessation support.

## 4.3 Online survey of professionals

There were a total of 87 responses to the online survey, an estimated response rate of 6%. Respondents reported working within each of the 22 Local Authorities in Wales. Of the 87 respondents, 54 (62%) had undertaken training with The Filter. The remaining 33 (38%) had direct experience of The Filter through workshops delivered to young people that they worked with or had used The Filter's online resources. Of the 245 trained professionals who were invited to take part in the survey, a response rate of 22% was achieved. Table 4.1 indicates the number of training sessions each respondent had participated in.

Table 4.1: Respondents participating in The Filter training

Number of training sessions	Number of survey respondents (%)
1	38 (70%)
2	9 (17%)
3	4 (7%)
More than 3	3 (6%)
TOTAL	54

Among the respondents who had participated in the training there was a wide mix of professionals, including teachers, health practitioners, youth and project workers, policy officers, housing managers, members of the police force and social workers. 48 of these respondents (89%) indicated that they worked directly with young people. The majority of those who had been trained (n=32, 60%) had received training within the previous year, with almost a third (n=17, 31%) being trained more than a year ago, and five unable to remember.

Of the 54 respondents who had attended training sessions, training had been undertaken in: smoking cessation (74%), smoking prevention (54%), e-Cigarettes (50%), Illegal tobacco (20%), and Shisha (17%). Table 4.2 indicates that staff were positive about the training they had received, with 96% strongly agreeing that they had gained knowledge about smoking and 95% stating that the training was relevant to their needs as a professional.

*Table 4.2: Respondent rating of The Filter training* 

	Strongly Agree	Agree	Neither Agree nor	Disagree	Strongly Disagree
	7.8.00		Disagree		2.oug.cc
I gained knowledge about smoking	31 (57%)	21	2 (4%)	0	0
		(39%)			
The staff were engaging	37 (69%)	15	1 (2%)	1 (2%)	0
		(28%)			
The training was enjoyable	36 (67%)	15	2 (4%)	1 (2%)	0
		(28%)			
The training was relevant	37 (69%)	14	1 (2%)	1 (2%)	0
		(26%)			
I have used the training when	23 (43%)	16	9 (17%)	4 (7%)	0
working with young people		(30%)			

NB: Total may not reach 100% due to rounding and small number of participants.

A total of 73% of respondents either strongly agreed or agreed that they had been able to use the training when working with young people. In response to this question, many professionals commented that they had been able to integrate The Filter training into the work that they were already delivering as part of their day to day role, they were able to use it as an aide to discussion or that they had been able to utilise The Filter as a referral source for young people who needed extra support with quit attempts. For example:

I am able to provide strong evidence of the damage smoking can do but also regarding the bizarre and dangerous things that are put into cigarettes

In addition to this 45 (83%) of respondents said they had made use of Filter physical resources offered at training (leaflets, posters, merchandise advertising The Filter service), and 31 individuals (57%) had used The Filter information contained within the memory sticks supplied at training which contained resources including: quizzes, cessation aides and techniques, film clips and a 'tool kit'.

Professionals were asked to tell us what they thought was good about the training using an open text box. Many respondents (n=49, 56%) noted that the training was relevant and engaging, and the trainers had a good up to date knowledge of the subject. For example:

The materials the trainers had and the trainers themselves were very good

It was free, up to date, flexible, they came to us, it was relevant to the group we provide a service to, so helped with my professional development

Many new facts that I was unaware of and that I can now share with young people in my role

Alongside this, professionals were asked what didn't work so well within the training offered by The Filter. There were a limited number of responses provided (n=5, 9%) and the majority of them offered points to consider about the type of venue that was used or that the number of people attending the course was too large. Other respondent comments included:

I feel that the trainers didn't challenge the opinions of certain staff members that were there, and were sometimes advocating the use of 'organic' tobacco.

Some repetition in the afternoon. Some of the exercises took too long.

Informal approach - did not work so well in the classroom

## 4.4 Conclusion

Previous research (Amos et al 2009) suggested that there was a lack of cohesive working between professionals working in young people's intervention services. Professionals who took part in the evaluation welcomed the fact that the training was interactive and there was room made for discussion with other trainees within sessions. The Amos Review (2009) also noted a lack of person centred working within the smoking cessation and prevention world, suggesting a need for professionals to be trained in how to engage with and empower young people. Interviewees from The Filter team highlighted the bespoke nature of training provided, which has been recommended by Carson et al (2011) to enhance acceptability of the messages that training aims to deliver. Moreover, both The Filter staff and training participants recognised that the training delivered by The Filter team acknowledged the broad social context in which decisions to smoke are made by young people (Sowden and Stead, 2003). The flexibility of The Filter training was seen by both The Filter staff and the professionals group as pivotal to the success of the training and to the maintenance of an ongoing relationship between the organisations. Engaging young people in tobacco intervention or prevention services is difficult (Amos, 2009). The Filter team have aimed to facilitate this engagement of young people by offering customised training to the staff who work directly with this group, providing them with the tools they need to offer young people the correct facts and advice about smoking.

## 4.5 Training for professionals working with young people: Key Messages

- A dedicated team from The Filter provided individually tailored and interactive training sessions on smoking prevention and cessation for professionals working with young people in Wales.
- The Filter approach was valued by professionals. Training was reported to be high-quality, relevant and enjoyable.
- Professionals reported being able to use the training with the young people they worked with as part of services they were already delivering.

## 5. Results: Youth Development, Education and Smoking Cessation Support

The Filter employed a dedicated Youth Development Team to undertake community engagement with young people and deliver The Filter workshops across Wales. Between January 2013 and January 2015 they had worked with around 5000 young people through a total of 202 face to face workshops, 10 volunteering posts, two Filter The Facts weekends and 58 events (such as Fresher's Fayres and college open days), covering 21 of the 22 Local Authorities in Wales.

#### 5.1 The views of The Filter Team

The Filter staff were asked for their views on delivering The Filter workshops and the other work that The Youth Development Team was undertaking. The staff members all reported that the main goal of the youth development team was to deliver smoking cessation and prevention advice in a way that was youth friendly, didn't lecture and was informative yet engaging. All of The Filter staff reported that excellent communication with young people was key here and they had strived to maintain a youth work based approach that was informal, building relationships with the groups and young people they were working with.

The Filter Staff were asked what they thought worked well with young people when trying to spread health promotion messages. There was a consensus that the way the team worked was suited to youth groups and other informal learning environments in which open, non-judgemental interaction between the team and the young people could be achieved using a variety of participatory techniques which aimed to be relevant to young people. One member of the team stated that the approach was about giving the young people the information they needed and then leaving them to make their own choice whilst also reminding them that if they need help The Filter team could support them:

If we go there we can make them listen even if we have to use graffiti or do something completely different at the same time, we can still kind of get conversations with young people...so actually doing this they can engage in whatever way they want.

Another respondent reported that they felt that the "branding "of this part of the project had made it attractive to young people, for example the Youth Development Team had "The Filter" branded clothing which included t-shirts and hoodies. Leaflets and promotional items handed out at workshops were branded with The Filter logo which aimed to have a "cool" appeal.

There was awareness among The Filter staff that the outcomes from the workshops undertaken by the Youth Development Team were hard to measure, but could include outcomes related to confidence and skills in addition to health behaviours. There was also an acknowledgement that some of the groups of young people who The Filter interacted with, such as those at Pupil Referral Units, had challenging circumstances, and that the intervention might therefore be less effective in promoting quit attempts, because of the "competing priorities" in the young people's lives.

## 5.2 The views of Young People

All of the eight young people who took part in interviews had been introduced to The Filter project by staff at a venue they attended on a regular basis. Some young people reported that they were actively seeking advice or information on smoking or electronic cigarettes, but others became involved because The Filter team were visiting the youth centre or group that they were attending and it was part of the session. Three of the young people reported that they had also seen leaflets or posters about The Filter beforehand and had become interested in attending the workshops from these:

Well I'm a smoker myself. I had seen the posters about and I just thought it would be something quite interesting because I like knowing things about smoking and stuff that I do, so I thought they may be able to help me. It worked.

(Young Person 2)

Each young person was asked what they expected of The Filter. The majority (n=6) stated that although they had received a little bit of information and they were interested in attending they remained unsure about what to actually expect from the sessions, or they expected that The Filter would be "rubbish" or "boring". However the young people reported that their view of the service became more positive after the session:

I didn't expect anything to be honest, but it was good.

(Young Person 5)

Following The Filter workshop one of the interviewees was also inspired to become a volunteer with the team, because of their supportive and inclusive approach.

The number of workshops young people had attended with The Filter varied by the venue from which they were recruited. Two young people had attended a Filter workshop on a single occasion only, the remaining six individuals reported that they had met The Filter team a number of times (ranging from three to eight), showing that most respondents were highly engaged with the project.

The young people were asked for their views on how The Filter Team delivered workshops and less formal sessions. The young people reported that they liked that The Filter Team interacted with them "nicely", "normally" and didn't "preach" to them:

I think it's good because they don't just drone on about things. They make it fun and it engages you to listen.

(Young Person 3)

Workshop content and structure varied and The Filter Youth Development Team were able to tailor sessions to meet the needs of young people and the requests of the staff group working with them. Young people reported that they took part in: games and activities, discussion groups, graffiti

sessions, "Cut Films" sessions<sup>3</sup>, making t-shirts, music sessions, carbon monoxide monitoring and workshops around smoking itself (such as electronic cigarettes, cannabis, addiction and health). All of these activities were based around a smoking cessation or prevention theme. Young people reported that they had undertaken different activities each time they saw The Filter team, and they were always sessions which the young people could actively participate in and this was welcomed:

I mean they came in and they had a pen and a big sheet of paper and they were writing stuff on there, and they had the CO monitors. That was really fun because everybody got involved in that, even the staff got involved. It was quite interesting to see other people's views. They just made it fun. Because I have sat in workshops where they just sit and talk to you, which they didn't sit there and preach. They spoke about daily things with us and they added smoking into it which made it a lot more different to how I've seen it before.

(Young Person 2)

The most frequent activities that the young people were able to recall from the workshops were those which were visual, such as the use of the "Tar Jar" (a jar which shows how much tar a heavy smoker would ingest in a year) and pig's lungs which were used to illustrate the difference between the lungs of a smoker and a non-smoker. These had a clear impact on the young person's ability to understand the effects of smoking and tobacco use:

When they brought out the pig's lungs..... I said to them: "Anything you say won't put me off smoking!" They were showing me fag packets and the backs of them. I said that doesn't stop anyone from smoking, they buy them all the time. I said I guarantee you there is nothing that you can show me that's going to, you know. Then she said well I've got pig's lungs in the car. I said go and get them then, they won't scare me off. And when I seen them.... She was pointing out to me and showing me — I just couldn't do it, it was disgusting.

(Young person 2)

Overall feedback was positive and no young people reported that there was anything they would like to change about the workshops and there were no suggestions made when each person was asked if there was anything they thought The Filter Team had missed out. Young people reported that the workshops were useful and three respondents reported that their interaction with The Filter had made some difference to their smoking habits

*I:* Have they made a difference to you?

R: Yeah I've cut down to two fags a day.

*I:* How many did you used to smoke?

R: Twenty. (Young Person 5)

<sup>&</sup>lt;sup>3</sup> 'Cut Films' is an anti-tobacco short films competition run by The Deborah Hutton Campaign in England and Wales

## 5.3 Young People Online Survey

In total 21 young people completed the survey. Although it is not possible to calculate a true response rate, as recruitment was facilitated by those who organised workshops, it represents less than 1% of the individuals who participated in workshops. 10 respondents were male (47.6%), 10 were female (47.6%) and one respondent preferred not to say (4.8%). We asked the participants if they had met The Filter Youth Development Team at a place they visited on a regular basis, 20 young people responded with 11 stating that they had seen The Filter team at a venue they had been to. Four of these had met the team at more than one venue, with local youth group (4), college (3), festival (3) Filter the Future (3) and adults training centre (4) the specified locations.

Out of the 11 young people who reported seeing The Filter Youth Development Team almost all of them had received information on smoking cessation (n=10) and a high number reported learning about smoking prevention (n=8). Further topics are detailed in Table 5.1 below:

Table 5.1: Young People's views of what was contained in youth development workshops

Topic	Number of respondents
Stopping smoking for people who already smoke	10
Reasons not to start smoking for people who don't smoke	8
Cannabis	6
Electronic Cigarettes	4
Shisha	4
Cut Films	2
Other (legal highs)	1

The respondents were asked their whether they agreed or disagreed with some statements about The Filter workshops (see Table 5.2). Participants unanimously reported that they had learnt something about smoking from the workshops they had attended (n=11), and the young people were close to unanimous in agreeing that they had enjoyed the sessions with The Filter Team (n=10) and The Filter team had made the sessions fun (n=10).

Table 5.2: Young People's views of youth development workshops

	Agree	Disagree	Don't know
I enjoyed the session with The Filter Team	10	0	1
The Filter Team made the session fun	10	1	0
I learnt something about smoking	11	0	0

Young people gave examples of what they thought was good about The Filter workshops and the Youth Development Team. Comments included that the training was enjoyable and engaging, friendly, informative, interactive and flexible. One young person appreciated the fact that everybody

got to mix with each other during the sessions. Another compared the approach used to that found within health education in schools:

They were much better than anything I learned about smoking in school

When asked if there was anything that they felt was not working with regards to The Filter one person noted that they found the workshops to be "judgemental". There were no other responses.

Less than half of the total respondents to the young person survey (n=21) reported that they had talked with their friends or relatives about anything they had learnt from The Filter. Only eight (38%) of the young people had passed on information such as facts about the dangers of smoking, or promoted The Filters' services, to friends and/or family.

Respondents were asked to tell us about their smoking habits. Firstly we asked those who *did not* currently smoke if The Filter had changed their thoughts about if they would smoke in the future. Out of 18 responses three young people reported that they were now less likely to smoke. 12 young people already knew that they wouldn't smoke and one respondent was unsure whether they would change their smoking behaviour (two young people who reported they were current smokers). We also asked young people if they were *current* smokers had The Filter had made them think about changing their smoking habits, the results are noted in Table 5.3. Out of five smokers, one young person reported that they already had or planned to stop smoking altogether and a second young person planned to cut down. One young person did not plan to change their smoking behaviour as a result of The Filter and two people were unsure if their habits would change.

*Table 5.3: Changes in smoking behaviour since The Filter* 

Smoking behaviour since The Filter	Number of respondents
I have or plan to stop smoking altogether	1
I have or plan to cut down on the number of cigarettes I smoke	1
I haven't changed and don't plan to change the amount I smoke	1
I have or plan to increase the number of cigarettes I smoke	0
I don't know whether I will change my smoking behaviour	2
I don't smoke	15

## 5.4 Interviews with professionals

Feedback from professionals was minimal as out of six professionals interviewed only two had direct experience of The Filter workshops. The two respondents noted that they had received input from the Youth Development team on a number of occasions within the groups that they were working. The workshops provided were seen as relevant, enjoyable and beneficial for the young people. In addition, the visual aspects of the workshops were highlighted by one respondent as particularly good. The relationships that The Filter staff were able to build with the young people were also noted as positive by both respondents. Communication was viewed as excellent between The Filter team and the young people, with respondents impressed by the skill of The Filter staff in being able to quickly generate rapport.

## 5.5 Professional Online Survey

Professionals who responded to the online survey were asked if The Filter Youth Development Team had worked directly with young people they were involved with. Out of a total of 87 respondents 36 professionals (41%) answered yes, 36 (41%) stated no and 15 people (18%) reported they didn't know. Professionals with experience of The Filter Youth Development Team's workshops reported that the team had covered a wide variety of topics within the workshops they provided (see Table 5.4). The most popular topics were smoking cessation (75%) and smoking prevention (75%). "Other" topics included "legal highs".

Table 5.4: Topics professionals thought had been covered by The Filter when working with young people

Topic	Number of respondents
Smoking Cessation	27
Smoking Prevention	27
Electronic Cigarettes	15
Cut Films	12
Cannabis	10
Illegal Tobacco	7
Shisha	5
Other	5

Professionals were asked to rate a number of statements relating to the input the young people they worked with had received from The Filter Youth Development team. The results are included in Table 5.5. The majority reported that the team engaged well with young people (n=34, 94%) and that the young people enjoyed the sessions they had participated in (n=34, 94%). Almost unanimously professionals reported that the sessions were appropriate (n=35, 97%) and that they felt that the young people had learnt something about smoking (n=35, 97%).

*Table 5.5: Professionals' ratings of The Filter workshops* 

	Yes (%)	No (%)	Don't know (%)
The Filter Team engaged well with young people	34 (94)	1 (3)	1 (3)
The sessions were appropriate	35 (97)	0	1 (3)
The young people enjoyed the sessions	34 (94)	1 (3)	1 (3)
The young people learnt something about smoking	35 (97)	0	1 (3)

Participants were asked to tell us what was good about the service provided by The Filter Youth Development Team. There were a number of comments (10 out of 25) noting the rapport between The Filter Youth Development Team and the young people, and the high quality of the workshop activities, for example:

(Member of The Filter team) was able to build a good rapport with our students and made the sessions enjoyable. Students from other classes requested to join the group.

Further comments noted the professionalism of The Filter staff and an appreciation by the respondents that The Filter were able to provide a service which was ongoing and available within their local community. Finally, we asked participants if they felt there was anything that hadn't worked so well with The Filter. Two comments were made, both suggesting that although the service is well received there is a need for more regular follow up visits to reinforce the messages.

### 5.6 The Filter Advice Service

As part of the Youth Development team, The Filter included a dedicated telephone, SMS and instant messenger advice service with Cessation Officers employed specifically to staff this. The advice service initially operated between the hours of 3pm and 8pm on weekdays. This was to reflect the times that young people finished school and would be likely to contact the service. The advice service was well promoted through The Filter Website, Twitter feed, Facebook pages and other Filter social media platforms, for example (5%) of all tweets analysed between January 2012 and August 2014 related to the Filter telephone helpline. For example:

Well done! @xxxxxx You're doing great, if you need any support feel free to come through to our advice line:)

Despite this The Filter staff found that most of the advice service traffic was around the times from 3pm to 5pm and it was reported that there was missed traffic at lunchtime. They also reported that the advice service was only being accessed by a limited group of young people and was often used by professionals. There were a total of 837 contacts on the advice service from January 2013 to March 2015, an average of 32 contacts per month, although it is unclear how many of these were young people and how many were professionals, as this data was not recorded by The Filter. None of the young people we interviewed or who participated in the online survey reported they had accessed the telephone advice service. There were 6 professionals (7%) who undertook the online survey who reported that they had utilised the advice service.

As a result a change in operating hours was made to 10am to 4pm, Monday to Friday. This proved to be more cost effective and freed up staff for other purposes. The 'call handling' service which was costly to operate was also deemed unsuitable at this time and was cancelled. The flexibility of The Filter project allowed for the amended advice service to be supplemented with an instant messenger service, together with applications such as "Whatsapp" and Snapchat" which were felt to be more relevant and accessible to young people. This is run jointly between the social media team, who identified young people in need of advice, and the youth development team who provided the advice.

#### 5.7 Conclusion

The Filter developed a workshop-based approach to sharing tobacco control and smoking cessation messages, which was delivered to small groups of young people in their own communities within youth groups, education units and through local events. The Filter staff reported that delivering these sessions was unproblematic, and professionals identified a very strong rapport between The Filter staff and young people. The range of activities included in workshops was also identified as a key way of sustaining interest from young people, and visual aids were identified as particularly engaging. Young people reported that they preferred the friendly interactive style used by The Filter to the more lecture based approach used in school. Some young people suggested that their interaction with The Filter had changed their planned behaviour in relation to smoking, or encouraged them to cut down or quit if they were existing smokers. Despite The Filter advice service being well promoted via social media its usage was relatively low, especially by young people. The flexibility of the project allowed for changes to the operating structure of the advice service to be made quickly and efficiently. This allowed for the most efficient usage of staff time and the supplementation of the amended advice service with more up to date platforms to encourage usage by young people.

## 5.8 Youth Development, Education and Smoking Cessation Support: Key Messages

- The aim of The Filter staff was to provide a service which was young person friendly, branded to appeal to young people, non-judgemental and informal. Alongside this, the service aimed to be educational and to allow relationships to be built between The Filter staff and the groups they worked with.
- The visual aids used in workshops by The Filter (pig's lungs, smoking images, tar jars) were reported to be impactful by young people and professionals.
- Professional noted the high degree of rapport between The Filter staff and the young people was important in the effective delivery of the smoking prevention and cessation messages.
- Few young people engaged with the advice service, but this service was used by some professionals.

## 6. Results: Online Health Promotion

The Filter used a variety of online platforms to communicate with young people in Wales. These included a dedicated website (www.thefilterwales.org) and social media pages (Twitter, Facebook, YouTube, Pinterest), mobile apps (Snapchat, WhatsApp, Distractor app), and an instant messenger service. Social media feeds included a mix of media-rich content including videos, photographs, animations and text which aimed to be relevant to young people but retained tobacco control as the key focus. In particular, the social networking sites Twitter and Facebook were selected as a key way of disseminating information by The Filter team as, at the time of the research, they had the largest usage within the social media market for 11-25 year olds (Winpenny et al., 2014). All of the platforms were chosen as they allowed for the two-way flow of information between The Filter and the target audience. User-generated content was encouraged by The Filter and the website was designed to be fully integrated with all the social media platforms. The Filter employed a dedicated Social Media and Campaigns Officer together with a Digital Media Officer to undertake the task of developing and maintaining social media accounts over the course of the project.

## 6.1 Website use

Over the two year period, The Filter website had 33,024 visitors, with 89,876 page views; an average of 1,376 visitors (range 813 to 2,906) and 3,745 page views (range 1,668 to 5,383) per month. Figure 6.1 shows that the number of monthly unique visitors grew slightly from 1128 in January 2013 to 1637 at the end of 2014, peaking at 2906 visitors in the month of April 2014. Interaction with the website varied over time and peaked in conjunction with events such as Stoptober and Cut Films events4.

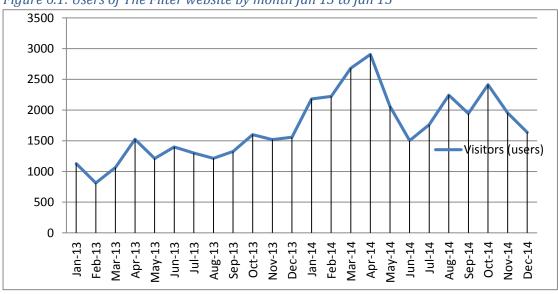


Figure 6.1: Users of The Filter website by month Jan 13 to Jan 15

 $<sup>^4</sup>$  The Filter Social Media team reported an increase in Cut Films advertising on their Facebook page in April 2014. Each version of the advert was responsible for 300-600 click-throughs to The Filter website. A larger percentage of visitors came from social sources than in neighbouring months, and the highest-ranking 'direct' arrival page was the Cut Films information page.

The most popular pages over the period analysed were The Filter website homepage (13,988 views) (Figure 6.2), the "Fact Bank" page on smoking and looks (8,457 views) and the "Help Stop Smoking - how to say no to smoking" page (6,536 views). Other pages which were consistently viewed included The Filter general "Fact Bank" homepage (Figure 6.3), the "Fact Bank" E- Cigarettes pages and the Stop smoking / Help to stop smoking pages.

Figure 6.2: The Filter Website homepage (accessed 20.03.15)



Figure 6.3: The Filter Fact Bank homepage (accessed 20.03.15)



#### 6.2 Social Media Use

The Filter Social Media team collected weekly data on Twitter usage on an ad hoc basis between January 2013 and January 2015. In total there were 35 weeks of data available for 2013 and 33 weeks of data available for 2014. The data compiled for Twitter usage showed the number of followers, @interactions and re-tweets, # interactions by The Filter, and the total interactions overall. The number of Twitter followers The Filter obtained increased steadily on a monthly basis from 418 in January 2013 to 1029 in January 2015 and 10,044 tweets on The Filter Twitter feed had been reached. During 2014 The Filter Social Media team composed, retweeted or received a mean of 267 interactions monthly via the Twitter feed. Due to missing data it was not possible to produce these figures for 2013.

Similarly the team gathered weekly data on an ad hoc basis regarding usage of The Filter Facebook account between January 2013 and January 2015. In total there were 40 weeks of data available for 2013 and 40 weeks of data available for 2014. Figures on the number of interactions (comments, likes, shares of posts), and total reach (the potential number of Facebook users who could view The Filter content on their news feed) were collected. Comparably to the Twitter Feed, the number of people "liking" The Filter Facebook page also grew steadily each month, from 116 "likes" in January 2013 to 1124 "likes" in January 2015. The mean number of people commenting, liking or sharing the Facebook page per month in 2014 was 231 (range = 94 in March 2014 to 431 in October 2014), with a mean monthly population reach of 2645 people (range = 331 in August 2014 to 4,487 in April 2014). Due to missing data it was not possible to produce these figures for 2013.

## 6.3 Content of The Filter Twitter Feed

Thematic analysis examined the source of tweets, that is who had written the tweet, and the topics contained within tweets.

## 6.3.1 Sources of Tweets

Tweets originated from either the filter team or third party users. The filter team tweets feel into three categories: (1) in response to a third party Twitter user, (2) as a 'new' topic, or (3) by retweeting third party content. An additional two categories were identified: (4) tweets to the Filter team (a combination of replies to The Filter team and new tweets) and (5) source of tweet unclassifiable.

The largest category found in the study period was The Filter team re-tweets (n=838, 51%). Each tweet included here had been selected by The Filter team and re-tweeted as it contained smoking/tobacco related content. The information re-tweeted by The Filter team represented a broad mixture of content, from a variety of sources. This included information on health, cessation and prevention campaigns and event promotions, as well as a significant number of young people talking about smoking and how it affected them, together with young people speaking about their quit attempts.

The second largest source of tweets were tweets generated *by* The Filter team (n=449, 27.6%). A variety of information was tweeted including smoking facts and myths, quit advice, light–hearted items (such as "Fun Friday" and "Weird Wednesday" tweets), event promotions and tobacco control campaign details. There were also frequent links to The Filter webpage included.

Replies *from* the team accounted for a further fifth of tweets (n=344, 21%). This category comprised tweets written by The Filter in response to young people's tweets, although these were not necessarily tweets directed to The Filter Twitter account, but tweets which contained content relevant to smoking. In these tweets, The Filter team used Twitter in a directed way with numerous posts offering support or advice, however, the majority of posts were those offering a positive message to young people who were making quit attempts.

The number of tweets *to* The Filter team Twitter account made up a smaller proportion of tweets (n=110, 6.8%). These tweets fell into 3 categories as follows: First, a response to online support (n=42, 38%), this generally involved a tweet from a young person in response to The Filter team, saying "thank you" for support, help or advice with their quit attempts. Second, "thank you" tweets following meeting The Filter staff (n=33, 30%) typically from youth groups, young people or professionals who had attended The Filter project events or training who were saying thank you for the input they received from The Filter. Finally, "other" tweets were commonly statements about issues with or experiences of smoking.

Within the six month period analysed there were 7 individuals and one youth group engaged in "conversations" with The Filter project via Twitter, for example the youth group became frequent "tweeters "to The Filter, providing updates on the work they were doing around smoking cessation and prevention, and several individuals responded to tweets from The Filter which then became two way interactions on the progress of quit attempts. Such conversations often included mutual thanks and support.

Just over half of the tweets analysed contained an attachment (n=838, 51%). Attachments were included not only within tweets generated by The Filter team themselves, but within retweets and replies *to* The Filter team. The majority of attachments included were links to various pages on The Filter website, offering support and advice (including promotion of The Filter advice line), information on the health benefits of quitting, volunteering with The Filter, sharing stories and campaign information. There were also attachments communicating smoking/ tobacco related news stories and events together with a number of tweets supplemented with images or video used to illustrate a message. Attachments were tailored to each individual in instances where The Filter Team used an attachment to offer support or advice.

## 6.3.2 Subject of Tweets

The analysis aimed to identify the main subjects that were being tweeted about via The Filter Project Twitter account. Six main themes were identified, as displayed in table 6.1 below. Further explanation of the themes and example quotations can be seen below.

Alongside these themes, 249 of the tweets (15.3%) were also coded as "positive". This category was largely made up of motivational tweets to a young person, giving them encouraging and constructive support with their quit attempts. Again each tweet was a tailored reply to the young person, offering individual reassurance and praise.

"Event Promotion" was also a highly discussed theme (n=240, 14.7%). Tweets related not only to events and campaigns run by The Filter project itself, such as The Filter residential weekends and attendance at festivals, shows and Further Education open days, but also to national and international campaigns, such as Share the Air and World No Tobacco Day. The majority also included attachments with further information. The Filter project website was frequently mentioned in tweets (n=206, 12.7%). These, together with tweets leading to The Filter telephone helpline (n=83, 5%), commonly also included an attachment linking to the website or helpline details as appropriate. A reference to the website or helpline within a tweet routinely occurred throughout the period analysed and across many of the other categories of tweet.

"Quit Progress" (n=177, 10.9%) represented instances where young people were tweeting about their experiences of quitting, ranging from a few hours to years being smoke-free. The majority of these tweets were Filter team re-tweets of young people's independently created content. Alongside this, The Filter team frequently replied to these tweets and offered the "positive" interaction described above.

*Table 6.1: themes found within tweets* 

Main theme	Sub-theme	total
The Filter Resources	Website	206
	Helpline	83
	Distractor App	38
	Volunteering	24
	Youth Development Team	16
	Training for professionals	2
Tobacco event promotion	Event promotion	240
	Cut Films	63
Information sharing	Heath benefits of quitting	60
	News item	36
	E-cigarettes	30
	Pregnancy	15
	Second-hand smoke	10
	Tobacco packaging	7
	Nicotine replacement therapy	7
	Drugs	7
	Waterpipe	6
	Illegal tobacco	2
Tobacco control campaigns	Share the air	18
	Smoke-free spaces	16
	Smoking in cars	15
	Smoking and litter	12
Quitting smoking	Quit progress	177
	I think I'll quit	62
	I have quit	43
	I'm giving up for lent	5
Unclassifiable or not related to	Unclassifiable	233
tobacco	Fun Friday	30
	Weird Wednesday	18

NB: themes were not mutually exclusive.

"Unclassified" tweets were typically tweets which included a random statement about smoking which did not generally fit into any other category, together with a minority of tweets which were not smoking related. Again these were mostly re-tweets by The Filter team.

#### 6.4 The views of The Filter Team

The Filter Team reported that the social media strand of The Filter was designed to work in conjunction with the other aspects of the service, and to explicitly be youth orientated and "cool". It was acknowledged that the amount of content uploaded to a particular platform was associated with the amount of interest or views that platform received. However, one staff member reported that although the content on The Filter Facebook page was being viewed by a lot of people it was hard to involve young people in conversations about smoking on Facebook, instead it was reported by staff that Twitter worked well for engaging young people.

Social media trends changed quickly during the first two years of The Filter, and all of the staff respondents noted that alternative platforms were used when engagement appeared to be lower than desired. The staff reported that there was also a significant effort via The Filter social media to promote The Filter helpline and Distractor App developed by the team, as well as sharing content that young people had posted via Twitter and Facebook. Instead of expecting the young people to go to them the social media team aimed to reach out to the young people.

The Filter staff team reported that they intended for the social media content to be engaging and thought-provoking, allowing young people to understand the dangers of tobacco use and the role of corporate advertising. Moreover, the respondents identified that a key strength of the social media aspect of The Filter was its ability to communicate information regarding news items and campaigns in order to raise awareness or to encourage young people to take action.

## 6.5 The views of Young People

We asked the eight young people who were interviewed face-to-face if they had used any of The Filter social media platforms. None of respondents had accessed any of The Filter Social Media. Two young people were aware that The Filter had a website and Twitter page.

We received a very low response to the call on Twitter for young people to participate in online interviews. The one respondent reported that they had found out about The Filter when the social media team had retweeted and replied to some of her tweets about smoking, therefore in this case the interaction was started by The Filter team. When asked if they had liked The Filter tweeting them the response was positive, with The Filter viewed as 'encouraging'. The person also reported that although she wouldn't necessarily tweet them first, she would reply to The Filter if they tweeted her again. The respondent stated that she had not visited The Filter website or any of the other Filter social media platforms.

## 6.6 Professional Online Survey

A total of 75 (86%) of survey respondents reported they had accessed at least one of the online resources offered by The Filter over the two year period prior to the survey. Table 6.2 details the online resources that respondents had accessed. The figure shows that respondents were most likely to access the general areas of The Filter website (75%) and the ASH Wales website (64%). There were low engagement levels with Twitter, with only 13% of respondents following The Filter Twitter feed.

Table 6.2: Interactive Resources accessed by respondents

Resources	Number of responses (%)	
Viewed general areas of Filter website	65 (75%)	
Viewed Professionals area of Filter website	37 (43%)	
Viewed the ASH Wales website	56 (64%)	
Viewed The Filter Twitter feed	15 (17%)	
Followed The Filter on Twitter	11 (13%)	
Viewed The Filter Facebook page	21 (39%)	
Liked The Filter Facebook page	15 (17%)	
Called The Filter telephone advice line	6 (7%)	
None of the above	8 (9%)	

We asked survey participants to explain why they were using The Filter online resources. 56 of the participants responded to this question, responses focused upon three areas. First professionals reported accessing the resources in order to keep their own knowledge and information up to date, including sharing the resources with other professionals. Second, individuals were using the information to promote discussion amongst the young people they were working with. Finally, respondents were looking for somewhere that they could signpost the young people to for advice on smoking cessation and prevention.

Respondents were also asked if their needs were being met by the interactive resources offered by The Filter. Of the 52 participants who answered this question, 51 respondents responded positively, stating that they had found them useful or had been able to utilise them when working with young people. The remaining respondent reported that they had not accessed the resources at the time of the research.

Participants were asked if they had shared information contained within The Filter interactive resources. 72 (96%) of those who had accessed the interactive resources stated that they had shared the information and 3 (4%) reported that they had not shared the information with any other people. Table 6.3, below, shows that 71% of professionals stated that they had shared information with the young people they worked with and 67% had shared information with fellow professionals. Also encouraging to note is that the information was also being shared with people in the more general population by professionals who responded to the survey.

Table 6.3: Sharing of The Filter interactive resources by professionals who had accessed the resources

	Yes (%)	No (%)	No response
Shared with Young People	53 (71)	9 (12)	13 (17)
Shared with Other Professionals	50 (67)	11 (15)	14 (19)
Shared with others not included above	19 (25)	14 (19)	42 (56)

NB: Percentages may not total 100 due to rounding.

## 6.7 Young Person Online Survey

The 21 young people who responded to the online survey were asked which of the social media platforms available from The Filter they had accessed. Table 6.4 outlines the responses. Of the young people who responded, 11 said they had viewed the website (26%), with the next most popular platforms being Twitter (16%) and Facebook (16%). 11 young people reported that they had not accessed any of The Filter online resources. Most of the young people who used The Filter's interactive resources reported using The Filter social media either weekly (n=4) or monthly (n=3) with the remaining respondents using it "occasionally" (n=2). There were no respondents who reported that they were using The Filter social media sites daily.

Table 6.4: The Filter social media accessed by Young People

Social Media Platform	Number Of Respondents	Percentage of Respondents
The Filter Website	11	26%
The Filter Twitter feed	7	16%
The Filter Facebook page	7	16%
The Filter Instagram page	1	2%
The Filter Pinterest page	1	2%
The Filter YouTube site	2	5%
The Filter WhatsApp	0	0%
The Filter Snapchat	3	7%
Other (Please specify below)	0	0%
None	11	26%

Participants were asked to rate their agreement or disagreement with four statements regarding The Filter interactive resources. A total of 11 young people answered this question. Figure 6.4 shows that overall the young people that used The Filter online agreed that they had been able to learn something about smoking (90%) and that the information presented had been easy to understand (90%). With regards to the visual aspects of the social media resources 82% of the young people who responded agreed that they liked the way in which the information was presented and written. It was also encouraging to note that 82% of the survey participants would continue to use The Filter social media in the future.

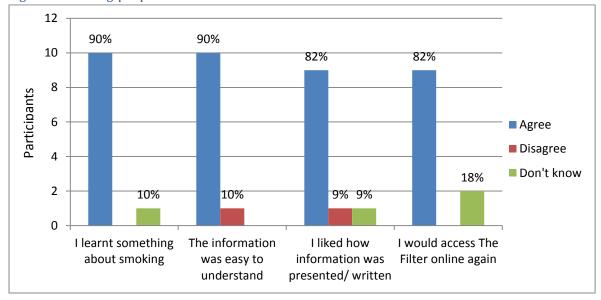


Figure 6.4. Young people's views about The Filter Social Media

When asked what they liked about The Filter social media, eight young people responded. Participants noted that the sites were easy to use, accessible and the information received was helpful. Five participants also gave further comments on The Filter and gave an indication of how people were able to use the information from the social media sites. One suggested that they had 'quit smoking as a result' of the information they had accessed.

In terms of what young people did not like about the sites, there were three responses offered. One respondent felt that there was a "judgemental attitude" to the social media output by The Filter, whereas the other young people reported that they felt the layout of the platforms needed improvement.

## 6.8 Conclusion

The Filter team attempted to transmit tobacco control messages via a wide range of online platforms. They have achieved some level of success in terms of potential reach on Twitter and Facebook and actual reach on The Filter website. However, it was not possible within the confines of this research to understand if these users fit within the target demographic for the intervention, and how much overlap there was between The Filter face-to-face services and online services. The Filter staff reported that the online content was deliverable by using a flexible approach, including the use of multiple and changing online platforms. It was not possible to understand how acceptable this intervention was to young people, as only one of The Filter's followers agreed to take part in an online interview, and only 11 respondents to the online survey had interacted with the online resources. The evaluation of social media based interventions has been acknowledged to be a challenging area (Bailey et al., 2015) and this low response does not mean that the intervention is not reaching the targeted individuals, but that the individuals were not willing to take part in a brief evaluation.

The use of social media as a health intervention tool is still in the early stages of research and therefore projects such as The Filter are rarely designed with an evaluation of the social media

elements in mind. The use of a dedicated social media team has gone some way to help with this as it allowed for the basic collection of data, such as those available through Google Analytics, which could be used by the evaluation team. However, as part of future interventions with an online component, evaluations should be planned from the beginning as data collection needs to be consistent throughout the course of the project in order for a comprehensive appraisal to be possible.

## 6.9 Online Health Promotion: Key Messages

- Usage of The Filter website and social media platforms was reasonable, but it is not possible to conclude that this was made up of The Filter's target audience.
- Targeted messaging by The Filter social media team had limited success in engaging individuals in conversation about tobacco use.
- Professionals reported using The Filter website following training by The Filter team.
- Engaging young people in an evaluation of The Filter via social media was challenging.

## 7. Conclusion

## 7.1 Summary of key findings

In this post-hoc process evaluation, we used qualitative interviews, quantitative surveys, analysis of social media content and service user metrics, to examine how deliverable and acceptable the Filter was to professionals and young people.

The Filter training team reported the value of including a range of activities and visual aids to ensure success during training, and reported a willingness to adapt training modules and online engagement methods according to the requirements of the individuals they were training and in response to new emerging issues (such as Shisha use and e-cigarettes). Professionals reported that they valued this interactive and flexible approach, reporting that the training was high-quality, relevant, enjoyable, and gave them new knowledge. They also reported that they had put some of the techniques they had learnt into practice in their work with young people.

The Filter staff highlighted the efforts that they had made to develop a strong rapport between themselves and young people. Both the young people and professionals interviewed confirmed that their interactions with the team were positive, and the young people particularly liked the visual nature of the materials used during the face-to-face sessions. Some young people suggested that their interaction with The Filter had changed their planned behaviour in relation to smoking, or encouraged them to cut down or quit if they were existing smokers.

The Filter used a variety of social media platforms to communicate with young people in Wales, including a dedicated website (www.thefilterwales.org), social media pages (Twitter, Facebook, YouTube, Pinterest), mobile apps (Snapchat, WhatsApp, Distractor app), and an instant messenger service. Usage of these online resources is encouraging: The Filter website had 33,024 visitors, with 89,876 page views over a 2 year period; the Twitter feed had 1,029 followers by January 2015; and the Facebook page had 1,124 "likes" by January 2015. 86% (n=75) of professionals surveyed reported accessing at least one of these online resources, to keep their knowledge up-to-date and promote discussions with the young people they worked with. However, Filter staff noted that engaging young people in conversations about smoking via these channels was challenging. This was confirmed when we attempted to recruit the young people who follow The Filter on Twitter to respond to an online survey of their views of The Filter; only 21 young people responded to this survey.

## 7.2 Strengths and weaknesses

To carry out this evaluation, we were given full access to The Filter team and their contacts in order to gather samples for the interviews and surveys. We were also able to use a mix of qualitative and quantitative methods to obtain data relating to both use of The Filter resources and people's opinions on these. This allowed us to draw conclusions about the deliverability of the service as well

as its' acceptability to both professionals working with young people and the young people themselves. The user metrics collected by The Filter also provided useful additional information.

The methodology of this evaluation did not allow us to examine the effectiveness of The Filter in terms of smoking prevention or cessation. The evaluation was post-hoc in nature, with no data available for baseline smoking information on participants who had later contact with the service. In addition, follow-up of the young people who had been in contact with the service was challenging, with a low response rate to both the requests for interview and the online survey. It was not possible within the confines of this research to understand if the users of the service fitted within the target demographic for the intervention, and how much overlap there was between participants in The Filter face-to-face services and online services. Lastly, it was not possible to understand how acceptable this intervention was to young people, given that only a limited number agreed to interact with the evaluation.

## 7.3 Implications for practice

The data in this evaluation suggests that The Filter is a service which is feasible to deliver and provides information which professionals report using in their day-to-day work.

Key features of the service which made it acceptable and viewed positively by the professionals who had contact with the service were:

- 1. The interactive nature of the face-to-face sessions;
- 2. The flexibility of The Filter team both in adapting sessions to the needs of the participants and in developing new sessions where key emerging issues were identified; and
- 3. The effort made by The Filter team to develop a rapport with both the professionals and young people with who they interacted.

Young people seem to respond well to the informality of the sessions and the highly visual nature of the materials developed for the sessions.

Drawing conclusions on the utility of the social media component of the service is challenging, and improved methodologies to test complex interventions which include an online component are needed. We note that there is an ongoing feasibility study of The Filter FE service currently being conducted, which may provide useful information to this end.

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