Full title: Reducing population exposure to unhealthy commodity advertising: evaluation of the Bristol Advertising and Sponsorship Policy (pre-intervention Data Collection)
Short title: Bristol Advertisement Ban

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KEY STUDY CONTACTS

Chief Investigators	Professor Frank de Vocht, Bristol Medical School. (frank.devocht@bristol.ac.uk)
Funders	NIHR Public Health Research Rapid Funding Scheme
Key Protocol Contributors Professor Russ Jago, School of Policy Studies (Russ.Jago@bristol.ac.uk) Professor Jeremy Horwood, Bristol Medical School (J.Horwood@bristol.ac.uk) Dr Zoi Toumpakari, School of Policy Studies (Z.Toumpakari@bristol.ac.uk) Dr James Nobles, Bristol Medical School (james.nobles@bristol.ac.uk) Dr Carlos Sillero Rejon, Bristol Medical School (carlos.sillerorejon@bristol.ac.uk) Professor Steven Cummins, London School of Hygiene & Tropical Medicine (Steven.Cummins@lshtm.ac.uk_	

II.STUDY SUMMARY

Study Title	Reducing population exposure to unhealthy commodity advertising: evaluation of the Bristol Advertising and Sponsorship Policy (pre-intervention Data Collection)
Internal ref. no. (or short title)	Bristol ad ban evaluation
Study Design	Cross-sectional survey and interviews
Intervention	Introduction of the new Bristol Council unhealthy commodities (HFSS, alcohol, gambling) advertisement policy
Study Participants	Residents of Bristol and South Gloucestershire
Planned Size of Sample	2,000 to 3,000
Planned Study Period	November 1st 2021 – February 28 2022

III.STUDY MANAGEMENT

Sponsor

Funder

This research is supported by National Institute for Health Research Public Health Research Rapid Funding Scheme (NIHR135220).

Project Management and governance

Professor de Vocht will manage the project and the survey data collection. Dr Toumpakari will manage the exposure assessment part of the study and Dr Nobles the qualitative data collection. The whole study team will meet monthly face-to-face or online via Teams. Issue that may occur in between meetings will be dealt with via email. Each meeting aims to have Ms Blake, the PPI co-applicant, attending.

A Study Steering Committee (SSC) will be established during this pre-intervention data collection project, which will subsequently stay on for the full evaluation (if funded). The SSC will meet twice to provide input into project results, external validation and transferability (Month 3), and development of the full evaluation research (month 5).

1. PLAIN ENGLISH SUMMARY

Aims of the Research: This research project aims to collect information on how much people in the city of Bristol and in South Gloucestershire see advertisements for unhealthy products such as junk foods and soft drinks, alcohol, and gambling. It also aims to find out how often they use these products. This is important because Bristol City Council will ban this sort of advertising in the city at the end of 2021. To be able to see if the ban had an effect we need to collect information before and after the implementation of the ban. This research project will collect information before the ban and a larger study, which we hope to conduct in future, will collect further information after the ban. We will then compare the results between the before and after groups.

Background of the Research: Research has shown that the more people see adverts for unhealthy products the more they use them, and that this is especially the case for children and young people. People who are on lower incomes are exposed to more unhealthy adverts, including from bus stops and billboards in their neighbourhoods. Some research also suggests that if these adverts are removed, this has a positive effect on people's behaviours. In 2019 the Mayor of London brought in a new policy to ban adverts for foods and drinks high in fat, sugar and/or salt at any places in London owned by Transport for London (Tfl). A first assessment of this policy shows positive effects on people buying less of the unhealthy products. Bristol City Council will start a similar advertisement ban at the end of 2021, but it will also include alcohol and gambling. This will be the first policy like this outside London.

Design and methods used: A survey will be sent to people living in Bristol. It will collect information on exposure to the advertising of unhealthy products and the use of those products. The same survey will be sent to people living in South Gloucestershire so we can compare with a similar area nearby that does not have the same ban. We can then repeat the survey after the ban has started so that we can compare before-and-after results. We will also collect photos from all advertisement sites that will be affected by the ban, as well as those in the area without the ban, so that we can compare real changes in a future evaluation study. In addition we will use Google Streetview to obtain similar images over the time period prior to our photo collection period to obtain better insights in temporal changes in advertisement exposures. Lastly, we will interview people who designed and planned the policy about how it was made and put into practice.

Patient and public involvement: This research proposal has been designed with input from the PPI Lead of NIHR Applied Research Collaboration West (ARC West) and with a member of the ARC West PPI group with an interest in this topic. She has agreed to be a co-applicant for this work. She will help with study design, design of the survey, attend study management meetings, and will be active in any publishing of results. If a full evaluation is to be carried out, she will continue to lead the PPI group.

Publication of results: We expect the main results in the second study after the ban. However, we will use the information from this first study to find out more about exposure to unhealthy advertising and different incomes or ethnicities in Bristol and South Gloucestershire.

2. BACKGROUND

Commercial determinants of health are described as "strategies and approaches used by the private sector to promote products and choices that are detrimental to health" [Kickbusch et al., 2016], and in addition to tobacco, alcohol and unhealthy foods, have come to include other health-harming industries such as gambling [Goyder et al., 2020] and payday loans. The exposure of people, and in particular children and adolescents, to unhealthy commodity advertisements is recognised as a risk factor for the development of non-communicable

diseases, and is therefore a priority for policy action [WHO, 2016]. Outdoor advertising is thought to reach 98% of the UK population at least once a week [OutSmart, 2021] with 84.7% reporting exposure to High Fat, Salt or Sugar (HFSS) advertising specifically in the past 7 days with middle and lower socio-economic group reporting higher exposure compared to the high socio-economic group [Yau et al., 2021b]. Gradients of exposure to these advertisements by deprivation and ethnicity are reported in the UK and internationally [Di Cesare et al., 2013; Fagerberg et al., 2019; Lowery and Sloane, 2014; Olsen et al., 2021; Robertson et al., 2017; Settle et al., 2014; Thomas et al., 2019]; thereby potentially acting as a mechanism by which health inequalities are exacerbated. Evidence suggests that unhealthy commodity advertising has cumulative effects, especially on children and adolescents, in that attitudes as well as consumption behaviours correlate with the frequency of exposure to marketing messages [Cairns et al., 2013; Gordon et al., 2011; Scully et al., 2012].

Outdoor spaces and transport facilities are important locations for advertisingas these 'out-of-house' exposures in the community are an integral part of the total exposure of its residents. For example, data from Scotland describe that fast food products totalled 15.3% of all "out-of-house" advertisements, confectionary 6.8% and alcohol 4.0% [Olsen et al., 2021]. Exposure to advertisement in recreational environments in the UK was associated with 46% higher odds of obesity [Yau et al., 2021b]. Advertisement on outdoor advertisement spaces, including bus stops but also other spaces including hoardings, billboards, screens and bins, therefore provided a potential key target for legislation to reduce health inequalities. Evidence from modelling studies suggests that unhealthy commodities advertising bans can have beneficial reductions in purchase and consumption of such products in the population; for example, a 15% reduction in the quantity of crisps sold [Dubois et al., 2018] and a 5-8% reduction in alcohol consumption [Saffer and Dave, 2010] if bans were introduced might be possible.

Bristol City Council has a long-term, "One City Plan" which engages public and private sector organisations, large charities, voluntary groups, and grassroots communities to deliver a fairer, healthier and safer city. A key part of this plan is an Advertising and Sponsorship Policy [Bristol City Council, 2018a] which has been developed to provide a framework for advertising and sponsorship in public places and aims to curb exposure to unhealthy commodities advertising (HFSS products, alcohol and gambling). This Policy document, for the first time, identifies what will not be permitted for advertising and/or sponsorship and be implemented from November 2021.

A key part of the Policy relates to HFSS foods and drinks, a major contributor to unhealthy commodity advertising, especially with to children. Under the policy, food and drink brands may only advertise if they promote non-HFSS options as the basis for the advert. Although government policies aimed at curbing children's exposure to the advertisement of HFSS foods and beverages on television have been in place since 2007, exposure to HFSS food and beverage advertising in other settings; such as outdoor advertising is important with televised media accounting for just 18% of total advertising by revenue [GroupM, 2020]. The advertisement of foods and beverages has been shown to affect nutrition knowledge preferences, purchasing, and consumption in children, but less so in adults [Boyland et al., 2016], with television advertising shown mainly to promote less healthy products[Cairns et al., 2013]. Evidence suggest that a much broader media strategy is required for this to result in meaningful impact on obesity and public health more generally [Adams et al., 2012; World Health Organisation (WHO), 2018]. Regulating the advertisement of HFSS foods and beverages has been promoted as a policy lever, especially for the prevention of childhood obesity, by the World Health Organization [World Health Organisation (WHO), 2018]. Advertisement strategies for HFSS (and

other unhealthy commodities) contribute to increased health inequalities because people from more disadvantages households have greater exposure in outdoor and recreational settings [Adams et al., 2012; Backholer et al., 2021].

To address this, the Bristol Policy, which was developed with SUSTAIN; the alliance for better food and farming [SUSTAIN, 2021], specifically includes the prohibition in public spaces or Bristol Council owned buildings or services of:

- *Promotion or availability of foods and drinks that are high in fat, salt and/or sugar (HFSS) as defined by the Department of Health and Social Care's nutrient profiling model, without exceptions*
- *Promotion or availability of alcoholic drinks. This includes advertisements where there is a range of drinks featured, some of which are alcoholic.*
- *Promotion of a food or drink brand (including food and drink service companies or ordering services) where no food or drink product is featured directly. These brands and services will only be able to place advertisements if the advertisement promotes healthier options (i.e. non- HFSS products) as the basis of the copy.*

The Bristol HFSS advertisement ban includes any HFSS products shown in any meal setting, including those for restaurants, aggregator platforms (for online advertisements) and delivery services. Thus, the Bristol strategy has a broader scope than a complementary HFSS advertisement ban implemented by Transport for London (TfL) in February 2019 as part of the Mayor's strategy to tackle childhood obesity [Thompson et al., 2021].

The Bristol HFSS advertisement ban will be based on the UK Nutrient Profiles Model (NPM) for the purpose of deciding which foods can be advertised to children via television [Department of Health, 2011]. Foods with a final score of 4 or more and drinks with a score of 1 or more are classified as HFSS. This follows the same methodology adopted as part of the recent evaluation of the TfL advertisement ban [Bristol City Council, 2018b; TfL, 2018], The evaluation of the TfL advertisement ban was conducted by a School of Public Health Research Team including de Vocht and led by Cummins (co-applicant) [Yau et al., 2021a]. Although there was significant opposition from industry expressed through the media to the ban at the time [Thompson et al., 2021], the evaluation showed that over a 10-month period there was a 5% reduction in average weekly household purchases of HFSS products (0.7 packs, [95%CI 0.2-1.2]) in households living in the intervention area compared to the counterfactual, which was accompanied by a decrease in average weekly household purchases of energy (1015.4 kcal [473.6-1557.2]). The largest reductions were observed for chocolate and confectionery (21.4%, 0.4 packs [0.3-0.6]) resulting in average weekly decreases in purchased energy (317.9 kcal [200.0-435.8]) from these purchases. The changes in chocolate and confectionary intake are particularly important as these products were completely removed from advertising on the TfL network as there was a lack of alternative products from the same company that could be advertised (companies that sell a range of products could substitute advertising of a burger for a salad, but a chocolate company could not make this switch as all their products would be banned). The observed changes were larger in more deprived households, households with children and households where the main food shopper was living with overweight or obesity. This indicates that the policy may be well targeted to high-risk groups and may have the potential to reduce health inequalities. These results indicate that the restrictions around the advertising of HFSS foods and drinks by TfL has a meaningful impact on HFSS purchasing and may therefore improve population diet and diet-related disease through reductions in purchases of HFSS products; the Bristol advertisement may similarly impact on public health and health inequalities, but a formal evaluation is required.

Such a formal evaluation is further important because the ban that will be implemented in Bristol is stricter than the TfL ban in that there are no exceptions (such as for example for olive oil and vitamin supplements [Tfl, 2019]; 33 product in total in total on 27/03/2020 [Tfl, 2020]) while it also has a wider scope than the TfL ban and includes unhealthy commodities more broadly (in addition to HFSS products it also includes alcohol and gambling). The Bristol policy also includes:

- *Promotion or availability of tobacco products or substitute tobacco products, weapons, gambling, or illegal drugs*
- *Advertising of loan advancers which meet the Financial Standards Authority's definition of 'High Cost Short Term (HCST)'*

The inclusion of gambling is a new addition here. Similar to advertisement for HFSS (and alcohol and tobacco products), associations between gambling advertisement and adverse impact, especially on young people, have been described [Monaghan et al., 2008; Syvertsen et al., 2021], including on self-perceived at-risk or problematic gambling [Kristiansen and Severin-Nielsen, 2021]; mainly through triggering impulses to gamble [Binde, 2009].

A third difference compared to the TfL advertisement ban is that it relates to a smaller part of the total outdoor advertising estate. Whereas TfL has responsibility for London's network of principal road routes and various rail networks in Bristol the advertisement ban will relate to Council-owned bus-stops, billboards and boarded fences (hoardings), Council media channels and digital screens across the city.

The ban represents a novel, broad, public health intervention which is about to be implemented in Bristol. There is evidence that a complementary policy in London was associated with the anticipated positive public health impacts, but there are also crucial differences between the policies and the context of implementation. There is a time sensitive opportunity to examine the impact of the ban on the targeting of HFSS, alcohol, and gambling on health behaviours.

3. RATIONALE

The project aims to collect pre-intervention baseline data as the precursor for a future evaluation of the impact of the advertising ban policy. The full evaluation we propose will be natural experiment and we plan to apply to the PHR programme for funding for the full evaluation. However, in order to conduct this evaluation, there is a pressing need to collect pre-intervention data imminently.

4. RESEARCH AIM, OBJECTIVES AND OUTCOME MEASURES

The proposed research aims to prospectively collect baseline data prior to the implementation of the new advertisement policy at the end of 2021 in the exposed and a comparable control residents populations. This will enable a subsequent full evaluation, where baseline data can be compared with post-intervention follow-up data. Specifically, the proposed project aims to collect the following baseline data from the exposed area (Bristol) and neighbouring control area (South Gloucestershire):

4.1 RESEARCH OBJECTIVES

To collect information on
1   Self-reported exposure to advertisement of HFSS foods, alcohol, and gambling.

2 Self-reported <u>recent purchase and consumption</u> of HFSS products, alcohol, or gambling

3 <u>Measured exposure</u> of advertisements displayed at council-owned sites throughout the city of Bristol and the control area of South Gloucestershire

And:

4 Gather <u>stakeholder information on</u> the rationale the policy, implementation challenges, its intended impacts, and resources used.

5 Identify <u>data requirements, sources and availability</u> to conduct the economic evaluation of the policy

5. STUDY DESIGN & SETTING

5.1 STUDY DESIGN

A natural experiment will be used to evaluate the implementation and impact of the advertising ban in Bristol [Vocht et al., 2021]. A future full evaluation will have a controlled before-after repeated cross-sectional design (with the expectation of some repeated measures), with the current project aimed at collecting the cross-sectional sample of the pre-implementation (baseline) data.

5.2 INTERVENTION

The new Advertising and Sponsorship Policy [Bristol City Council, 2018a], which has been developed to provide a framework for advertising and sponsorship in public places and aims to curb the exposure to advertisements for unhealthy commodities HFSS products, alcohol and gambling, will be introduced by the end of December 2021. The policy will encompass all public advertisement places owned by Bristol City Council and will include 283 bus shelters and 17 hoardings throughout the city as well as Council media channels and numerous digital screens at venues such as museums, libraries and customer service points across the city.

5.3 STUDY SETTING

The study is set in the resident population of Bristol (subject to the intervention) and the control population of South Gloucestershire (the control). The 'exposed population' is defined as the population of Bristol who are, by means of their residency location, exposed to the 'out-of-house' advertisement subject to the ban. We will collect data from this population through a survey sent to the Bristol Citizen's Panel and wider population (see below). South Gloucestershire has a comparable citizens' panel to Bristol, "Viewpoint", enabling the collection of the same data from the control and exposed populations in the same time period.

5.4 SURVEY DATA COLLECTION

We will collect self-reported information on specific exposure to HFSS foods, alcohol and gambling advertisements, as well recent use of these products that in the exposed and the control population by means of a bespoke survey. The survey will consist of 32 questions that have been developed and agreed together with the collaborators, Panel managers, and PPI representatives, and takes 5-10 minutes to complete.

The survey will be digitalised. Considerable efforts have resulted sampling frames in both areas being broadly representative of the demographics of the underlying populations. Surveys will be sent out by email by its managers at Bristol City Council and South Gloucestershire Council. To maximise representativeness and response from traditionally under-represented groups, panel managers have established specific sampling strategies and we will use these standard approaches.

In Bristol, the survey will be sent to all participants of the Bristol Citizens' Panel (https://bristol.citizenspace.com/business-change/bristols-citizens-panel/), which is distributed every three months to about 1,000 Bristol citizens. The sample will be supplemented by subscribers to the survey newsletter (~3,000 people). In addition, the survey link will be sent to stakeholder contacts (about 200 equality organisations and partner organisations). Paper copies will be sent to the most deprived 20% of communities, and will be provided at libraries and upon request to digitally excluded citizens and others who request this. Alternative formats will be provided to people with specific accessibility needs (although language translation will not be possible) Together these form the basis of the survey methodology routinely used by the Council to get information from an approximately representative sample of the Bristol population.

In the control area of South Gloucestershire the survey will be distributed using similar methods, which includes sending to all participants in the comparable South Gloucestershire Viewpoint Panel, which currently has about 2,300 participants (https://www.southglos.gov.uk/council-and-democracy/customer-services/viewpoint-citizens-panel/), as well as the distribution of paper copies.

5.5 ADVERTISEMENT DATA COLLECTION

We will collect objective information of a snapshot of advertisement exposure by creating a database of photos of all advertisement sites across Bristol and South Gloucestershire. Staff will visit all sites - about 283 bus stops and 17 hoardings as well as several billboards and digital screens - in Bristol and the bus stops, billboards and hoardings in the South Gloucestershire urban areas surrounding Bristol and take a photo of the advertisement on display. Geolocations of each site have been provided by our collaborators from Bristol City Council and will be provided by South Gloucestershire Council. In addition, and to explore the temporal variability of advertising, we will use Google Street View and store images of the same sites (we will store the most recent imagine were more are available).

5.6 QUALITATIVE DATA COLLECTION

We will conduct semi-structured interviews to collect stakeholder accounts of events that led to the ban and resources involved in its design, organisation and implementation. Interview participants will include Council staff and other stakeholders involved in the policy. The topic guide includes questions on rationale for the policy; how the policy was developed and expected impacts; the barriers and facilitators to its initial planning, implementation plans and anticipated impact; and, future plans using TIDieR-PHP as a framework [Campbell et al., 2018]. Qualitative economic data will also be collected that can subsequently inform a health economic assessment in the full evaluation. We will use convenience sampling followed by snowball sampling via those already interviewed and aim for 8-15 interviews. Interviews will be audio

recorded, and then transcribed and anonymised by Bristol Transcription Services. Data will be analysed using the framework method [Gale et al., 2013]. Anonymised quotes, will be used in the reports, publications and presentations. The findings from this work will contribute to the mixed methods paper.

5.7 PROJECT OUTLINE AND TIMETABLE

The proposed project has five Deliverables.
1. Dataset baseline data from the surveys and analyses
2. Pre-intervention exposure assessments
3. Transcribed stakeholder interviews and analysis
4. Mixed methods draft manuscript
5. Final report

	Oc '21	No '21	De '21	Ja '22	Fe '22	Ma '22
Research Ethics approval						
Surveys Bristol & South Gloucestershire						
Survey data management & analysis (Del. 1)						
Exposure Assessment (Del 2)						
Structured interviews stakeholders						
Transcription and analysis interviews (Del 3)						
Outline mixed-methods manuscript (Del 4)						
Final Report (Del 5)						
Project team meetings				x	x	x
Study Steering Group meetings				x		x

6. STATISTICS AND DATA ANALYSIS

6.1 SAMPLE SIZE CALCULATION

The survey will be distributed to about 5,000 people in both Bristol and South Gloucestershire. Based on previous surveys we anticipate a 30-50% response rate (including additional efforts to increase the response rate from under-served groups) resulting in 1,500-2,500 responses from Bristol and 700-1,100 from South Gloucestershire. Final numbers will inform recruitment strategies and samples size calculations for the full evaluation. However, if we assume 84% will be exposed to HFSS advertising in the past 7 days [Yau et al., 2021b], 30% response rates, $\alpha=5\%$ and power=80%, we'd expect to be able to detect a 5% difference in exposure in a cross-sectional sample.

A convenience sample of those involved in designing the ban will be recruited for the interviews. We anticipate to conduct up to 15 interviews.

6.2 STATISTICAL ANALYSIS PLAN

These data will inform recruitment methods, strategies and sample size decisions for the full evaluation, and no exposure-response statistical analyses will be conducted in this project.

We will write a manuscript for submission to a peer-reviewed mixed-methods scientific journal in which we will provide a descriptive overview of patterns of advertisement exposure and product use for various population groups as well as to discuss the policy (ie the intervention) and its rationale.

6.3 QUALITATIVE ANALYSIS PLAN

The audio recordings will be transferred to secure servers at the University of Bristol and will only be accessed by the research team. The anonymised data will then be organised using the framework method (Gale, Heath, Cameron, Rashid, & Redwood, 2013). This approach will be used to analyse the notes using inductive and deductive coding to develop a systematic coding framework that will help identify patterns in the data relevant to the research questions. Framework analysis is appropriate for this research because it has specific questions, a limited time frame, a pre-designed sample and a priori issues. The data will be imported into Microsoft EXCEL to be analysed. A subset of transcripts will be independently double-coded by other members of the research team and compared; any discrepancies will be discussed within the research team and resolved in order to achieve a coding consensus and to maximise rigour.

7. DATA MANAGEMENT

Data will be collected and retained in accordance with the General Data Protection Regulation 2018 (GDPR) and subsequent data protection laws that supersedes the DPA, and the University of Bristol, Research Data Service 'Guidance on the Retention of Research Records and Data' (Version 3.0 September 2019).

Survey data: The surveys will be managed by the Council Survey management teams. Information will be provided with the survey outlining that pseudo-anonymised data will be used for research purposes. The Council will remove the postal code from the survey data and replace this with the corresponding lower super output area (1,000-3,000) people. The anonymised datasets will be sent to the research team using the University of Bristol FLUFF service Data and encrypted in accordance with the University of Bristol Information Security Policies. The key with the link to postal codes will be stored by the Council survey management teams to enable linking of repeated measurements in a subsequent full evaluation. A Data transfer Agreement will be signed by both parties prior to sharing of any data.

Interviews: Qualitative interviews will be digitally audio recorded using University of Bristol approved encrypted digital audio recorders or by using University of Bristol supported remote conference facilities of MS Teams or Zoom (approved as secure by the University of Bristol (http://www.bristol.ac.uk/telephones/conference-solutions/). Audio files will immediately be stored on secure password protected University of Bristol network filestore space. Digital audio recordings will be transcribed by Bristol Transcription Services, a University of Bristol approved transcription company and a confidentiality agreement will be signed prior to this work commencing. Data will be encrypted in accordance with the University of Bristol Information Security Policies whenever it is transmitted electronically or otherwise conveyed.

Interview transcripts will be edited to remove identifying details, and participants will be allocated codes to prevent linkage of data to participant details except by the researchers conducting the interviews and analysis.

Exposure data: all photos and images will be stored for analyses if a full evaluation will be funded.

All electronic data will be stored on a secure password protected University network filestore space where access is controlled by use of user accounts and file access control lists. Servers providing the system hosting are located in secure data centres within the University of Bristol estate. These buildings are protected by secure automatic locking doors, requiring appropriate University Card (MiFare2) and biometric second factor-controlled access to enter (for limited authorised personnel only) and are monitored by CCTV by University security services. Locations of routers and switches are physically restricted to IT Services staff.

Anonymised analysed data and summaries of data will be held for 10 years after the study is finished.

9. ETHICAL AND REGULATORY CONSIDERATIONS

8.1 ETHICAL APPROVAL

A favourable opinion has been obtained by the University of Bristol's Faculty of Health Sciences Research Ethics Committee for the survey part of the study in an expedited review (Reference 9754). The interviews have been submitted to the University of Bristol's Faculty of Health Sciences Research Ethics Committee separately, and will be reviewed in the next meeting.

Any subsequent protocol amendments will be submitted to the Research Ethics Committee for approval.

8.2 PUBLIC AND PATIENT INVOLVEMENT

PPI has been an integral part of the development of this research and is also an integral part of the project. Ms Blake is the PPI co-applicant and is the PPI Chair of the project. She and the NIHR ARC West PPI Representative contributed to the development of the current study by reviewing the application and provided input in study design, methods including the survey questions, and abstracts, and have particularly provided input into the PPI elements of the research. The PPI Chair will attend study team meetings. In addition, through the surveys we will recruit 3 additional PPI representatives to represent important intersections to contribute to a full evaluation, they will be invited to the last management meeting (month 5).

8.3 INVESTIGATORS RESPONSIBILITY

The PI will ensure that local research approvals have been obtained and that any contractual agreements required have been signed off by all parties before commencing the study. Investigators will be required to ensure compliance to the protocol. Investigators will be

required to allow access to study documentation or source data on request for monitoring visits and audits performed by the Sponsor or any regulatory authorities.

Investigators will be required to read, acknowledge and inform the study team of any amendments to the study documents approved the ethics committee that they receive and ensure that the changes are complied with.

8.4 CONFIDENTIALITY

Identifiable information from the surveys will be kept by the respective Survey managers at each Council, and only anonymous data shared with the research team.

The Principal Investigators and the research team will preserve the confidentiality of participants in accordance with the Data Protection Act 2018 and subsequent data protection laws that supersedes the DPA. All research data will be handled according to the principles of the Data Protection Act and University of Bristol data protection policies, especially for sensitive, personal data. Data will be anonymised and stored on a password protected computer located in the University of Bristol and appropriately backed up.

8.6 STUDY SPONSORSHIP

The study does not require additional study sponsorship in addition to FREC approval.

9. DISSEMINATION

We will submit one scientific mixed-methods paper to a peer-reviewed journal. However, the data will primarily be used to inform a full evaluation of the intervention. This is a separate research grant application which we aim to submit in Spring 2022. If successful, the data collected in this project will be used in the full evaluation. We will ask separate full FREC approval for this in due course.

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