



Application for the CRG Networks Innovation Fund 2019

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Other CRG Networks involved: to be invited (open invitation)

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Executive summary

Background:

Cochrane reviews are widely seen as trustworthy and informed by rigorous and evidence-based methods. However, these methods have historically been developed with a focus on reviews of treatments. Cochrane has been criticized for publishing reviews or using methods that are not optimal for public health questions. The complexity, scope, source of evidence and relevant outcomes of these public health questions pose significant challenges for authors and CRGs. They often have to use relatively new methods. Our prioritisation exercise suggested that author support tools that are pragmatic (user friendly, with examples) which help to clarify and connect various sources of guidance are critical to facilitate the production of high quality, timely and relevant public health reviews.

Aim:

Improve the content, quality and relevance of the Cochrane Library by providing user-friendly author resources to optimise our reviews for public health-relevant questions

Key deliverables:

1. A suite of author resources with illustrative best practice examples. This includes a series of flow charts to guide framing of questions, and deciding what study designs are appropriate for the perspective, context and PICO of the review question
2. Mapping of existing Cochrane author resources to the newly developed flow charts to existing Cochrane author resources/methodological guidance

All the resources developed in this project will be available for all.

Strategy:

This project will build on the existing resources, methodology and expertise. We aim to connect and clarify existing methods rather than producing new ones. Subgroups, which consist of content and methodology experts from various Cochrane CRGs, Fields and Methods Groups, especially the Non-Randomised Studies (NRS) will examine the key issues and relevant resources before making recommendations on the author support resources/tools. The resources developed will be piloted and made available for comments within and outside the PHHS network.

The work of these subgroups will be supported by the NSF, AE and SE of the PHHS network. Additional assistance and specialist knowledge from a research assistant, information scientists and visual presentation specialists will be critical to the completion of the scope of this project.

Significance of Project:

This project builds on the *existing* wealth of expertise to address our *current* challenges and plan for the *future*. We will look at the existing methodology and facilitate the sharing of experience and expertise of people across Cochrane to ensure that Cochrane public health reviews meet the needs of stakeholders. We will focus on the current needs for author resources for framing the question(s) and selection of the best type of study design(s). These author resources will also link the decision-making steps in reviews to methodological guidance/resources and this would facilitate the efficient production of high quality and relevant reviews. This would also improve author experience and harmonise the methodology across

groups. In the longer term, the findings of this project can be used to identify potential gaps in methodological guidance or authors resources for public health reviews that should be prioritised for future development.

Project Plan

Purpose/ organisational need

Cochrane reviews have a reputation for being trustworthy and informed by rigorous and evidence-based methods, but these rigorous methods have been developed and optimized for conducting systematic reviews of clinical interventions. Cochrane has been criticized for publishing reviews or using methods that are not optimal for public health questions, such as those that deal with exposures (rather than interventions), harms or protection from harms (prevention), policy evaluation and/or implementation or interventions that are implemented at population level. For example, a recent anecdote from a public health guideline producer described how a Cochrane review could not be used for the guideline in question because it did not assess the outcomes that were rated as highest priority by the guideline development group. The guideline developer commissioned a review outside of Cochrane. Furthermore, as many of the reviews of public health questions have a high impact on policy making and affect many people, they are often high profile and have a risk of generating controversy.

The PHHS Network has particular expertise with these public health relevance issues. We conduct many reviews on prevention, harms, and exposures and assess effects of interventions, which have significant impact on public health. There are a number of challenges that affect the production, quality and relevance or applicability of the reviews:

- Firstly, many of the issues or ‘interventions’ addressed are complex, and multiple factors could affect the observed ‘effectiveness’ ([Petticrew2019](#), [Craig 2008](#)). Therefore, questions need to be framed carefully to achieve a balance of comprehensiveness versus the pragmatism of being able to address the scope of the review within available resources and a reasonable timeframe.
- Secondly, the population(s) impacted by the interventions or measures evaluated in these reviews are often not ‘patients’ who are actively seeking or requiring ‘treatment’ for a health problem faced; they are health systems, policy makers, members of the public, healthcare professionals, carers and people who are at risk of certain conditions, or undiagnosed.
- Thirdly, evidence from RCTs are often insufficient, and RCTs are sometimes not the best type of design to address the issues of interest. Therefore, many reviews within the network included non-randomised studies (NRS). Qualitative evidence is also increasingly incorporated to gain a deeper understanding of the public health context and to answer the ‘why’ component of questions.
- Fourth, true clinical or health outcomes, such as reduction in incidence of cancer, may take decades to achieve, so process outcomes, such as limiting exposure to a carcinogenic agent, or valid “surrogate” outcomes, such as reduction of the levels of carcinogenic agent detectable in blood may be the most relevant outcomes for a public health question.

These challenges require authors and editors to look beyond the commonly used methods in Cochrane and GRADE for evidence synthesis and interpretation. Authors conducting public health-relevant reviews are often at the forefront of adopting newly introduced methods, or have to work closely with many methods groups or innovators outside of Cochrane to create new solutions. Very often, they have to address problems as they surface on a case by case basis. Therefore, authors and the CRGs supporting them often require extra support and guidance. Although these issues are prominent for reviews conducted within the public health network, they are also important for public health-relevant reviews conducted by other networks.

Aims

The overall aim of this project is to improve the **content, quality and relevance** of the Cochrane Library by providing resources that can be used across networks to optimize our methods for public health-relevant questions. We will do this by focusing on the root cause of many of these quality and production

issue: the **framing of questions** (see [Appendix 2](#) for Background of project, and [Appendix 3](#) for Scope of the PHHS relevance project, and [Appendix 4](#) for information about the survey).

How the aims and objectives of the project were prioritised

We reached this conclusion after multiple discussions on public health relevance issues across several meetings in the network and a survey of the network to prioritize the topics. We have also discussed this in depth in a face-to-face meeting during Cochrane Governance meeting in Krakow. Based on this discussion, there was a consensus that we need to address the root cause of many challenges and issues affecting the quality and relevance of public health reviews: **the framing of the question**. We propose that the type of question to be addressed, rather than the availability or rigour of certain study designs, should drive the selection of eligible evidence for public health questions (Bero2019). We hope to link the development of the review question to the relevant perspective and context of the questions. Guidance on review question formulation will be closely linked to guidance about when to include non-randomized studies and what type of non-randomised studies would be relevant to the topics. We will then propose a plan for developing guidance for study designs that are not currently covered by existing Cochrane resources (see [Appendix 2](#) for Background of project).

Objectives

Specifically, the following are our objectives:

- 1) Develop author resources to help authors consider how a question for be framed from a public health perspective.
- 2) Develop author resources to support decisions about when to include non-randomized studies (NRS), and which types of studies to include, to answer public health relevant questions.
- 3) Identify gaps in existing methodological guidance to address the framing of public health questions and inclusion and application of evidence from different types of study designs.

The achievement of these aims will raise the profile of public health relevance and study selection issues in Cochrane, harmonise the considerations contributing to selection of study designs for Cochrane reviews and improve the consistency in methods of Cochrane reviews. This should further ensure the quality of reviews and improve the applicability of the reviews to evidence users and policy makers.

We do not aim to duplicate other available resources. Instead, we seek to clarify and connect various sources of guidance and support the implementation of these methods. For example, we will work closely with the relevant working groups in GRADE, and support the implementation of the projects recently completed by the Cochrane Methods Innovation Fund. This project will advance the practical implementation of these newer methods.

Therefore, the project will not only address the key challenges and potentially improve the efficiency of production and quality of reviews. It also has the potential to foster closer working and sharing of expertise across review groups within the PHHS network and with other networks.

Planned deliverables:

1. Author resources (with illustrative best practice examples) to guide authors in framing public health relevant questions. Most of the author resources will be in the written form because we had surveyed the network, and this is the preferred option. This suite may include:
 - Flowcharts /tools to assist the **framing of questions**
 - Flowcharts / tools to assist with **selection of study designs** for questions related to policy evaluation/implementations, exposures, harms and prevention measures. These flowcharts would require the explicit demonstration of rationale between context of review question, and the choice of study design, population, intervention, comparison and outcomes.

2. Flow chart/tools to assist classification of NRS studies according to common definitions (and map this according to Cochrane terminology). This would harmonise the terminology used for different NRS designs.
3. A colloquium workshop to explore the review question framing and study selection issues identified and share the developed resources
4. Mapping of existing resources with the newly developed flowcharts
 - Inventory of existing resources available to guide framing of research questions and selection of study designs, i.e.: searching, assessing risk of bias, synthesizing evidence, and interpretation of evidence
5. Mapping of resources with the study design identified in the flowchart

Proposed methods (*Describe the overall strategy, methodology, and analyses to be used to accomplish the specific aims of the project. Consider including how data will be collected, analysed, and interpreted as well as any resource sharing plans as appropriate. You may also consider including potential problems expected and any strategies to address them*):

The key outputs of this project will be delivered in parallel by different subgroups and coordinated by the NSF, AE and SE of the PHHS Network. Members of the subgroup are editors and other CRG staff (e.g., information specialists regarding searching for non-randomized studies, existing resources) within the PHHS networks, but invitations are also extended for participation from other Cochrane Networks, Cochrane Fields, the relevant Methods groups, such as the Non-Randomised Studies (NRS) groups and the Cochrane Methods Implementation team.

Additional support from people with specialist knowledge, such as a knowledge management specialist/information specialist to create linked resources, and visual presentation specialists will also be required to develop user friendly resources and linkages.

Communication and close working of these subgroup will be facilitated through online meetings and document sharing platforms. We believe this will be an important opportunity for knowledge and skills sharing across the CRGs.

Key subgroups and methodology used:

1. Development of author resources on 1) framing of research questions and 2) study design selection)

This work will be divided between 2 subgroups – 1 on framing questions and 1 on selecting study designs

A) Identify key issues related to framing of question and study design selection

- Conduct a small number of interviews with key developers / users of guidelines who have experience of using Cochrane reviews to address public health questions (eg, Susan Norris (WHO), Davina Gheri (NHMRC), Tracey Woodruff (Environmental Health) and technical advisors from NICE to determine issues with framing questions and study design selection
- Survey review groups on the following:
 - i. issues related to framing public health relevant questions
 - ii. study design selection

B) Identify and synthesis existing resources on framing public health questions and study design selection

- Search and extract information from various sources for resources on topics identified, including Cochrane Handbook ([Handbook 2019](#), [Handbook 2017](#), [EPOC 2017](#)), Cochrane Methods Groups websites and published literature (e.g., searched through Medline).
- Search and extract information on systematic review requirements/guideline development methodology of key guideline developers (e.g. NHMRC, WHO, NICE, AHRQ, Joanna Briggs Institute, SIGN) to identify guidance on framing questions and study design selection
- Conduct a literature search on guidance for framing public health questions for systematic reviews and selection of study designs

C) Identify gaps in Cochrane Guidance

- Review and compare methods proposed in latest Cochrane handbook / other Cochrane resources vs other sources regarding framing of questions and study selection.
- Create an inventory of existing Cochrane resources available to guide framing of research questions and study design selection.
- Gap analysis to identify study designs for which existing resources are deficient

D) Develop author resources

- Develop flow chart for considerations for framing public health questions
- Develop flow chart for the study selection process
- Map the relevant existing Cochrane resources in to key sections of each flowchart
- Send flow chart to review groups for feedback and piloting
- Further revisions and finalization of the flow charts

E) Dissemination

- Identify a suitable platform to share the flowcharts and the linked resources
- Submit an abstract for a 2019 Cochrane Colloquium to present the preliminary findings of this project and seek additional input on the way forward. All networks will be invited, as well as relevant methods groups and users of Cochrane reviews.
- Flowcharts will be shared at the 2020 Cochrane UK symposium/Cochrane governance meeting

2. **Classification/definitions of nonrandomized studies.**

To inform the development of the flowchart, we will develop harmonized definitions of different types of non-randomized study designs.

A) Identify key issues related to classification of non-randomised study designs

- **Survey review groups to identify issues with classification of NRS**

B) Identify and synthesis existing resources

- Compare the current Cochrane definitions used for NRS vs non-Cochrane sources

C) Harmonise definitions / Identify gaps in Cochrane Guidance

- Identify areas where there are inconsistencies in definitions

D) Develop author resources

- Develop a flow chart to help to class studies according to common definitions (and map this according to Cochrane terminology)

E) Dissemination

- As in the methods for the flow charts for study design (see above), this will be sent to CRGs for feedback, piloted in Cochrane authors and revised accordingly
- The flowcharts for identification of studies will be disseminated alongside those for framing of questions.

Key milestones and timelines (please highlight responsibilities of the project team members for each stage within the timeline, ideally represented through a Gantt chart)

These are the estimated timelines. However, the timelines are depending on the allocation of funding and the recruitment of suitable help to support this project. It is possible that setting this up may take up to 3 months, and the core activities could only start in August to October. If that is the case, the project will have to be extended by the amount of time equivalent to the delayed start.

Figure 1: Gantt chart showing timelines and milestones

	2019						2020						
	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July
Setting up subgroups (LYC, NO, LB)													
Resource identification & organization (IS, RA, LYC)													
Interviews with guideline developers (RA, LYC)													
Survey review groups (LYC, RA)													
Inventory of current resources (LYC, NO, IS, RA)													
Flow charts for framing questions (subgroups, All)									†				**
Flow charts for study selection (subgroups, All)									†				**
Flow chart/definitions of NRS (subgroup, LYC, RA)								†					**
Feedback and piloting of flowcharts(LYC, RA, All)													
Map flow charts & resources (LYC, NO, RA)										†			**
Write up and reports of the project (LYC, RA, LB)										†			**

Milestones:

† first drafts of deliverables

** final outputs

Abbreviations:

LB: Lisa Bero, NO: Newton Opiyo, LYC: Lee Yee Chong, RA: Research Assistant, IS: Information scientist/Knowledge management consultant

Budget (please consider breakdown by type of resource or activity):

Purpose of funds	Activity	Budget
Research support and administrative costs*	<ul style="list-style-type: none"> • Conduct interviews and survey • Identify published resources • Manage data • Extract and collate data from existing resources • Support the work of the subgroups • Organize meetings • Draft flowchart resources • Consult with review groups and revise as needed • <i>Estimated cost/time needed: 600 hours</i> 	£13000
Knowledge management and translation activities	<ul style="list-style-type: none"> • Format flowchart and create documents that are user friendly ** • Partial costs for accommodation and transport for presentation of findings 	£2000
Total		£15000

*Includes cost for research assistance, consultation with information scientists

** consultation with visual presentation experts

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Appendix

Appendix 1: Biographical sketches of principal investigator and project team members

Appendix 2: Background of the PHS relevance project & survey used

Appendix 3: Scope of the project's key output

Appendix 4: Survey and findings of the prioritization survey (separate attachment)

Appendix 5: Prepublication version of Bero LA, Norris SL. Making nutrition guidelines fit for purpose. BMJ, in press. (separate attachment)

Appendix 1: Biographical sketches of project team members

Professor Lisa Anne Bero, *Senior Editor*

Lisa A. Bero, PhD is an expert in examining how science can be influenced and translated into clinical practice and health policy. She directs a multidisciplinary team whose primary focus is on ways to produce, synthesize and promote the translation of rigorous and unbiased evidence into health policy and practice. She specialises in studying the quality, use and implications of research for healthcare and health policy, and have both collaborated with and studied as research subjects such diverse groups as policymakers, journalists, consumers, and researchers themselves. Lisa also pioneered the development of qualitative and quantitative methods (called “meta-research”) for measuring bias in the design. Lisa has conducted and disseminated research on pharmaceuticals, tobacco, chemicals, and complex public health interventions. Her international activities include member and chair of the World Health Organization (WHO) Essential Medicines Committee and Cochrane Collaboration liaison to WHO. Lisa serves on several committees related to conflicts of interest, evidence and decisions, such as the Institute of Medicine Committee on Conflict of Interest in Medical Research, Education and Practice and the National Academy of Science Committee to review the Environmental Protection Agency Integrated Risk Information System Process.

Selected publications

1. **Bero LA**, Norris SL. Making nutrition guidelines fit for purpose. *BMJ*, in press.
2. Blake P, Durao S, Naude C, **Bero L**. Food based dietary guidelines: An analysis of methods used to synthesize evidence and grade recommendations. *Nutrition Rev* 2018 Apr 1;76(4):290-300. doi: 10.1093/nutrit/nux074.
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Newton Opiyo, Associate Editor

Newton has been involved with Cochrane since 2007. Prior to joining Cochrane, Newton was a research scientist at KEMRI-Wellcome Trust, Kenya. Newton's research experience is in the areas of evidence synthesis, pragmatic trials, knowledge translation and guideline development. Newton also has a strong interest in capacity building in evidence-to-policy processes and has been involved in training healthcare professionals and policymakers in systematic reviews and GRADE methodology.

Selected publications

1. Chen I, **Opiyo N**, Tavender E, Mortazhejri S, Rader T, Petkovic J, Yogasingam S, Taljaard M, Agarwal S, Laopaiboon M, Wasiak J, Khunpradit S, Lumbiganon P, Gruen RL, Betran AP. Non-clinical interventions for reducing unnecessary caesarean section. *Cochrane Database Syst Rev*. 2018 Sep 28;9:CD005528.
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Lee-Yee Chong, NIHR Network Support Fellow

Lee Yee is interested in the assessment of impact of healthcare interventions and translation of evidence into clinical practice, guidelines and policies. She has been conducting reviews and providing methodological support to authors and editors in various Cochrane review groups. Within Cochrane, Lee Yee has been involved in initiatives such as introducing scoping into the review process, standardising/structuring reviews and implementation of GRADE. Prior to working with Cochrane, she was a senior research fellow in clinical guideline development for NICE, and one of the early adopters of GRADE in NICE guidelines. Although most of the focus were on risk assessment, diagnosis and management options, she had also worked on guidelines on prevention, such as prevention of infections and prevention of venous thromboembolism (VTE).

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Celeste Naude, *Co-Director of Cochrane Nutrition*

Celeste is a registered dietitian (SA and UK), and her academic interests include evidence synthesis, knowledge translation and evidence-informed decision-making in policy and practice for nutrition, health and other sustainable development outcomes. She is an Associate Editor of the Cochrane Effective Practice and Organisation of Care (EPoC) Group and Nutrition Journal (BMC), member of the Cochrane Fields Executive Committee, Cochrane Africa, the South Africa GRADE Network, and an invited member of the Chronic Disease Initiative for Africa and of NutriRECS. Celeste is involved in international research networks via the Research, Evidence and Development Initiative (READ-It). Nationally, she serves on the Department of Health's Ministerial Committee on Mortality and Morbidity in Children and sub-nationally on the Technical Reference Group on Healthy Eating (Western Cape Government).

Selected publications

1. **Naude CE**, Visser ME, Nguyen KA, Durao S, Schoonees A. Effects of total fat intake on bodyweight in children. *Cochrane Database of Systematic Reviews* 2018, Issue 7. Art. No.: CD012960.
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All the CRGs within the public health network is represented, in this project. Only short biographies are listed in this section.



Associate Professor Sophie Hill, Co-ordinating editor

Associate Professor Sophie Hill has been the Co-ordinating Editor of Cochrane Consumers and Communication since it was founded in 2000. From the work of Cochrane Consumers and Communication, A/Prof Hill founded the Centre for Health Communication and Participation in 2009. In her Co-ordinating Editor and Centre Head roles, A/Prof Hill leads a range of national and international research collaborations that engage policy makers in the evidence base for consumer participation. She is also committed to educating the next generation of researchers responsible for improving communication and participation in health.

Dr Rebecca Ryan, Co-ordinating editor

Rebecca's background is in pharmacology and neuroscience. She has been a Research Fellow with the Cochrane Consumers and Communication Review Group since 2004, an Editor with the group since 2011, Deputy Coordinating Editor since 2013 and Joint Coordinating Editor since January 2019. Her role currently includes writing and editing Cochrane reviews and developing guidance to support authors of Cochrane reviews.



Simon Lewin, Co-ordinating editor

Simon Lewin is the Joint Co-ordinating Editor of the Cochrane Effective Practice and Organisation of Care (EPOC) Group and a Coordinator of the GRADE-CERQual Project Group. Simon is a senior researcher in the Global Health Group of the Norwegian Institute of Public Health and the Health Systems Research Unit of the South African Medical Research Council. His work is largely within the field of health systems research, including systematic reviews of complex health system interventions; the evaluation of strategies for changing professional and consumer behaviours and the organization of care; and methods for synthesizing the findings of qualitative studies and assessing confidence in such findings. He is an Honorary Professor in the Faculty of Public Health and Policy at the London School of Hygiene and Tropical Medicine and also sits on a number of Advisory Committees at WHO.



Professor Paul Garner, Coordinating Editor

Paul leads the Centre for Evidence Synthesis for Global Health at the Liverpool School of Tropical Medicine (LSTM) and was part of the original team that set up the Cochrane Collaboration. The group lead a network of over 300 people synthesizing research to inform global, regional and national policies in tropical infections and conditions relevant to low- and middle-income countries. Cochrane CDIG work with the World Health Organization and several countries in guideline development, hold a WHO Collaborating Centre for Evidence Synthesis for Infectious and Tropical Diseases. In addition, Paul is the Director of a DFID Research Consortium, the Effective Health Care Research Consortium, working with colleagues in South Africa, Kenya, Malawi, Nigeria, Cameroon, India, Norway and China.



Assoc Professor Luke Wolfenden, Joint Co-ordinating Editor

Luke is Joint Co-ordinating Editor of Cochrane Public Health since July 2019. Luke is a behavioural scientist, and health service researcher with a research focus on the reduction of the burden of chronic disease related to obesity, diet, physical inactivity, alcohol and tobacco use in the community. Luke has conducted trials of health behaviour interventions or of population wide-dissemination and implementation strategies in hospitals, out-patient clinics, schools, child care centres, community organisations, and sports clubs.

Luke is also actively involved in research on dissemination and implementation strategies to increase the adoption of evidence based chronic disease prevention practices and conducting methodological research to facilitate the translation of research into practice. He has collaborated with policy makers or practitioners in Australia and the WHO.

Dr Hilary Thomson, Joint Co-ordinating Editor

Hilary is joint co-ordinating editor of Cochrane Public Health (since 2016). Hilary leads the Evidence Synthesis theme at MRC/CSO Social & Public Health Sciences Unit at the University of Glasgow and has extensive experience in conducting large complex reviews and evaluations of questions about the health impacts of social policy interventions such as housing, transport, and welfare. Most recently Hilary has led work on Risk of Bias in Non-Randomised Studies, and is Principal Investigator on the ICONS-Quant project (Improving the CONduct of Narrative Synthesis of Quantitative data). Hilary is co-lead of the GRADE Public Health project group.



Professor Paul Aveyard, Co-ordinating Editor

Paul's research focuses on behavioural medicine; i.e. helping people change their behaviour, either to prevent serious disease, or as a treatment for that disease. A lot of his work has examined interventions to help people stop or reduce their smoking and lately, he has also been involved in helping people manage their weight if they have become obese. In addition to his role as the coordinating editor of the Cochrane TAG, Paul conducts clinical trials. Paul is involved in the application of evidence to improve health and healthcare. He has worked alongside several NICE working groups and advised the Department of Health on smoking and obesity.



Jos Verbeek, coordinating editor

Jos trained as an occupational health physician and an epidemiologist in the Netherlands. He works as coordinating editor of the Cochrane Work Review Group since 2003. He has been a methodologist on several guideline committees with WHO and with the Occupational Medicine Association in the Netherlands. Jos has published several papers on systematic review methods such as on the inclusion of non-randomised studies in reviews, how to use outcomes for inclusion in prevention reviews and quality criteria for reviews of preventive interventions.

Appendix 2: Background of the PHHS relevance project & survey

The initial aim of this project was to ensure that public health related reviews are relevant to policy makers. To achieve these aims, we had embarked in a process to understand and collate examples and issues affecting the reviews in the network.

This was initially done by extracting and collecting examples from several main sources:

- Reviewing reviews in the network, particularly the high impact or controversial reviews to identify examples and reasons for a mismatch between the review design, overall context and interpretation to the context or requirements of policy makers
- Going through the screening reports for the past few years
- Going through comments and criticisms received about the published reviews

Initially, all the challenges and issues were written down. The challenges and issues identified were then analysed, and similar issues, or issues with a similar cause were group together and then distilled into a list of issues and topics. This list was shared in the January PHHS network meeting, and subsequently discussed across several meetings in the PHHS Network. Multiple reiterations to the initial list was made, with the input from the editors and members of the network.

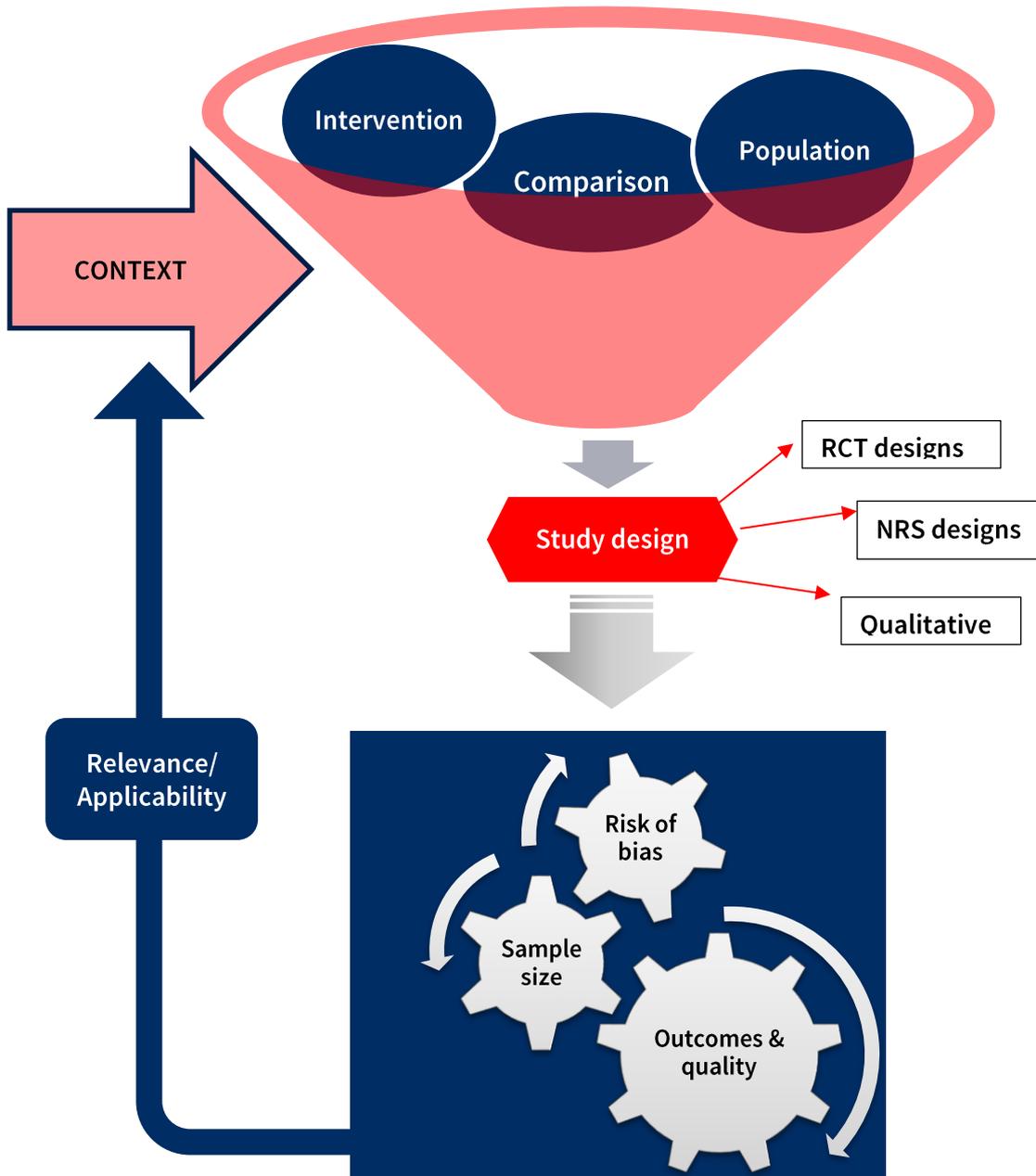
In March, the co-eds and managing editors of the PHHS network were surveyed (survey accessible on: <https://www.surveymonkey.co.uk/r/RG83R82>) to prioritise the topics (the survey and findings are attached in Appendix 4). Prior to the survey, the editors in the network had agreed to prioritise areas and outputs that can result in pragmatic help in the review production (quality, consistency, efficiency) for authors. The findings of the survey were discussed this in depth in a face to face meeting (during Cochrane Governance meeting in Krakow) on the best way to address these topics prioritised.

Based on this discussion, there is a consensus that we need to address the root cause of many challenges and issues affecting the quality and relevance of public health reviews: **the framing of the question**. We propose that the questions to be addressed, rather than the availability or rigour of certain study designs, should drive the selection of evidence for public health questions (Bero 2019). We hope to link the development of the review question to the context of the questions, focusing on guidance about when to include non-randomized studies and what type of non-randomised studies would be relevant to the topics.

Based on the resources gathered and the exercise of the linking of resources and paths in the flow chart, we will be able to find out where the gaps are and propose a plan for developing guidance for study designs that are not currently covered by existing Cochrane resources, particularly those that assess policy interventions. This part of the project also builds on and expands an earlier initiative of building an inventory of author resources produced by CRGs in the PHHS network.

Appendix 3: Scope of the project’s key output

Scope of flow charts which links framing of questions to context, population, intervention, comparison and selection of appropriate study designs to how the evidence will be applied



Appendix 4: Survey and findings of the prioritization survey

Please see separate attachment for findings of survey

Priority Setting for Public Health and Health Systems Relevance Project 2019

Aim of survey

This survey aims to **prioritise the topics** addressed in the PHHS Relevance Project. These topics have been distilled from a collation of challenges faced in reviews attempting to address topics of relevance to public health.

We aim to develop practical solutions to address these topics, such as author resources, checklists, training and RevMan modification/templates.

Should you have any queries, please contact Lee Yee at lee-yee.chong@nds.ox.ac.uk.

This survey should only take 5 minutes. We thank you in advance for your participation.

Next

Priority Setting for Public Health and Health Systems Relevance Project 2019

Identifying the topics and issues of high priority

For each of the topics below, **please tell us how important the topic is.**

Please use the comments boxes to share additional thoughts about the topics or rationale for your ratings.

* 1. **Framing the question** (determining which issues the review aim to address vs. the appropriate D-PICO)

Very unimportant	Somewhat unimportant	Neutral	Somewhat important	Very important
Use of logic model to support the rationale of Design-Population Intervention Comparison Outcomes (D-PICO) used in reviews.				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Design: When qualitative evidence synthesis (QES) is useful to support/as a stand-alone review.				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Setting: What settings will be reviewed vs. where the evidence is intended to be applied .				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Design: When to consider non-randomised studies (NRS) / what type of NRS should be used.				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Population & corresponding outcomes: How many types should be included (e.g. the people receiving the intervention(s), people who may benefit vs people who may be harmed).				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments/rationale for ratings

* 2. **Choice of outcomes** (which outcomes should be addressed by reviews).

Issues to be addressed may include:

- 1. Should we include non-health outcomes? (e.g. equity, satisfaction/user experience, environmental, implementation. If yes, when appropriate and how?)
- 2. Issues to be addressed include:
- 3. What outcomes are most relevant from the public health/policymaker perspective vs. individual perspective?
- 4. Should we have different outcomes for different populations? (e.g. individual level outcomes vs. population-level outcomes?)

Very unimportant	Somewhat unimportant	Neutral	Somewhat important	Very important
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comments/rationale for ratings				
<div style="background-color: #cccccc; height: 50px;"></div>				

* 3. **Surrogate/Indirect outcomes**

Issues to be addressed may include:

- 1. When are they appropriate, and can they be used as primary outcomes?
- 2. How to measure and analyse these (non-validated) outcomes?
- 3. Interpretation: What to do if surrogates and health outcomes are contradictory
- 4. Interpretation: GRADE, how to consider indirectness.

Very unimportant	Somewhat unimportant	Neutral	Somewhat important	Very important
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comments/rationale for ratings				
<div style="background-color: #cccccc; height: 50px;"></div>				

* 4. **Non-standardised outcomes**

Issues to be addressed may include:

- 1. Analysis & interpretation of outcomes with multiple instruments/different scales reported.
- 2. Analysis & interpretation when instruments are not validated.

Very unimportant	Somewhat unimportant	Neutral	Somewhat important	Very important
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comments/rationale for ratings				
<div style="background-color: #cccccc; height: 40px;"></div>				

* 5. **Narrative synthesis** (how to report when data are not meta-analysed)

Issues to be addressed may include:

- 1. When to use narrative synthesis.
- 2. How to present narrative synthesis.
- 3. How to incorporate narrative synthesis.

Very unimportant	Somewhat unimportant	Neutral	Somewhat important	Very important
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comments/rationale for ratings				
<div style="background-color: #cccccc; height: 40px;"></div>				

* 6. **Effect sizes for non-intervention reviews** (what is considered as important)

Issues to be addressed may include :

1. Effect sizes for non-validated instruments.
2. Effect sizes for different populations / perspective / review types (e.g. prevention vs. treatment).
3. How to/should we build a database of different MID values across different conditions and populations.

Very unimportant Somewhat unimportant Neutral Somewhat important Very importa

Comments/rationale for ratings

* 7. **GRADE / Summary of findings table** (how evidence should be interpreted)

Issues to be addressed may include:

1. How to incorporate data when multiple types of synthesis methods are used (e.g. narrative/meta-analysis).
2. How to incorporate data when different types of study designs are used.
3. Contradictory findings (between study designs) or analysis methods.

Very unimportant Somewhat unimportant Neutral Somewhat important Very importa

Comments/rationale for ratings

Priority Setting for Public Health and Health Systems Relevance Project 2019

Participation in the PHHS Relevance Project

8. If you are interested to join the subgroups addressing the topics, please indicate which topics are of interest to you. You can select more than one option.

- Framing of questions
- Choice of outcomes
- Surrogate/indirect outcomes
- Non-standardised outcomes
- Narrative synthesis (non-meta-analysed data)
- Important effect sizes for non-intervention reviews
- GRADE/SOF & interpretation
- Others (please specify)

Comments/Suggestions

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Priority Setting for Public Health and Health Systems Relevance Project 2019

Comments and suggestions

9. Do you have any other comments, suggestions, or questions?

[Prev](#)[Done - Thank you for completing the survey](#)