### **PEER REVIEW HISTORY**

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (http://bmjopen.bmj.com/site/about/resources/checklist.pdf) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

#### **ARTICLE DETAILS**

TITLE (PROVISIONAL)	Towards sustainable healthcare system performance in the 21st
	century in high-income countries: a protocol for a systematic
	review of the grey literature
AUTHORS	Braithwaite, Jeffrey; Zurynski, Yvonne; Ludlow, Kristiana; Holt,
	Joanna; Augustsson, Hanna; Campbell, Margie

### **VERSION 1 – REVIEW**

REVIEWER	Dr Tsegahun Manyazewal
	CDT-Africa, College of Health Sciences, Addis Ababa University,
	Ethiopia
REVIEW RETURNED	31-Aug-2018

INCHIENT INCHIONNED	31-Aug-2010
GENERAL COMMENTS	The review protocol entitled "Towards sustainable healthcare system performance in the 21st century: a protocol for a systematic review of the grey literature" has the potential compiling information on the area of subject. The following points need to be considered:
	Title 1. Title: the title should include the sentence "high-income countries" as the study focus on this countries only and strictly excluded low- and middle-income countries. Then others will do the same for LMICs.
	Abstract 2. Methods shall highlight the quality assessment strategy. 3. Abbreviations should be expanded at first mention: OECO, WHO in Methods section 4. Ethics and dissemination: "Disseminated in peer-reviewed literature", preferred if disseminated in open-access, peer-reviewed journals.
	Key Word: 5. I suggest key words be revised as: healthcare system; sustainability; high-income countries; 21st century; grey literature; Australia.  Main text 6. Research questions (Page 5): some of the specific questions will have similar result, thus merging may be needed for some, keeping in mind of replication potential of the study.
	Scope and documents to be included 7. Starting Page 7 line 50-51: The authors described 7 core concepts/scope that they intend to discuss. Such scopes shall not emerge from the authors as this would mislead the study, and is very fragmented at its current state and "patient" is almost

	neglected. Instead, the authors can adapt a health system framework developed by credible organizations or authors. I suggest the WHO health systems framework with 6 building blocks to guide the collection, analysis and interpretation of the study:  (http://www.wpro.who.int/health_services/health_systems_frame work/en/)  Quality appraisal and risk of bias, analysis 8. The quality and statistical analysis procedures intended are very strong, I suggest this shall be reflected in the (Strengths and limitations of this study) section above.
REVIEWER	Vincent Miceal Makerere University School of Public Health Department of Epidemiology and Biostatistics, Kampala, Uganda
REVIEW RETURNED	01-Sep-2018
GENERAL COMMENTS	It's a well written protocol.
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REVIEWER	Andrea Furlan
	Institute for Work & Health Toronto, ON, Canada
REVIEW RETURNED	19-Sep-2018
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GENERAL COMMENTS	This is an innovative review on an interesting topic
SEMERAL COMMENTS	I found the review easy to read and well organized.
	Tround the review easy to read and well organized.
	Page 5, line 24, The term buoyancy sounds strange.
	Page 5, line 40, What about op-eds, journalists, media and social
	media?
	Page 7, line 21, I assume national means in Australia. If that is
	correct, please change to "will be stratified by their geographical
	scope: in Australia and internationally".
	Page 8, line 40, In the sectors included as components of
	healthare systems, are laboratories and diagnostic tests facilities
	included?
	Page 10, line 56, please give an example of what would not be
	relevant to high-income country
	Page 11, line 25, please change national or international to
	"applicable to Australia or internationally"
	I found some information missing:
	I found some information missing: - What is the expertise of the team?
	- Plans for dissemination of the results after this systematic review
	is finished?
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## **VERSION 1 – AUTHOR RESPONSE**

- Is there a plan for a prisma chart?

Reviewer comments	Response
Editorial office	
Manuscript ID bmjopen-2018-025892 entitled	Thank you for providing reviewers' comments
"Towards sustainable healthcare system performance in the 21st century: a protocol for a	which we have found most helpful.
systematic review of the grey literature" which	

you submitted to BMJ Open, has been reviewed. The comments of the reviewer(s) are included at the bottom of this letter. The Editorial Office have also checked your manuscript for any minor formatting issues and these will be listed at the end of this email.	
The reviewer(s) have recommended revisions to your manuscript. Therefore, I invite you to respond to the reviewer(s)' comments and revise your manuscript. Please remember that the reviewers' comments and the previous drafts of your manuscript will be published as supplementary information alongside the final version.	We address each of the reviewers' comments in the table below and we provide a revised version of the manuscript with all changes highlighted in blue text.
To revise your manuscript, log into <a href="https://mc.manuscriptcentral.com/bmjopen">https://mc.manuscriptcentral.com/bmjopen</a> and enter your Author Center, where you will find your manuscript title listed under "Manuscripts with Decisions." Under "Actions," click on "Create a Revision." Your manuscript number has been appended to denote a revision.	
You will be unable to make your revisions on the originally submitted version of the manuscript. Instead, revise your manuscript using a word processing program and save it on your computer. Please also highlight the changes to your manuscript within the document by using the track changes mode in MS Word or by using bold or coloured text. Once the revised manuscript is prepared, you can upload it and submit it through your Author Center.	
When submitting your revised manuscript, you will be able to respond to the comments made by the reviewer(s) in the space provided. You can use this space to document any changes you make to the original manuscript. In order to expedite the processing of the revised manuscript, please be as specific as possible in your response to the reviewer(s).	
You will receive a proof if your article is accepted, but you will be unable to make substantial changes to your manuscript, please take this opportunity to check the revised submission carefully.	
IMPORTANT: Your original files are available to you when you upload your revised manuscript.	

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Please delete any redundant files before completing the submission.	
Because we are trying to facilitate timely publication of manuscripts submitted to BMJ Open, your revised manuscript should be submitted within 28 days. If it is not possible for you to submit your revision by this date, we may have to consider your paper as a new submission.  Once again, thank you for submitting your	
manuscript to BMJ Open and I look forward to receiving your revision.	
Reviewer 1: Dr Tsegahun Manyazewal	
The review protocol entitled "Towards sustainable healthcare system performance in the 21st century: a protocol for a systematic review of the grey literature" has the potential compiling information on the area of subject. The following points need to be considered:	
Title 1. Title: the title should include the sentence "high-income countries" as the study focus on this countries only and strictly excluded low- and middle-income countries. Then others will do the same for LMICs.	We have amended the title accordingly:     Towards sustainable healthcare system     performance in the 21 <sup>st</sup> century in high-income countries: a protocol for a systematic review of the grey literature
Abstract 2. Methods shall highlight the quality assessment strategy.	2.Quality assessment is now explicitly mentioned.
3. Abbreviations should be expanded at first mention: OECO, WHO in Methods section 4. Ethics and dissemination: "Disseminated in peer-reviewed literature", preferred if disseminated in open-access, peer-reviewed journals.	3. As far as we are aware, well known and commonly used abbreviations such as WHO and OECD do not require spelling out in full in the abstract according to the BMJ style guide. However, we are happy to follow the advice of the journal's editorial team.
	4.We have changed this sentence to include "open access"
Key Word: 5. I suggest key words be revised as: healthcare system; sustainability; high-income countries; 21st century; grey literature; Australia. Main text	5. We have added "grey literature" as a key word.  We feel that "21st century" and "sustainability"
6. Research questions (Page 5): some of the	are too general as key words, and would not be

specific questions will have similar result, thus merging may be needed for some, keeping in mind of replication potential of the study.	helpful to those searching for papers on healthcare system sustainability. The scope of the protocol includes reviewing international literature and not just Australian literature, therefore we feel it inappropriate to single out Australia as a key word. As "high-income" countries has been added to the title, we feel it is not needed as a key word.
	6. Having separated the research questions to address different aspects of healthcare system sustainability will ensure appropriate and relevant data extraction—therefore enhancing reproducibility of the proposed method. The questions are of course inter-related and the results will be brought together at the synthesis stage (please see page 13).
Scope and documents to be included 7. Starting Page 7 line 50-51: The authors described 7 core concepts/scope that they intend to discuss. Such scopes shall not emerge from the authors as this would mislead the study, and is very fragmented at its current state and "patient" is almost neglected. Instead, the authors can adapt a health system framework developed by credible organizations or authors. I suggest the WHO health systems framework with 6 building blocks to guide the collection, analysis and interpretation of the study: (http://www.wpro.who.int/health_services/health_systems_framework/en/) Quality appraisal and risk of bias, analysis 8. The quality and statistical analysis procedures intended are very strong, I suggest this shall be reflected in the (Strengths and limitations of this	7. The scope of the review is based on documents from the OECD, WEF, WHO and a key paper by Crisp – we have added these references to the text on page 7 to make this clear.  The suggested WHO health system framework, although useful to identify the building blocks of a healthcare system does not specifically address health care system sustainability.  8. Dot-point 1 of the strengths and weaknesses section highlights the analysis and synthesis process.
study) section above.  Reviewer 2: Vincent Miceal	
It's a well written protocol.	Thank you.
Reviewer 3: Andrea Furlan	
This is an innovative review on an interesting topic I found the review easy to read and well organized.	

Page 5, line 24, The term buoyancy sounds strange.	We have replaced "buoyancy" with "resilience"
Page 5, line 40, What about op-eds, journalists, media and social media?	We have limited the scope to documents published on-line by reputable organisations, opinion pieces and editorials are included—please Table 2.
	Including media and social media items would require a different protocol more amenable to discourse analysis rather than a systematic review of the grey literature. A discourse analysis may be an option for a future study.
Page 7, line 21, I assume national means in Australia. If that is correct, please change to "will	The review has an international scope—please see Table 2, point 6.
be stratified by their geographical scope: in Australia and internationally".	We have amended box 1 and we have added a sentence on page 10, paragraph 1 to clarify the meaning of international and national documents.
Page 8, line 40, In the sectors included as components of healthare systems, are laboratories and diagnostic tests facilities included?	The review does not focus specifically on laboratories and tests—rather, the review takes a broad view of health care delivery systems (according to WEF) of which laboratories are an integral part.
Page 10, line 56, please give an example of what would not be relevant to high-income country	The following sentence on page 10 has been amended:  Documents related to health systems in lowincome countries or conflict zones, where health resources are scarce, or aspects of health system reform which are exclusive to a particular national political situation such as Brexit in the UK or the Affordable Care Act in the USA will also be excluded.
Page 11, line 25, please change national or international to "applicable to Australia or internationally"	The scope of this review includes relevant documents from many different nations (not only from Australia) as well as from international organisations such as the OECD, WEF and WHO. We have clarified the meaning of "international" and "national" documents on page 10, paragraph 1.
I found some information missing: - What is the expertise of the team? - Plans for dissemination of the results after this systematic review is finished?	The protocol has been registered with PROSPERO and meets all PRISMA guidelines.
- Is there a plan for a prisma chart?	A paragraph on dissemination has been added on page 14.

	Page 10, under the heading "Selection Process" states that a PRISMA flowchart will be constructed.
Formatting amendments	
Required amendments will be listed here; please include these changes in your revised version:  - We have implemented an additional requirement to all articles to include 'Patient and Public Involvement' statement within the main text of your main document. Please refer below for more information regarding this new instruction:	
Authors must include a statement in the methods section of the manuscript under the sub-heading 'Patient and Public Involvement'.	The following statement has been added at the end of the manuscript, on page 14.
This should provide a brief response to the following questions:	Patient and Public Involvement:
How was the development of the research question and outcome measures informed by patients' priorities, experience, and preferences? How did you involve patients in the design of this study?  Were patients involved in the recruitment to and conduct of the study?  How will the results be disseminated to study participants?  For randomised controlled trials, was the burden of the intervention assessed by patients	The Consumer Health Forum of Australia (CHF) is a partner in the Partnership Centre for Health System Sustainability and representatives from the CHF are aware of the proposed grey literature review and this protocol. We plan to liaise with representatives of the CHF when the review is complete to produce a resource on healthcare system sustainability for health consumers.
themselves? Patient advisers should also be thanked in the contributorship statement/acknowledgements. If patients and or public were not involved please state this.	

# **VERSION 2 – REVIEW**

REVIEWER	Dr Tsegahun Manyazewal
	CDT-Africa, College of Health Sciences, Addis Ababa University
REVIEW RETURNED	15-Oct-2018
GENERAL COMMENTS	Braithwaite et al have reasonably addressed the comments from my previous review of the paper " Towards sustainable healthcare system performance in the 21st century in high-income countries: a protocol for a systematic review of the grey literature", and I have no additional comment on the revised version.