## 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)	A scoping review protocol on the roles and tasks of peer reviewers
	in the manuscript review process in biomedical journals
AUTHORS	Glonti, Ketevan; Cauchi, Daniel; Cobo, Erik; Boutron, Isabelle;
	Moher, David; Hren, Darko

## **VERSION 1 – REVIEW**

REVIEWER	Carolyn Sun Columbia University School of Nursing, New York Presbyterian Hospital
	USA
REVIEW RETURNED	26-May-2017

GENERAL COMMENTS	This is an important topic that is timely and well suited for a scoping review. Overall, the protocol is well developed and clearly defined. One aspect to consider is how you will check for duplicates between the grey literature and indexed literature. That is, oftentimes, results are found in the grey literature that are subsequently published elsewhere in the indexed literature, with a slightly different title and date. How will you account for this and what methods do you plan to use to identify these duplicates?
	Other than this minor consideration, I think this would be a very helpful scoping review, and this protocol may serve as a template for others.

REVIEWER	Cynthia Lokker
	McMaster University, Canada
REVIEW RETURNED	26-May-2017

GENERAL COMMENTS	This scoping review addresses an important issue in peer review and I think the results will be very interesting and hopefully lead to improvements in the understanding of peer review but also the strengthening of the process. I have made some comments in the pdf file, mostly to help clarify some of the more complicated methods
	and alignment of your stated objectives to the charting/collating/ and conclusion sections of the manuscript. The methodology is sound and based on established scoping review methods.

#### **VERSION 1 – AUTHOR RESPONSE**

#### Reviewer: 1

This is an important topic that is timely and well suited for a scoping review. Overall, the protocol is well developed and clearly defined. One aspect to consider is how you will check for duplicates between the grey literature and indexed literature. That is, oftentimes, results are found in the grey literature that are subsequently published elsewhere in the indexed literature, with a slightly different title and date. How will you account for this and what methods do you plan to use to identify these duplicates? Other than this minor consideration, I think this would be a very helpful scoping review, and this protocol may serve as a template for others.

• Thank you for pointing out this important issue. We expect that most of the duplicates will be identified during the full-text screening and will take precautions to facilitate identification. We will primarily use the authors' names to identify potential duplicates.

The results for grey literature will be displayed in a separate table which will further help us to identify duplicated between the two tables.

We have now clarified this under the "Study selection" section (page 6):

"We expect that some of the grey literature might subsequently be published elsewhere in the indexed literature. This will be accounted for by cross-checking authors' names across grey literature and index literature results in order to identify potential duplicates."

#### Reviewer: 2

This scoping review addresses an important issue in peer review and I think the results will be very interesting and hopefully lead to improvements in the understanding of peer review but also the strengthening of the process. I have made some comments in the pdf file, mostly to help clarify some of the more complicated methods and alignment of your stated objectives to the charting/collating/ and conclusion sections of the manuscript. The methodology is sound and based on established scoping review methods.

• We thank the reviewer for the helpful comments. We addressed each comment below and updated the manuscript accordingly.

### Comments from the attached pdf file:

Looking at the charting and collating sections, there are more expectations and competencies that will be extracted/reported than just the roles and tasks. For consistency, perhaps reiterate in the collating section that your primary concerns are roles and tasks in this evaluation?

• We have now added this point under the collating section (page 7).

"While the primary goal is to extract roles and tasks of peer reviewers, additional items related to particular abilities, knowledge, training and skills will also be extracted."

I imagine roles and tasks would overlap. Can you provide definitions of how you will tease them apart? Or is there an existing categorization you could use?

• Thank you for highlighting this. In fact, we have debated this potential overlap while drafting this protocol, since it has substantial implications for data extraction. We conducted a non-systematic review of the literature on this particular issue in preparation for this manuscript, however we did not encounter a clear categorization or definition of these terms. For example, the definition provided by the Council of Science Editors (https://www.councilscienceeditors.org/resource-library/editorial-policies/white-paper-on-publication-ethics/2-3-reviewer-roles-and-responsibilities/) mentions roles very briefly but mostly refers to "responsibilities".

The closest example we found is a recent paper by Galipeau et al. "A scoping review of competencies for scientific editors of biomedical journals. BMC medicine. 2016 Feb 2;14(1):16.". This article groups roles and tasks of journal editors into the single term "competency-related statements". However, for our purposes we decided to clearly differentiate between these terms. We considered "roles" to be of an overarching nature, whereas "tasks" refer more specifically to actions that fulfil these roles. We have now added this clarification to the manuscript (page 4):

"Given that some overlap between the terms "roles" and "tasks" is expected, we defined "roles" as referring to the overarching nature of peer reviewers' function, whereas "tasks" refer more specifically to actions that fulfil these roles."

How will this analysis be done? Word frequency? Please provide a few more details.

• We think that a word frequency analysis would not be appropriate for our purposes because each database makes use of distinct terms which may not overlap between databases, hence a word frequency analysis would not necessarily be helpful.

We have now clarified our approach in the manuscript (page 5).

"In the second step, we will closely review potentially relevant text words in the titles and abstracts of the most pertinent papers in order to compile a list of terms that can be used to inform our search strategy. Index terms used to describe the articles will also be included. This list will be combined with search strategies from existing scoping and systematic reviews on peer review (9,21,28) to develop database-specific search strategies."

This first sentence is hard to read. Please consider using brackets around the details for JAMA and Nature and Science.

• Thank you, we have simplified the sentence.

Highlight the focus on roles and tasks to align with your stated objectives.

- We have now added this point under the collating section (page 7).
- "While the primary goal is to extract roles and tasks of peer reviewers, additional items related to particular abilities, knowledge, training and skills will also be extracted."

Rather than outcomes, perhaps use results.

• We agree that this is a better word and have changed the text accordingly.

Again, I think some alignment with your stated objectives is needed here.

- We have now clarified these terms in line with our objectives:
- "To our knowledge, this scoping review is the first attempt to systematically identify the roles (overarching nature of the work) and tasks (specific actions carried out to fulfil these roles) of peer reviewers involved in the manuscript review process in biomedical journals."

#### **VERSION 2 - REVIEW**

REVIEWER	Carolyn Sun Columbia University School of Nursing, USA
REVIEW RETURNED	13-Jul-2017

GENERAL COMMENTS	Thank you for addressing my previous comments. The results of this
	scoping review will be relevant and useful to many.

REVIEWER	Cynthia Lokker McMaster University, Canada
REVIEW RETURNED	06-Jul-2017

GENERAL COMMENTS	The changes made to the manuscript addressed the concerns I had in the initial review. Thanks. I look forward to reading the results of
	the review!

# **VERSION 2 – AUTHOR RESPONSE**

Reviewer: 1: Thank you for addressing my previous comments. The results of this scoping review will be relevant and useful to many.

Reply: Thank you for your feedback.

Reviewer: 2 The changes made to the manuscript addressed the concerns I had in the initial review. Thanks.

I look forward to reading the results of the review!

Reply: Thank you for your feedback.