Reviewer's report

Title: How do we define the policy impact of public health research? A systematic review

Version: 0 Date: 26 Feb 2017

Reviewer: Andrew Searles

Reviewer’s report:

1. Is the question posed original, important and well defined?

The paper's three research questions reflect current issues that need to be addressed in the literature to arrive at a consensus view of what constitutes research impact. As a reader I would have benefited from a clearer understanding of the perspective of authors with regard to seeking definitions of research impact. Academics, policy makers, politicians, bureaucrats, clinicians, patients and the general community have slightly different views on the topic. For example, I believe there remains an entrenched view amongst part of the academic community that peer reviewed papers and grants are the end points for research impact. A view unlikely to be shared by the wider community.

The use of mental health research as a case study was informative and adds to the originality of the paper. Mental health is a growing area of need for preventative health and health interventions, and it contributes to significant growth in health budgets.

2. Are the data sound and well controlled?

The authors included a wide search strategy to ensure the peer and grey literature were captured. The study design as appropriate for the research questions.

While the search strategy was appropriate. I note that the economic literature was not included - it should be noted that impact assessment is of great interest to economists. Further, the economic perspective of 'impact' would probably resonate strongly with community and funder expectations. From the viewpoint of economists, the generation of outputs from research are not impacts; they do not create impact until those outputs are used by an end user such as the health service, patients or clinicians. This point is different to the inclusion of 'the economy' in definitions of impact.

3. Is the interpretation (discussion and conclusion) well balanced and supported by the data?

The authors have drawn balanced and reasonable conclusions from the data. Two points were highlighted 1) that the definitions of research impact, when provided, are heterogeneous and that 2) frequently papers discussing research impact do not define the term at all. The conclusions in this paper were well referenced.
4. Are the methods appropriate and well described, and are sufficient details provided to allow others to evaluate and/or replicate the work?

The authors provided detailed methods and followed the PRISMA framework to extract and analyse the collected works. The described methods provide sufficient detail on search terms, databases and grey literature sources to enable replication of the study. The statistical analysis was straightforward and, in my view, does not require separate review by a statistician.

5. What are the strengths and weaknesses of the methods?

The research questions were appropriately addressed by the authors' methods - as discussed above. However, as noted, I believe the search strategy would have benefited from inclusion of economic databases.

6. Can the writing, organization, tables and figures be improved?

The layout of the paper is easy to follow and logical. The paper is peppered with interesting findings and they are drawn together expertly and intelligently in the discussion. I have a great interest in this area and found the paper to be well written and a pleasure to read.

7. When revisions are requested.

In its current form the paper is original and provides a valuable addition to knowledge in the fundamental area of defining research impact. However, as a suggestion and at the authors' discretion, I suggest that the economic literature (and hence economic databases) be included for identifying discussions on research impact.

8. Are there any ethical or competing interests issues you would like to raise?

No

9. Are the included additional files (supplementary materials) appropriate?

Yes

**Level of interest**

Please indicate how interesting you found the manuscript:

An article of importance in its field

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable

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