Reviewer’s report

Title: The impact generated by public and charity funded research in the UK: A systematic literature review

Version: 0 Date: 30 Oct 2018

Reviewer: Jonathan Grant

Reviewer’s report:

This is a strong, interesting and timely paper that I recommend for publication subject to the comments below. I have two significant issues that I would like to raise with the authors and a series of minor corrections/typos. I should note at the outset that I am an author of a number of the papers that are reviewed and assessed in the study and hence have a potential conflict of interest which I did share with the editor before undertaking this review.

Significant issues

1. I am concerned about the definition used for 'selection bias' as described in Table 1. The idea that this sort of evaluative research should be based on randomisation is misguided and thus is a bias in its own right in this actual study. A lot of the studies that are reviewed use case studies where accepted cases study methodology is to use 'purposive sampling' whereby you deliberately select the project that are likely to have an impact (see Yin, R (2008) Case Study Research: Design and Methods). The issue here is not whether the projects are representative or randomised but where the sampling approach is transparently described in the research publication (which is covered in reporting bias). I think this is potentially a significant flaw in this study which biases against case study research. At a minimum this should be acknowledged and developed as a significant line of argument in the discussion, but ideally the definition of selection bias should be reviewed and re-analysed. Related but less significant is that it would be help to know the basis for the response rates - is this driven data or is a heuristic developed by the authors.

2. The authors raise a really important issue with respect to 'funding bias' and one that I would like to see them expand on in the discussion. As a practitioner of this type of research it is very difficult (near impossible) to get independent funding. I and others have been arguing for this for some time, for the reasons that the authors note i.e there is a potential tendency for studies to support the interests of the study, whether real or perceived. (See for example recent commentary in BMJ Open: https://bmjopen.bmj.com/content/8/9/e022131.info). It would be really helpful if the authors commented on this in the discussion and bought out the need for independent funding streams for this type of research.
Minor comments/typos

Page 3, line 34-36: There is something wrong with the sense of this sentence (eg possible missing word)


Page 4, line 32. Why these journals? I would have come up with a different list (e.g. HSRP, Research Evaluation, BMC Medicine etc.) do some explanation would be helpful

Page 4, line 45. Not sure why the start of NIHR in 2006 is a good reason, but very minor comment

Page 20, line 24. Do you mean the use of the ResearchFish reference here? Seems wrong

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:

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I am an author on a number of studies that are reviewed in this paper. Otherwise I have no other competing interests to declare.

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