### PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (<u>http://bmjopen.bmj.com/site/about/resources/checklist.pdf</u>) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below. Some articles will have been accepted based in part or entirely on reviews undertaken for other BMJ Group journals. These will be reproduced where possible.

### ARTICLE DETAILS

TITLE (PROVISIONAL)	Understanding how appraisal of doctors produces its effects: A
	realist review protocol
AUTHORS	Brennan, Nicola; Bryce, Marie; Pearson, Mark; Wong, Geoff;
	Cooper, Chris; Archer, Julian

### **VERSION 1 - REVIEW**

REVIEWER	Marty Chamberlain
	Loughborough University
	UK
REVIEW RETURNED	22-Apr-2014

GENERAL COMMENTS	An excellent protocol paper on a pertinient topic presented in clear
	manner with appropriate supporting evidence.

REVIEWER	N S Prashanth Institute of Public Health, Bangalore, India
REVIEW RETURNED	30-Apr-2014

GENERAL COMMENTS	Thank you for the opportunity to review this paper. The paper is a contribution to the relatively small (within public health) body of literature centred around realist review, and a useful contribution to the field of human resources management in health services and allied disciplines.
	A few comments: 1) A brief reflection on the limitations of this method in particular, or other methods/approaches to answering the research questions could add value to the paper. This could be added to the Discussion.
	2) Although mostly based on desk work, Step 1 and perhaps later steps (where they come back for the 'reality check') involve some interaction with clinicians or others involved/holding influence over the existing appraisal process. It may be important to consider the ethical implications of their involvement in this study, and consider, if and what types of consent/information sheets may be needed for their participation.
	3) The "context" in the second research question has many dimensions, ranging from the larger policy context within which the GMC went in for the choice of appraisal process to the smaller micro-contexts within the individual's practice setting. It might be useful to indicate the depth to which these will be explored and if

indeed there is a boundary to such exploration.
4) Further on the involvement of stakeholders in Step 1, the purpose for interacting with them is clear. However, the nature of the interaction and what tools will be used is not mentioned. For example, will this involve engaging with them in groups, or as individuals. Are structured tools going to be designed for such interaction and how these stakeholders will be selected. These could be useful both on ethical (per comment above) and technical grounds.
5) A scheme/diagram to explain the study design could be considered for readers new to realist review.
Minor comments: - Sentence case for Human Resources necessary? (See p.6, line 33) - On p.5, line 55 the reference number 15 may be incorrect. Is it not 14 which explains the C-M-O relationship?

# **VERSION 1 – AUTHOR RESPONSE**

## Reviewer Name Marty Chamberlain

Institution and Country Loughborough University UK Please state any competing interests or state 'None declared': None declared

An excellent protocol paper on a pertinent topic presented in clear manner with appropriate supporting evidence.

### Reviewer Name N S Prashanth

Institution and Country Institute of Public Health, Bangalore, India Please state any competing interests or state 'None declared': None declared

Thank you for the opportunity to review this paper. The paper is a contribution to the relatively small (within public health) body of literature centred around realist review, and a useful contribution to the field of human resources management in health services and allied disciplines.

A few comments:

1) A brief reflection on the limitations of this method in particular, or other methods/approaches to answering the research questions could add value to the paper. This could be added to the Discussion.

B) We believe we make the case on Page 6 – albeit briefly. We have added a little more to the text for clarification.

2) Although mostly based on desk work, Step 1 and perhaps later steps (where they come back for the 'reality check') involve some interaction with clinicians or others involved/holding influence over the existing appraisal process. It may be important to consider the ethical implications of their involvement in this study, and consider, if and what types of consent/information sheets may be needed for their participation.

C) = (A) We have added a sentence about there being no need for formal ethical approval for conducting expert panels but that we wish to achieve informed participation.

3) The "context" in the second research question has many dimensions, ranging from the larger policy

context within which the GMC went in for the choice of appraisal process to the smaller microcontexts within the individual's practice setting. It might be useful to indicate the depth to which these will be explored and if indeed there is a boundary to such exploration.

D) We would argue that the reason why the question is so broad is because we are not at this point. We are not exactly sure what the programme theory is in appraisal in relation to revalidation. The depth and boundary to the review will be driven by the need to produce a coherent and plausible realist explanation of how and why appraisal 'works'. To this end we will need seek data that; a) help us to develop an initial realist programme theory of appraisal and; b) refine this programme theory. We have not made changes to the text in the paper.

4) Further on the involvement of stakeholders in Step 1, the purpose for interacting with them is clear. However, the nature of the interaction and what tools will be used is not mentioned. For example, will this involve engaging with them in groups, or as individuals. Are structured tools going to be designed for such interaction and how these stakeholders will be selected. These could be useful both on ethical (per comment above) and technical grounds.

E) We have added: "This process will involve a series of expert panel meetings using facilitated discussions centred on evolving programme theory. Formal ethical approval will not be required but informed participation will be sought.

5) A scheme/diagram to explain the study design could be considered for readers new to realist review.

F) We have added a simple diagram to illustrate Pawson's 5 practical stages = figure 1

Minor comments:

- Sentence case for Human Resources necessary? (See p.6, line 33)

G) This has been changed to human resources

- On p.5, line 55 the reference number 15 may be incorrect. Is it not 14 which explains the C-M-O relationship?

H) This reference is correct as written.