PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Encouraging translation and assessing impact of the Centre for Research Excellence in Integrated Quality Improvement: rationale and protocol for a research impact assessment
AUTHORS	Ramanathan, Shanthi; Reeves, Penny; Deeming, Simon; Bailie, Ross; Bailie, Jodie; Bainbridge, Roxanne; Cunningham, Frances; Doran, Christopher; McPhail-Bell, Karen; Searles, Andrew

VERSION 1 – REVIEW

REVIEWER	Pavel Ovseiko
	University of Oxford, UK
REVIEW RETURNED	26-Jul-2017
GENERAL COMMENTS	
	This important and most interesting protocol describes an ambitious programme of work funded by the Australian National Health and Medical Research Council. Given that the latter is a recognised, open access advocating research-funding body http://www.sherpa.ac.uk/juliet/index.php?fPersistentID=17&la=en&m ode=advanced and that the study has been approved by the University of Newcastle's Research Ethics Committee, further peerreview may not be necessary as per BMJOpen's editorial policy for study protocols. If so, the editors may want to contact the authors for proof of funding and ethics before proceeding with further peerreview.
	 The study is potentially acceptable for publication in BMJOpen, once the authors have carried out two minor, but essential revisions: Add 'Strengths and limitations of this study' after the abstract Reformat citations according to BMJOpen's style. In addition, the authors may find it useful to consider whether their study is relevant to Australia's National Innovation and Science Agenda. If so, it may be worth mentioning it in the background of the current protocol or in the future actual study to maximise its chances of being translated into policy and practice nationally.

	Otava Harray
REVIEWER	Steve Hanney
	Brunel University London,
	UK
	I was co-creator of the Payback Framework which is adapted for use
	as one of the methods in this study
REVIEW RETURNED	31-Jul-2017
GENERAL COMMENTS	
	The focus in this study on encouraging translation as well as assessing impact, including in a prospective way, makes the study a most interesting and innovative one. This is particularly so in the
	context of the statement about 'continued concerns that Indigenous communities are over-researched with little corresponding
	improvement in health outcomes.' It is also a strength that the study proposes not only to apply the new framework (FAIT) that the team
	have developed to encourage and assess impact, but also that the operation of the framework itself will be analysed.
	Therefore, I would welcome publication of this protocol, but feel that prior to publication a little more work is required on some of the details and adherence to the guidelines for authors. These points
	are listed below:1. I could not see that there was the required 'strengths and
	 limitations of this study' section (apologies if I missed it). The references do not seem to be presented in the required
	style, and the name of the journal in reference 21 is incorrect (it
	should not have 'Journal of' at the start).
	3. The guidelines for authors state, 'Appropriate previous
	literature should be referenced, including relevant systematic
	reviews.' In some areas this seems fine, but in relation to previous
	reviews of ways of assessing health research impact, including categories of impact, it would probably be worth referring to some recent additional examples of the previous literature, for example the review by Raftery et al (2016) which analysed 161 previous studies,
	including, in each case, the categories of impact assessed, or proposed for assessment. (These 161 studies were additional to those 46 included in that team's earlier review in 2007). Drawing on
	the previous literature to a somewhat greater extent would also help in addressing a couple of points in the text that I believe should be corrected, as set out below.
	4. I'm not sure it's any longer correct to state, as on p.4 that
	'impacts have rarely been measured beyond academic outputs such as peer-reviewed publications.' Included in the many empirical
	studies in the Raftery et al review there is a description of the Research Excellence Framework in the UK (pp.26/7, and 253/4)
	which assessed the research impact of all UK university departments. Furthermore, there is also description of 14 empirical studies of the impact from Australian health research programmes or
	whole portfolios. These include Kalucy et al (2009) which (as set out on pp.27 and 172 of Raftery et al) piloted the expected introduction
	of impact assessment in Australia through the impact case studies that had been proposed for the Research Quality Framework and
	found the Payback Framework would be likely to be a suitable framework to gather data for such impact cases studies. (Eventually,
	of course, RQF was not implemented). 5. I don't think it's correct to suggest, as on p.11, that Barker
	(2007) is a suitable reference for 'the research evaluation system currently used in the United Kingdom'. The title of Barker's paper is
	'The UK Research Assessment Exercise'. That was correct when the paper was written in 2007 but has now been replaced by a different system in the Research Excellence Framework
	different system, ie the Research Excellence Framework.

	 6. A final point in relation to the literature may just be a matter of interpretation, but I see narrative case studies as a major way in which data about impacts (and how they were generated) can be gathered and presented using the Payback Framework. Of course many other approaches have also been used to organise narrative case studies, but in relation to Payback they are often an integral part of the approach, as for example in the assessment of the research funded by the Australian National Breast Cancer Foundation (Donovan et al, 2014). At times I thought the protocol possibly implied narrative case studies were necessarily a separate approach from Payback. 7. Finally, I believe the protocol would also benefit from being slightly more detailed in relation to the limitations or challenges, especially around conducting the economic analysis. Certain limitations, or challenges, are already mentioned but I think it might be useful to draw them together and highlight the interconnections. If I've understood the proposal correctly, these limitations could include the fact that it seems to be proposed: that a reasonable assessment of the value of actual and expected impacts can be made over the comparatively short timescale of 4 years; that the research costs to be included should only be those of the specific pieces of research and not any earlier research on which they are based; and that each study is likely to make an impact and a separate assessment and economic analysis will be made for each – as opposed to say the study by Johnston et al (2006) which, while it did not look at the costs of earlier research, did count the cost of the whole programme in the analysis including those studies that did not produce societal benefits.
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REVIEWER	W.H. van Harten
	Netherlands Cancer Instutute; Rijnstate General Hospital and
	University of Twente
	I have no conflict of interest to report
REVIEW RETURNED	04-Aug-2017

CENEDAL COMMENTS	
GENERAL COMMENTS	Although the tekst in abstract and introduction seem to suggest otherwise, this is merely a project plan on how to evaluate the impact of a number of research(?) projects in the Indigenous population of Australia. The stage in which this is presently, does not even allow the authors to presnt a proper evaluation model based on literature, as they announce that they will endeavor on a scoping review, before piloting thier resulting evaluation model. This is extremely preliminary and not informative for readers. To my knowledge there is already quite some literature on the subject, so an open planning paper on such a project seems superfluous to me. One could expect a paper to be written on the scoping review with a draft impact evaluation model, but this is not yet achieveable, leaving readers with a completely hupothetical model, not thoroughly based in literature. In the introduction is is not clear whether this will be a paper on Australian projects or on impact evaluation using Australian cases. The generalization issue should in any variation be clarified just from the start.

VERSION 1 – AUTHOR RESPONSE

Reviewer 1

Comment: Add 'Strengths and limitations of this study' after the abstract. Response: This has been done on page 4.

Consider whether their study is relevant to Australia's National Innovation and Science Agenda.

Response: Mention of the Agenda has been included on Pg 5, last dot point of Para 3.

Reviewer 2

It would probably be worth referring to some recent additional examples of the previous literature, for example the review by Raftery et al (2016) which analysed 161 previous studies. Response: We have included the Raftery study and another more recent systematic review of methodological frameworks (Rivera et al, August 2017) and one from the FAIT team (Deeming et al, 2017).

I'm not sure it's any longer correct to state, as on p.4 that 'impacts have rarely been measured beyond academic outputs such as peer-reviewed publications.'

Response: Para 2 on page 5 has been modified to clarify that impact measurement while becoming more common is still not standard practice in many countries and Australia has not yet implemented a national framework for impact assessment.

I don't think it's correct to suggest, as on p.11, that Barker (2007) is a suitable reference for 'the research evaluation system currently used in the United Kingdom'.

Response: Noted and changed accordingly on Page 5 & 12 (Reference No 5)

At times I thought the protocol possibly implied narrative case studies were necessarily a separate approach from Payback.

Response: While FAIT identifies three separate but interconnected methodologies for impact assessment, the links between each component were not clear. This has been clarified with additions to page 8, 2.1 (first para); Page 10, Para 3 and under the heading Narrative on page 12 to more clearly articulate how FAIT treats each of these three methodologies and their interconnectedness.

Comment: I believe the protocol would also benefit from being slightly more detailed in relation to the limitations or challenges...certain limitations, or challenges, are already mentioned but I think it might be useful to draw them together and highlight the interconnections.

Response: We agree. The limitations and challenges have now been connected and expanded and included as a separate section - 2.4 on Page 13.

Comment: limitations could include ..that a reasonable assessment of the value of actual and expected impacts can be made over the comparatively short timescale of 4 years

Response: This has been clarified under Economic Assessment on page 11 and Limitations on page 13. In summary, the timescales will be different for each project and will be determined on a case-bycase basis any may include costs expended prior to the commencement of the CRE, where appropriate. Comment: ..that the research costs to be included should only be those of the specific pieces of research and not any earlier research on which they are based;

Response: This point has been clarified under Para 1 on page 11.

Comment: and that each study is likely to make an impact and a separate assessment and economic analysis will be made for each – as opposed to say the study by Johnston et al (2006) which did count the cost of the whole programme in the analysis..

Response: Correct, a separate assessment will be made for each of the five CRE-IQI Flagship projects and not for the CRE as a whole. This has been included as a limitation of the study on page 13.

Reviewer 3

Comment: The stage in which this is presently, does not even allow the authors to present a proper evaluation model based on literature, as they announce that they will endeavor on a scoping review, before piloting their resulting evaluation model.

Response: The framework we are trialing (FAIT) has been developed using a detailed mixed methodology including a review of existing literature about impact assessment frameworks and methodologies. The FAIT model has been published as referenced in this protocol (see Reference 25)

Comment: One could expect a paper to be written on the scoping review with a draft impact evaluation model, but this is not yet achievable, leaving readers with a completely hypothetical model, not thoroughly based in literature.

Response: We have referenced the FAIT seminal paper (Reference 25) which provides details of the FAIT framework.

Comment: In the introduction it is not clear whether this will be a paper on Australian projects or on impact evaluation using Australian cases.

Response: This is an impact evaluation using Australian research projects but is also an evaluation of the validity of the FAIT framework with a view to improving its performance as described in the fourth objective on page 7.

Comment: The generalization issue should in any variation be clarified just from the start.

Response: FAIT was designed to be applied to all health and medical research projects from basic science to applied research. Its application within CRE-IQI will test its feasibility when applied to health services research projects in the area of Indigenous primary healthcare but should be generalizable to health services research more broadly. A sentence has been added under the objectives on Page 7.

VERSION 2 – REVIEW

REVIEWER REVIEW RETURNED	Steve Hanney Brunel University London, UK I was co-creator of the Payback Framework which is adapted for use as one of the methods in this study. 14-Sep-2017
GENERAL COMMENTS	I thank the authors for addressing most of the points I raised (although ideally I would have liked a clearer recognition that narrative case studies are also one of the major ways in which the Payback Framework has been applied, eg in the referenced studies by Kalucy et al, and Donovan et al). However, there is one specific correction that unfortunately I missed in the first review but which does need to be made and I assume the authors will have the opportunity to do this: References 27 and 32 are to the same paper, although there are several bits of reference 27 which are incorrect (and the page numbers, which are correct in reference 27, are missing from reference 32). Making the necessary changes will mean the final two references will have to be re- numbered.

VERSION 2 – AUTHOR RESPONSE

Comment: However, there is one specific correction that unfortunately I missed in the first review but which does need to be made and I assume the authors will have the opportunity to do this: References 27 and 32 are to the same paper, although there are several bits of reference 27 which are incorrect (and the page numbers, which are correct in reference 27, are missing from reference 32). Making the necessary changes will mean the final two references will have to be re-numbered.

Response: Reference 32 has been deleted and replaced with Reference 27 which has been corrected.