Reviewer’s report

Title: A Lung Cancer Research Agenda that Reflects the Diverse Perspectives of Community Stakeholders: Process and Outcomes of the SEED Method

Version: 1 Date: 06 Oct 2018

Reviewer: Rachel Matthews

Reviewer's report:

Thank you. I found this submission informative and thought provoking from a personal and professional perspective.

In summary, the article draws attention to methodological issues of research prioritisation and the implementation of a specific method in practice that will be of interest to researchers, practitioners and patients.

Specific comments

1. In the plain English summary conceptual models and concept modeling are mentioned but I'm not sure these terms are adequately explained in the summary or elsewhere.

2. SEED was new to me and I note its development was funded by PCORI. I wondered if there was any further explanation to provide detail on how it was developed. Reference 12 and 13 I assume may do this. I was curious to know more. Is there evidence of it being tested anywhere else?

3. The methodology for priority setting partnerships by the James Lind Alliance is mentioned towards the end and I wondered if any other examples could be mentioned earlier?

4. Is there an implicit assumption that research questions generated this way will get funded? Is it worth considering the acceptability of evidence generated this way by funders?

5. Reference 4 looks dated. I think there are more recent references that could be used to strengthen this point.

6. The term 'causal modeling' is used. Could more explanation be added? I assume that it refers to a logic model approach? It made me think of the Action Effect Method approach we have used with patients and carers which helps to identify factors that contribute to programme theory and the testing of causal chains (Reed et al 2014, BMJQS)
7. The steps involved in the SEED process are clear and helpful in enabling others to test in different settings. I'm concerned about the separation of groups as we generally feel there are benefits of bringing people together. However, your use of group readiness and group dynamic surveys (are these validated?) are an important feature of evaluation that I'd consider using in future. I note with curiosity at the bottom of Table 1 that some questions were not applied to the Topic Groups and I wanted to know why.

8. There is reference to the use of stakeholder selection called the 7Ps Framework. Assume reference 21 explains further. Why was this used? Were alternatives considered? Could this feature earlier in the methods section? For example from line 201 through to line 208 on page 9. The methods used to advertise are described but there is no detail about which methods are most successful. If people were not selected to join the group, how was that managed?

9. The acronym SCAN is listed but I struggled to understand who this was on page 10.

10. The evaluation methods are comprehensive. I wondered if more could be said about the activity and observation logs and the after-action reviews.

11. Line 356 on p17 refers to other engagement models. Can you be more specific?

12. Line 363 the observation that SEED generates broader questions is well made and important. Could this be made more overt in the abstract?

13. Line 413 on page 19 refers to the lack of technical training and a dearth of capacity building methodologies. Is it implicit that community members need to be trained and informed or could it be considered that researchers need to do more to work with what people know, even if it is uninformed? Is there a deficit-model assumption here or an opportunity for shared learning?

14. Flexibility in the time taken to conduct SEED would be helpful. However, collaboration and participation take time for relationships to form so that they are productive. If there was evidence of more disengagement over time, then consideration of the time becomes more critical.

15. I'd consider publishing another paper in the future to follow up on what happened with the questions. Some progress is hinted at and I'd be curious to know more.
Finally, I was particularly interested in the faith and religiosity issues that were identified. I have direct experience of losing a close family member to lung cancer which was diagnosed late. My family member refused palliative intervention. This family member had a strong religious faith that with hindsight may have been a factor in delaying seeking help and probably played a part in the refusal of intervention.

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