Reviewer’s report

Title: Learning from patient involvement in a clinical study analyzing PET/CT in women with advanced breast cancer

Version: 0 Date: 06 Oct 2019

Reviewer: Laura Forsythe

Reviewer's report:

The authors describe their experiences with involving patients as partners on one of their studies relative to their experience on a past study. It is notable that their recruitment in the current study exceeds expectations and that other benefits may accrue to the study. There are several ways to make the description of their experiences more compelling.

- There are some statements in the introduction that are not entirely supported by the literature. For example, the finding that the impact of PPI is greatest if partners have lived experience was related to a specific set of outcomes (recruitment) and may not reflect other aspects more broadly. Also, there is a focus on the effects of PPI in quantitative research, particularly in the US. One recently article is Forsythe, Carman et al 2019 describing influence of engagement in PCORI studies, and there are others that should be included.

- It's not clear what the authors mean in the second paragraph - in what ways are attitudes more positive? changes to what kinds of practice?

- An accurate description of the study is needed in the first sentence of the Methods. The current study is not "clinical" observational. Also, please clearly state it's comparing experiences with an ongoing clinical study to a previous one.

- More needs to be done throughout the paper to demonstrate that these two studies are comparable. While they both deal with breast cancer patients, it seems that there are meaningful differences in the types of patients, the intervention delivered, and the amount of time for study participants (2 scans per day vs. something less intensive). These differences may account for differences in recruitment across studies.

- It's not clear why the authors only compare the first year of recruitment. The differences could be better assessed upon completion of recruitment for both studies.

- Throughout the paper, the authors should more carefully describe that recruitment was more successful in the study with PPI but causal language is not warranted given the methods used in this paper.
- The authors should be clear that they didn't "observe" researcher attitudes- they are describing their own attitudes. Also, much more detail and depth is needed about the changes in their attitudes.

- The influence on partners on analyses and dissemination will also be much stronger when more of the research study is completed.

Level of interest
Please indicate how interesting you found the manuscript:

An article of limited interest

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

Needs some language corrections before being published

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests.
I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal