PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (**http://bmjopen.bmj.com/site/about/resources/checklist.pdf**) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Building motivation to participate in a Quality Improvement Collaborative in NHS hospital trusts in south-east England; a qualitative participatory evaluation
AUTHORS	Lalani, Mirza; Hall, Kate; Skrypak, Mirek; Laing, C; Welch, John; Toohey, Peter; Seaholme, Sarah; Weijburg, Thomas; Eyre, Laura; Marshall, Martin

VERSION 1 – REVIEW

REVIEWER	Daniel M. Walker The Ohio State University, College of Medicine United States
REVIEW RETURNED	09-Jan-2018

GENERAL COMMENTS	**Journal:** BMJ Open **Title:** Building motivation to participate in a quality improvement collaborative: a qualitative participatory evaluation **Manuscript ID #:** bmjopen-2017-020930 **Comments to Author:** Thank you for submitting this manuscript – it is well written, thorough, and timely. The authors present on an important issue regarding quality improvement collaboratives, namely the lack of understanding regarding how the function. The specific focus on motivation helps focus this manuscript. However, I have a few comments related to details missing from the Methods, clarification and expansion in the Results, and questions regarding the Discussion. My specific comments are below. **Methods** 1. p. 4, ln 33: You state when the evaluation of the collaborative was running, but what is the time period that the collaborative itself was running? 2. How were the teams that participated in the evaluation

	selected? 3. Who did the participant observation? Was it just one investigator? Or multiple? 4. Who conducted the interviews? The same researcher that was the participant observer? 5. It is stated that 15 interviews were initially conducted, but then snowball sampling was used to identify additional informants – How many total interviews were conducted? What were the characteristics of the interviewees (i.e. physicians/ nurses/ managers)? 6. Who conducted the data analysis? **Results** 1. It is not clear in the Results what is identified from the interviews vs. the residency? 2. p. 6, ln 32/ 34: "This was a key…"/ "This was compounded…" Both of these statements could be clarified as to what the "This" refers to. 3. P. 7, ln. 4: What is meant by "fewer resources"? Does this refer to time to participate in the QI project? Or does this refer to staff available to help with the project? This is important because one could be interpreted as cultural, where as the other may be representative of financial constraints. 4. P. 8, ln 13: "Relevant to health systems pressures…" It is not clear why this is under the domain of external pressures, as health system pressure is an internal pressure – I think? Unless I am misinterpreting. Either way, I think this point could be clarified. **Discussion** 1. p. 8, ln 28: "board engagement" - What is meant by board engagement? The board is not mentioned in the results. This statement could connect more closely to the results. 2. P. 9, ln 12: One thing that seemed to be missing from the Results in general is mention of how the embedded researcher effected the motivation and direction of the QIC. I think this is a missed opportunity given the novelty of the research design. I mention this because the Discussion could include examples of how the embedded researcher negotiated their role as researcher to influence the direction of the collaborative, i.e. the real-time feedback that is mentioned. 3. P. 9, ln. 24: "junior doctors" - in the Results only "junior nurses" are referred to – please check for consistency.

REVIEWER	Paresh Dawda University of Canberra, Australia
REVIEW RETURNED	10-Jan-2018

GENERAL COMMENTS	Thank you for an interesting paper which is well written, accurate with upto date refeerences. The participatort methodology of researcher in residence model and principles of co-creation are excellent and from a personal perspective I completely endorse it,

	particularly for a formative evaluation as in this case. However, such a model also carries risks e.g. if researcher becomes too embedded is there a risk to objectivity and impartiality and how are such risks managed? A mention of this and/or reference to publications about it would be valuable. Along with co-creation concepts are co-design concepts and I note there were no interviews with patients or patient representatives. Please clarify if this was intentional and deliberate or was there no patient representation in the collaborative committees and teams. Again a sentence clarifying reasons for this would be helpful.

VERSION 1 – AUTHOR RESPONSE

First reviewer

Methods

1. p. 4, ln 33: You state when the evaluation of the collaborative was running, but what is the time period that the collaborative itself was running?

The collaborative ran from September 2016 to June 2017. This has been revised on page 4.

2. How were the teams that participated in the evaluation selected?

The two teams representing the hospital trusts were selected based on their perceived maturity in terms of quality improvement capability and capacity and this has been explained further on page 4.

3. Who did the participant observation? Was it just one investigator? Or multiple?

ML carried out all data collection (see page 5).

4. Who conducted the interviews? The same researcher that was the participant observer?

As above

5. It is stated that 15 interviews were initially conducted, but then snowball sampling was used to identify additional informants – How many total interviews were conducted? What were the characteristics of the interviewees (i.e. physicians/ nurses/ managers)?

Initially 13 interviews were conducted with a further 2 individuals identified by snowball sampling. Interviewees were nurses, doctors and managers. Further detailed characteristics have been included on page 5.

6. Who conducted the data analysis?

This was primarily undertaken by ML with co-interpretation of the thematic framework with the evaluation committee (see page 5).

Results

1. It is not clear in the Results what is identified from the interviews vs. the residency?

This has been addressed throughout the results section see pages 5, 6 and 8. Field notes from participant observations informed the development of the interview guide (stated on page 5), the thematic framework (pg 5) and influenced some of the interpretation of the interview data. We have also included a further quote from field notes on page 8.

2. p. 6, ln 32/ 34: "This was a key…"/ "This was compounded…" Both of these statements could be clarified as to what the "This" refers to.

Revisions have been undertaken as advised (page 6/7).

3. P. 7, ln. 4: What is meant by "fewer resources"? Does this refer to time to participate in the QI project? Or does this refer to staff available to help with the project? This is important because one could be interpreted as cultural, where as the other may be representative of financial constraints.

Resources referred to staff expertise, time and financial resource. (page 7).

4. P. 8, ln 13: "Relevant to health systems pressures…" It is not clear why this is under the domain of external pressures, as health system pressure is an internal pressure – I think? Unless I am misinterpreting. Either way, I think this point could be clarified.

The health system pressures refer to the general health care environment in the UK at the time of the study. We perceived this as an external factor – which the participants had little control over. This is also mentioned on page 10 in the discussion. We have tried to clarify this point on page 8.

Discussion

1. p. 8, ln 28: "board engagement" - What is meant by board engagement? The board is not mentioned in the results. This statement could connect more closely to the results.

Board was referred to in the results section as medical directors which has now been added in the relevant part of the discussion.

2. P. 9, ln 12: One thing that seemed to be missing from the Results in general is mention of how the embedded researcher effected the motivation and direction of the QIC. I think this is a missed opportunity given the novelty of the research design. I mention this because the Discussion could include examples of how the embedded researcher negotiated their role as researcher to influence the direction of the collaborative, i.e. the real-time feedback that is mentioned.

Assessing the effect of the researcher in residence and attributing any changes to the programme is challenging. It is an aspect of the in-residence model we would like to explore further in future studies. Nonetheless, in the second and fourth paragraphs in the discussion we highlight the role of the researcher in this study - as a member of the operational team involved in strategic discussions on the progression of the collaborative, a mobiliser of existing academic knowledge or an interface for the new emerging knowledge and as a conduit for information sharing across the programme.

3. P. 9, ln. 24: "junior doctors" - in the Results only "junior nurses" are referred to – please check for consistency.

Junior doctors were already mentioned on pg 5 under the 'inherent motivation' section.

2nd reviewer
Thank you for an interesting paper which is well written, accurate with upto date refeerences. The participatort methodology of researcher in residence model and principles of co-creation are excellent and from a personal perspective I completely endorse it, particularly for a formative evaluation as in this case. However, such a model also carries risks e.g. if researcher becomes too embedded is there a risk to objectivity and impartiality and how are such risks managed? A mention of this and/or reference to publications about it would be valuable.

We have already stated that discussing findings with independent academic colleagues minimised the risk to objectivity in paragraph 2 of the discussion. A further sentence with a reference has also been included to clarify this point.

Along with co-creation concepts are co-design concepts and I note there were no interviews with patients or patient representatives. Please clarify if this was intentional and deliberate or was there no patient representation in the collaborative committees and teams. Again a sentence clarifying reasons for this would be helpful.

There were no patient representatives in any of the teams – this is mentioned now on page 4.

Editorial requests:
- Please revise your title to include the setting (location). This is the preferred format for the journal.

This has been revised as requested.

- Please complete and include a COREQ check-list, ensuring that all points are included and state the page numbers where each item can be found: the check-list can be downloaded from here: https://www.equator-network.org/reporting-guidelines/coreq/

We have completed the COREQ checklist and attached it to the new submission with appropriate revisions made to the manuscript where needed.

- Please revise the Strengths and Limitations section (after the abstract) to focus on the methodological strengths and limitations of your study rather than summarizing the results.

We have revised this section in line with your recommendations.

VERSION 2 – REVIEW

REVIEWER	Daniel Walker The Ohio State University, College of Medicine United States
REVIEW RETURNED	26-Feb-2018

GENERAL COMMENTS	The authors have done an excellent job of responding to my earlier comments. I appreciate their thorough work. This manuscript is, in my opinion, ready for publication.