Reviewer’s report

Title: Barriers and facilitators to implementing Dementia Care Mapping in Care Homes: results from the DCM™ EPIC Trial process evaluation

Version: 0 Date: 24 Oct 2018

Reviewer: Reviewer 2

Reviewer's report:

PEER REVIEWER ASSESSMENTS:

OBJECTIVE - Full research articles: is there a clear objective that addresses a testable research question(s) (brief or other article types: is there a clear objective)?

Yes - there is a clear objective

DESIGN - Is the current approach (including controls and analysis protocols) appropriate for the objective?

No - there are minor issues

EXECUTION - Are the experiments and analyses performed with technical rigor to allow confidence in the results?

No - there are minor issues

INTERPRETATION - Is the current interpretation/discussion of the results reasonable and not overstated?

Yes - the author's interpretation is reasonable

OVERALL MANUSCRIPT POTENTIAL - Could an appropriately REVISED version of this work represent a technically sound contribution?

Probably - with minor revisions
GENERAL COMMENTS: Implementing complex psychosocial interventions in care homes can be an expensive, difficult, and intense process in a context where the priority (usually) is with providing care for the residents, staff shortage and turn over are high, and the current staff experiences a high work load. Therefore, implementing an intervention often is not on top of everybody's list. With interventions comprising of multiple components, the 'challenges' of the intervention environment, and between-site differences in intervention delivery and receipt, making a proper understanding of the intervention process and implementation issues highly important in considering (the current and future) research study design and implementation.

Overall the authors did a good job. Not only is the objective relevant and clear, the paper is understandable and easy to read. However, as someone not familiar with the EPIC Trial I would have liked to see some more details about the study and the involved care homes/participants to be able to better put this study in context. Also, I think the results section was a bit wordy and would benefit from shortening (for example, only add quotes that really add something extra to the text).

REQUESTED REVISIONS:

Method:

- Why did you recruit 216 residents at 16-months? Did you recruit them from the care homes that where already participating in the study or did you also include new care homes? If so, how many?

- Who did the randomization?

- Please provide information about the participating care homes (size, rural/urban, number of participants, etc.). This can be done using a Table, and/or in the Supplements. If details of the care homes involved is already available, please add the appropriate reference.

- Please provide more information about the mappers in each care home (for example; background, gender, did they receive an incentive for their participation, what kind of training did they get, what instructions did the care homes receive for selecting mappers, etc.).

- Why did you choose to select 2 mappers per care home? How many residents did each mapper have to map? I am just wondering, because that might have impacted the mapper (the ratio mapper:residents) and possible success of implementation. Perhaps you could also talk about this a bit in your Discussion. Do you have any idea of an optimum number of
residents per mapper (like for a full time staff number in a care home with no additional
funding for the DCM)? What would you recommend to care homes who are interested in
starting with DCM?

- Is there a fixed time period between cycles of DCM or could care homes decide for
themselves? (Obviously I am not a DCM expert) Were they given specific instructions
regarding this?

- p6, s28-39: This section seems out of place. Maybe better to move this to Results. Also, were
you able to identify certain characteristics of the care homes that were the most successful
and unsuccessful in implementing DCM?

- Same section: please add the 'n' after the %. That is more informative for the reader.

- How many residential, nursing, and dementia care homes were participating (please provide
number per type of care home)? Did you observe a difference in implementation success
between the types of care homes?

- Please provide more details about the interviewees (like how where they distributed among
the care homes, gender, age, number per category, etc.)

- Why did you only conduct interviews in 18 of the DCM care homes? How/why did you
select these homes for the interviews?

Results:

- This section is a bit wordy. It would benefit from shortening. Only add quotes when they
truly add something to the text or illustrate something. For example, the first quote on p25
could be removed and 2nd quote on p24 is very similar to previous quote on p24.

- p9, first alinea, please integrate with participants section.

- p9. s54 " this suggest....". Does your data support this (when looking, for example, at %
completion intervention components)? This might be interesting to put in the Discussion and
elaborate further.

- p11, first paragraph: Do you have any number on turnover of trained mappers after
recruitment but before training and how often it occurred that no suitable replacement was
found after the first cycle?
- p11, s15-16: "....overwhelmed by what was required of them." What was required of them? Did that differ per care home? Could you tell us a bit more about that? Was it the sheer number of residents that had to map (if so how many) or the combo with their regular tasks?

- p18, start at s10: Good point made. Structure-wise it feels a bit odd. I would suggest to move this to the Discussion or introduce it as a short summary of that paragraph.

- p19 s 31-54: You describe the experience of one mapper. This is not specific for choice of mappers. To improve the structure, move this to the Discussion or at the end of that specific section in a sort of short summary of the paragraph that motivation and passion alone is not always enough.

- p 26, s18: This is an important point you make and also a valuable recommendation. Move completely, or add this section to the Discussion too.

- Do you have any thoughts about why the expectations of management and staff differed from the realities of participation?

- Section about 'Input from DCM expert mappers': just wanted to say that I think you selected really good quotes. Very informative and illustrative!

Discussion:

- Please add some of the previous mentioned suggestions for a bit more depth in the discussion.

- I would like to see some really practical recommendations for practice. That would make your article not only interesting from a scientific perspective, but also more valuable for practice (if the journal does not permit that, maybe it's something you can add to the Supplements).

ADDITIONAL REQUESTS/SUGGESTIONS:

Minor issues:

- There is a difference in Title between that on p1 and p3.

- p5, s46/47: 'fifty' should be '50'.
- Remove the 2nd bullet from Box 1 (no text after that bullet).

Note: This reviewer report can be downloaded - see attached pdf file.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

No

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

No

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Yes

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

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

Acceptable

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