Reviewer’s report

Title: Evaluating a Dementia Learning Community: exploratory study and research implications

Version: 1 Date: 30 Jan 2017

Reviewer: Suzanne Timmons

Reviewer’s report:

This is an important topic and the results are useful.

I have some areas that require clarification:

General:

1) You initially describe this as a "controlled mixed methods realistic evaluation", but then state (page 7, line 14) that you aimed to make "preliminary, exploratory attempts to evaluate empirically, as a feasibility study, perhaps leading..... onto a more definitive evaluation".

In section 5b (page 21, line 40) you say the study should be regarded as containing elements of a feasibility study and of a pilot study...

What was your intent at the outset? Was this a feasibility study to see if you could gather the necessary data for a future definitive trial? Or was this an exploratory study to develop/refine theory, explore effects and magnitudes etc? Because it seems to me that it was exploratory in concept and it is very acceptable to discuss elements that would need refining in a more definitive study and discuss limitations that you came across, but not to call it a feasibility study after the event.

2) Why did you think that "raised quality of life" would reduce external service use (link f)? I think it was because your "raised quality of life" component included care planning and TEP decisions... But is this really part of quality of life? I would have preferred "care planning" as a separate box in figure 1, placed in parallel with raised quality of life, with this new box leading onto external service use (link f), and QOL as an end-point in itself.

I would have liked much more discussion on why care planning was not affected - was it included in any PDSA cycles? Was it covered in initial training??

Methods:

3) 3c: page 9, line 13: How were the dementia champions selected in each care home? You say you looked at it but didn't report the results.
4) RQ1: page 7, line 29: You did not attempt to directly observe training or the champions meetings, relying instead on participant surveys, interviews and facilitator's field notes. Would you change this in a second study -there is obviously a resource issue for doing this, but would it have helped answer questions around training and its effects?

5) Ethics: 3e, page 12 line 30: Who were the "participants" giving informed consent owners/managers? individual staff?

Results:

6) page 15/16: section 4c: Link C: While you present data for the "low WIB" DLC sites as being similar to control sites (and then discuss the "high WIB sites" separately), I think you should emphasise more that in the "low WIB" sites, two sites actually showed large disimprovements (no control site had such a large negative change) - as this is not the same as 5 showing little change and five showing improvements... NB abstract also - "residents well being scores ... improved markedly in half these homes" - I don't think that accurately reflects your results and you need to include that two showed worse scores to be balanced.

7) page 17: 4d: link D: While you described "link B" well -how training was linked to PDSA cycles, I didn't see anything much on "link D" - how PDSA cycles changed work routines, except by default - ie "link C" didn't cause the changes so "link D" must have. But was there more change in work routines where PDSA cycles were performed, or performed better, repeated etc? Did the content of the PDSA cycles performed (not just intended after training but actually performed) relate to the improvements in work routines?

8) Page 17, line 13: You stated that link C needed to be "re-interpreted" (see discussion)", but I didn't see any specific discussion of an alternative link or mechanism then in the discussion section 4g (page 19). Can you clarify this.

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

Yes

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

Yes

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.

I recommend additional statistical review

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