Reviewer's report

Title: A mixed methods quality improvement study to implement nurse practitioner roles and improve care for residents in long-term care facilities

Version: 2 Date: 14 Nov 2019

Reviewer: Reviewer 2

Reviewer's report:

PEER REVIEWER ASSESSMENTS:

OBJECTIVE - Full research articles: is there a clear objective that addresses one or several testable research questions? (Brief or other article types: is there a clear objective?)

No - there are minor issues

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

Yes - the approach is appropriate

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

Yes - experiments and analyses were performed appropriately

STATISTICS - Is the use of statistics in the manuscript appropriate?

N/A - there are no statistics in this study

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

No - there are minor issues

OVERALL MANUSCRIPT POTENTIAL - Has the author addressed your concerns sufficiently for you to now recommend the work as a technically sound contribution? If not, can further revisions be made to make the work technically sound?
GENERAL COMMENTS: I am satisfied with the underlying manuscript and reactions. It is better readable and understandable. All response are adequate.

REQUESTED REVISIONS:

The authors describe an aim, but that is very broad. It would helpful off they formulate one or more research questions.

In the first paragraph of the results they describe the results of the qualitative part. It would be helpful if these results are formulated more concrete. For instance all NP's provided....

In line 392 it is stated that 5 of the six sites.... However when I look at the figure the medication increases in sites 4 and 3. So only 4 of the six sites decrease.

For me it is unclear why it is conclude that the consultative model appears to lead to better quality. Based on the medication figure this cannot be concluded. All the other figures show no big differences, as far I can see, although the authors state that there are considerable differences.

In the abstract it is stated that "this project provides evidence to inform the implementation of these new roles across the province". In the discussion something comparable is written. I have no idea on what this is based. And which evidence or knowledge about the implementation do they add?

ADDITIONAL REQUESTS/SUGGESTIONS:

See my comments earlier.

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.
No

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

**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?

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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.

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