Author's response to reviews

**Title:** Implementation of geriatric assessment and decision support as part of a Multidisciplinary Integrated Care model in residential care homes

**Authors:**

Marijke Boorsma (m.boorsma@vumc.nl)
eveliene langedijk (eveliene_langedijk@hotmail.com)
dinnus h.m frijters (d.frijters@vumc.nl)
giel nijpels (g.nijples@vumc.nl)
tom elfring (t.elfring@vu.nl)
hein p.j hout (hpj.vanhout@vumc.nl)

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**Author’s response to reviews:** see over
Response to the comments

Below, we present a point-by-point response to the comments of the reviewers. After repeating each comment of the reviewers, we present in italics our answer to the comment followed by any changes we made.

Reviewer's report

Title: Implementation of geriatric assessment and decision support as part of a
Multidisciplinary Integrated Care model in residential care homes

Version: 2 Date: 7 February 2012

Reviewer: margaret petrina sweeney

Reviewer's report:

Major compulsory revision required

Thank you for asking me to review the above manuscript. It is interesting to see that the care system in the Netherlands experiences the same problems as the United Kingdom such as understaffing and lack of education of care staff and managers. I have prepared my report using the questions listed in the guidelines for reviewers.

1. The research questions posed were well defined but not well answered within the manuscript.

2. The methods used may be appropriate but are not well described in the text. Initially a short description of the previous work done would have been useful to aid readers who have not had access to the first manuscript. One possible improvement would be the inclusion of a study diagram which would clarify numbers of homes, participants, respondents, and measures of outcomes. There is little or no description of the content of the inter RAI-LTCF instrument, methods used and copies of the inter RAI-LTCF, questionnaires and semi-structured interview questions are not appended. It is not clear if staff were trained together, individually, or in grade-related groups. Under
Measurements and data analyses (p6) it would be helpful to repeat the two research questions to save the reader having to refer back.

*Thank you for this question:
  a. we added the following sentences on page 3 (the introduction) Around 10% of all the elderly aged 75 or older in the Netherlands live in residential care homes. These homes were used to offer sheltered living for disabled but still relatively healthy elderly. Nowadays, due to our ageing population the characteristics of the residents of residential homes have become more and more comparable with those of nursing homes, needing complex care. These homes are comparable with residential care facilities in Canada, are publically funded and subject to governmental inspection and approval. The average size of the study residences was 46 and staff included nurse assistants and a house manager. Over 70% of the residents need professional care such as assistance with activities of daily living, nursing care (medication, wound care) and housekeeping. They suffer from (multiple) chronic diseases and associated disabilities.
  b. we added the flow chart of the main study: Effects of multidisciplinary integrated care on quality of care in residential care facilities for elderly people: a cluster randomized trial (cmaj 2011)
  c. we added as appendices the questionnaires and semi structured interviews.
  d. we added on p.6: The coaches and nurse assistants of each home were trained together. The managers were trained separately in using the management output and quality indicators.
  e. We also repeated the questions.

3. It is difficult to comment as to whether the data are sound because, as mentioned in the previous question the actual data collection tools are not provided and in-depth statistical information is lacking. There is a serious deficiency in that the authors have not attempted to collect any data on patient or quality of care outcomes.
55.2% percent of the residents in the intervention homes were assessed with the Long Term Care Facility version during the study. This was less than we aimed for and was partly due to implementation delay.

Forty multidisciplinary meetings were held during the study period in the intervention homes and the outcomes of assessment of 93 residents included in the study were discussed (Table 2). In 90% of the multidisciplinary meetings the primary care physician was present and the geriatrician in 75%.

The intervention homes scored better on 30 of the 32 risk indicators for quality of care and 11 of these had improved significantly. The residents in the intervention group tended to be more positive about the quality of care over.

4. The reporting of the results is difficult to follow due to the way in which it has been presented. Results should be grouped under each of the research questions, again repeated in full. Clear reference to results shown in tables is needed, and inclusion of numbers as well as percentages in the text [i.e 87.9% (16)]. The authors also show a tendency to discuss their results in this section, rather than in a separate discussion section. For example, this happens in the final sentences of the results section (p10)

5. There is no discussion section as the manuscript jumps from results to conclusions. The limitations of the work are clearly stated.

6. The authors acknowledge that they are building upon work which has previously been carried out but do not provide sufficient detail as to the methods used and the outcomes therefore more information is required.

7. Yes, however some explanation of this previous work would have been helpful for the
8. Yes.

9. The standard of written English requires some revision before it reaches the appropriate level acceptable for publication.

* we revised and hopefully increased the standard of written English

I would suggest that some major compulsory revision of this manuscript is required before it is resubmitted.

The standard of the written English requires upgrading prior to publication.

It is not essential that the manuscript be seen by an expert statistician but some suggestions re the data have been included.

I declare that I have no competing interests in relation to this paper.

Dr. M. Petrina Sweeney

Level of interest: An article of limited interest

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests

Reviewer’s report

Title: Implementation of geriatric assessment and decision support as part of a Multidisciplinary Integrated Care model in residential care homes

Version: 2 Date: 29 November 2011

Reviewer: Jane Banaszak-Holl

Reviewer’s report:

Major compulsory revisions
1. More generally, it is unclear what is the basis for the authors’ statement that “Prerequisites of successful introduction versus maintenance of care innovations are not well understood.” The adoption and maintenance of innovations is a well researched area of health services, going back to Everett Rogers book on The Diffusion of Innovation. Innovation adoption is widely researched today in health services research (as evidenced by the journal Implementation Science which focuses in this area) although perhaps not in the setting of Dutch residential care homes. Authors need to be clear on whether they are discussing the narrow context that they are considering and if so, is this research applicable to other settings.

*we edited the discussion and the comparison with literature in answer to your question page 10-13

2. Given the readership of the journal, it would also be helpful to have a more complete description of what are residential homes in Netherlands and how they are staffed. Furthermore, it is not clear whether all those trained within facilities participated in evaluation surveys and interviews. Further detail is needed there.

* we added a description in the introduction on page 3

3. Also, abstract notes that “contextual issues that include type of care setting and type of innovation” are key to adoption but those factors are not studied here. The focus of this paper appears to be on individual level evaluation of barriers and facilitators as well as success of implementation. NOTE, that individual reports may differ from what other data reveal about barriers, facilitators and success of implementation and the authors should explain why they focus on individual reports in these cases.

* The nature of the main study and its complexity did not permit data collection on other level than directly involved management, nursing staff and physicians. The studied residential care homes are under the umbrella of one single care organization.

4. The quantitative data collection is only scantily described. Little information is
provided on the semi-structured interview structure or on how summary statistics were calculated. Did questions just allow for a yes/no answer (which would allow the estimate of percentages)? Or were they Likert scaled and if so, were responses aggregated across response categories?

*Indeed questions just allowed yes/no*

5. Table 3 adds some confusion to the results section. If facilitators and barriers are the same across time periods than you would expect that adoption does not change across these periods and yet, we find in Table 3 that even though the staff indicated barriers in the better facilities at time 1, they still adopted the InterRAI program effectively, while in the 3rd and worst facility, the staff were not resistant to adoption at time one and yet were ineffective in adopting the practices of this program. This would suggest that attitudes are not predictive of whether they actually made changes. It is possible that attitudes do not reflect behavior.

No discussion of these contradictory findings. The discussion on page 10 does not make sense in that if management changes between the times surveys were done than you would expect changes in attitudes but there were no changes observed in facility #3. Furthermore, the explanations on page 10 (specifically: “Remarkably, nursing assistants of the ‘worse’ residential home saw the least drawbacks and the most benefits of the RAI-LTCF. This is somewhat contradictory to the finding that they scored the ‘worse’ compared to the other two homes on the quality of care outcome report.”)

*On page 10: This may be explained by the fact that this particular home faced management disruption. The new manager tended to be very positive about the instrument and the care model. The relation between scores on quarterly output of Quality Risk Indicators and successful implementation of a care model may be complicated and not simply comparable.*

6. The qualitative data in table 5 is useful and very descriptive of some of the benefits
and barriers but is not organized to highlight key results for the reader nor is it well
described in the paper itself.

* we added more information in appendix 1 and 2

Minor essential revisions for conclusions

The authors provide extensive discussion of the comparison to the RAI-HC instrument
which is used in the home care services sector. This discussion highlights extension of
the application of the intervention approach and is not directly related to the findings on
how implementation is occurring within residential homes. This could be shortened to
highlight further the discussion of implementation success within the residential care
setting.

**Level of interest:** An article whose findings are important to those with closely related
research interests

**Quality of written English:** Not suitable for publication unless extensively edited

**Statistical review:** Yes, and I have assessed the statistics in my report. **Declaration of
competing interests:** I declare that I have no competing interests.