Reviewer's report

Title: Natural course of care dependency in residents of long-term care facilities: Prospective follow-up study

Version: 2
Date: 18 February 2014
Reviewer: Karin Wolf-Ostermann

Reviewer's report:

Major Compulsory Revisions

1. Looking at the JAGS-paper on the study design it may result in problems/difficulties that half of the population also used in this publication was undergoing an intervention which may result in lower CDS-values since incontinence is part of the CDS - so it might be difficult to state results about the "natural course" of care dependency.

2. I still do not see from the facts presented in the article that differences in CDS-scores between male and female persons are mandatory a matter of gender. Maybe female persons are the ones being older and more frail, having more comorbidities and therefore differences in CDS-values do not depend on gender but on other facts.

3. The division in three groups of CDS-scores for male and female persons seems quite artificial. If a division in groups turns up to be essential to the authors than this division should be done with regard to contents of the scale. Otherwise the analyses should just be carried out by using score values.

4. On p11 you state results for the three CDS-groups. Are these results the same for men and women?

5. You do not analyse institutional effects of different LTC included into the study motivating this by "we were interested to explore personal characteristics on the course of care dependency". I do understand this interest but nevertheless it could not be ruled out that there might be insitutional effects on care dependency of residents which can even superimpose individual effects.

6. The discussion is still difficult to follow. It recaps results and has no really stringent structure and style. See comments to the first review of this manuscript.

Minor Essential Revisions:

1. Abstract:: "Interquartile range 79,88" is surely a mistake and should be 79-88 in your presentation of IQRs.

2. Methods: It should be stated, that p-values have to be understood as nominal p-values.
3. p11, first added sentence (yellow): this sentence is quite difficult to understand and needs rewriting.

4. p11 bottom: effects should be described shortly also with regard to contents

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

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests.