Author's response to reviews

Title: Intermediate care at a community hospital as an alternative to general hospital care for elderly patients: a randomised controlled trial.

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Author's response to reviews: see over
Dear Sir

MS: 1811828476128688
Intermediate care at a community hospital as an alternative to prolonged general hospital care for elderly patients: a randomised controlled trial.

We highly appreciate the comments from the reviewers, and agree that their comments will contribute to a more precise presentation of the results of the study.

The revised manuscript has incorporated that the ethical board approved the study, the patient information and the consent schemes before the study started. This is included in the Methods section.

The CONSORT checklist, added necessary information, is enclosed to the cover letter, and this is also incorporated in the Methods section.

The trial registry and the identifying number is now included in the last section of the abstract.

Further revisions of the manuscript are accounted for according to comments to each of the reviewers on the following pages.

All authors have read and accepted the changes.

Yours sincerely

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Comments and revision according to the reviewer’s report by William Hamilton.

**Major Compulsory Revisions:** None mentioned.

**Major Essential Revisions:**
1. All participating patients gave their written consent before inclusion. They were given written and oral information about the trial, and the consents were signed prior to the randomisation procedures. This is now incorporated in the Methods section, page 6, para 3.
2. The title is revised to reflect the fact that this was a trial where intermediate care was used as a step-down care after initial care at a general hospital (GH).

**Minor Essential Revisions:**
1. As suggested, some introductory notes on the state of the knowledge is moved from the Discussion to the Background chapter.
2. As noticed by the reviewer this study trialed the effect of intermediate care after a spell of GH care. We agree in that the main question is if intermediate care can replace GH care. At the time of the planning of this study we did not have enough knowledge, nor support from colleagues, about how to provide acute care at an intermediate level as an alternative to admissions to a GH. The next step, based on the results from this study, will be to perform a study as described by the reviewer.
3. In Norway the physicians at the CH are also part time general practitioner, but they have the CH as a special task. This is regulated by law in Norway.
4. We agree that the study is best reported on an intention to treat analysis and have revised the text in the Results section. The results are now mainly presented as intention to treat analysis. However, we believe that it is important to present the results of the eight patients not transferred to the CH to demonstrate that these eight patients basically where alike the other patients treated at the CH except for somewhat reduced ADL.
5. In the regression analyses in table 3 we have used multivariate analyses and adjusted for gender, age, ADL and diagnosis. This is now stated in the table 3.
6. We believe that the differences in need of community care and readmissions partly reflect the additional stay in a hospital facility. The repeated regression analyses adjusted for length of primary stay did not change the results presented in Table 3. So, we believe that the main effects are depended on to the expanded communication with the patient and their social and professional network and consequently better adapted follow-up.
7. The economic analysis will be reported in a separate paper.
Comments and revision according to the reviewer’s report by Andreas Stuck.

Major Compulsory Revisions:

1. A competed CONSORT checklist is enclosed the cover letter and is also referred to in the Methods section.
2. The length of the hospital stay prior to randomisation is now presented in the Results section, and in table 4.
3. The patients where transferred to the unit immediately, that is as soon as transportation was available (ambulances or taxis), after the randomisation, and latest 24 hours after inclusion to the study as the blinded randomisation was performed by the Clinical Research Department at the Faculty of Medicine only during working hours (0800 a.m. to 3.30 p.m.). This is incorporated in the Results section.
4. Please see the previous response. The patients were transferred immediately after randomisation except those 8 patients. We agree that they could be treated as readmissions. However, the decision not to transfer these patients was undertaken by the colleagues at the General Hospital (GH) and not by the doctors at the Community Hospital (CH). That is why we have chosen to treat them according to the intention to treat. Treated as readmissions resulted in a nonsignificant number of readmissions (p=0.14, adjusted p=0.11) and a nonsignificant difference in number of days readmitted (intervention group 4.4 (2.6-6.9) and control group 7.6 (3.6-11.6); also p=0.14 and adj. p=0.11)). We will also mention that in the GH group five patients were readmitted more than once (12 readmissions) whereas no patients in the intervention group were readmitted more than once.
5. Readmissions are only readmissions for the same diagnosis; incorporated in the Methods section.
6. The inclusion criteria were discussed in details prior to the study. We did not want to have inclusion criteria excluding any patients groups except for severe mentally ill patients, and decided that the 4 criteria should be; 1) patients aged 60 years or more admitted the general hospital due to an acute illness or an acute exacerbation of a known chronic disease, 2) probably be in need of inward care for more than three to four days, 3) admitted from their own homes and 4) expected to return home when inward care was finished. This paragraph is rewritten and incorporated in the Methods section.
7. The randomisation was blinded for the patients, the health personal and the authors; incorporated in the Methods section.
8. The assessments of ADL were not blinded per se, however the nurses did not know which group the patients belonged to as the assessment were performed prior to the randomisation. All information on readmission, community care, and total use of institutional care were furthermore collected without knowledge on which group each patient belonged to.
9. The description of the Norwegian system is rewritten. We do not believe that the financing did have any influence on the care or the results. The general hospital is financed only by the government, and the community hospital is financed as a joint
venture by both the community and the government. This is incorporated in the Methods section (Setting).

10. The cost analysis will be presented in a separate paper.

11. We believe that the reason for no readmissions during rehabilitation stays of persons in the intervention group was the ability of the physicians at the CH to be more accurate when they planned the after-care due to the close observation of the patients. (That is the monitoring of the ADL and the communication with the network and the patient). himself. This is further discussed in the Discussion.

12. We agree that there are several studies on transitional care. However, we still believe that this is the first randomised controlled study comparing intermediate care and GH care on a none-selected patient group in need of prolonged hospital care. However, there are some RCTs on selected patient groups (e.g. Green et al 2005 on rehabilitation) [11].

13. The paragraph on power estimating is rewritten, hopefully to the better.

14. We agree that multicomponent treatment/care is not the correct term to use in this study. We have exchange this multicomponent with intermediate care. We have not used geriatric assessments tools as this is not commonly used in primary care in Norway. In this study we wanted to use clinical assessments commonly in use in all primary care units in the municipality. The national system “Gerix” has been used as an assessment tool for ADL since 1993. This is incorporated in the Methods section.

15. Multy-component end-care system has been exchanged with intermediate care as a more correct description of the care (Discussion)

16. The trial registry and the identifying number is now included in the last section of the abstract