Reviewer’s report

Title: Health Enhancing Strength Training in Nonagenarians (STRONG): rationale, design and methods

Version: 1 Date: 27 April 2009

Reviewer: Donna K Ciliska

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This proposal is brief, but has some important areas missing. Language is clear and appropriate.

Discretionary Revisions
RE: Will the study design adequately test the hypothesis?
1. It would be useful to have a feasibility stage. The design, as is, could adequately test the hypothesis, but it may be difficult to get nonagenarians to participate at the level this study demands. I also think the drop-out rate is underestimated and the sample size should thus be larger. Again, a feasibility study would indicate if dropouts would be larger than estimated.
Or, is there any literature with this elderly group re drop-out from this type of exercise?

2. In the analysis section, more detail on what actual outcomes will be included in the ANOVA would be helpful.

Major Compulsory Revisions
RE: Are sufficient details provided to allow replication of the work or comparison with related analyses: if not, what is missing?

3. There should be more literature review, or a statement that no related literature is available for this age group (if no literature, this may again reflect the feasibility issues defined above).

4. There is not enough information about the measures being utilized (reliability and validity). I would also recommend a clearer presentation of primary versus secondary outcomes, and why these were chosen.

5. Measurement of adverse events is not clear; will falls be measured by chart audit?
Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have n competing interests