Reviewer's report

Title: Predictors of mortality among elderly dependent home care patients

Version: 2 Date: 20 September 2012

Reviewer: Danilo Fusco

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REVIEW. PREDICTORS OF MORTALITY AMONG ELDERLY DEPENDENT HOME CARE PATIENTS.

The rationale for the study is well explained. In general, the limitations of the study and potential sources of bias have been adequately addressed in the discussion. The paper is well written and referenced and will be a major contribution to the literature. There are however some issues requiring further explanation.

MAJOR COMPULSORY REVISIONS

1) Why the predictive model was built only for hospitalized patients? The comparison between the two predictive models (whole population versus hospitalized subgroup) may be interesting.

2) The study design is not sufficiently clear. It would seem that not all patients have had a one-year follow-up after hospital discharge. If my interpretation was correct, why, in the result section, the authors speak of “probability of dying during the next year”? Moreover, in the discussion, reference is made to the “risk of dying during hospitalization”. This creates a lot of confusion.

3) Authors should better explain the different data collection phases of the study.

4) With regard to the statistical analysis, it is not clear what the authors intend for “Fisher test”. Is it the Fisher's exact test?

5) We are in the framework of logistic regression. Therefore, I am not clear why the authors speak of “risks proportionality”. Moreover, the Hosmer-Lemeshow test is a statistical test for goodness of fit. It assesses whether or not the observed event rates match expected event rates in subgroups of the model population. What is the connection with the proportionality?

6) It is not clear whether the authors have added a “Charlson index by gender” interaction term. If the answer is affirmative, the interaction term should be better described and commented.

DISCRETIONARY REVISIONS

1) When analyzing mortality among those patients that were hospitalized, authors might use multilevel logistic regression, in order to take into account the degree of resemblance between patients who were treated at the same hospital.

MINOR ISSUES NOT FOR PUBLICATION
1) Introduction: the acronym EDPLH is repeated twice.
2) Table 5: the table header is not complete.

**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.