Reviewer's report

Title: A Frailty Instrument for primary care: findings from the Survey of Health, Ageing and Retirement in Europe (SHARE)

Version: 1 Date: 11 May 2010

Reviewer: Stephane Rochat

Reviewer's report:

A) Major Compulsory Revisions
None

B) Minor Essentials Revisions

B.1) Abstract, Results, Females, second sentence:
« All indicators discriminated well ». I presume that these indicators are the « biopsychosocial range of Wave1 variables » that are mentionned in the Abstract's Methods. This could be made clearer.

B.2) Abstract, Conclusions:
The authors could improve the conclusion by clearly indicatting what the SHARE Frailty Instrument has « sufficient validity » for. It is also unclear what the authors mean by « high accessibility » ?

B.3) Background, second paragraph:
The beginning of the first sentence is a little bit too affirmative, in my opinion. From a clinical point of view, frailty is not always « a distinct entity easily recognized by clinicians… », particularly if we include pre-frail states. The authors should consider suppressing this part of the sentence or precise it.

B.4) Background, third paragraph, second sentence:
The authors should decide how to cite the authors of previous studies, either with the family name only or with both first and family names. This should be consistent in all the manuscript (see in particular Background, paragraph 8, first sentence; Discussion, first paragraph, third sentence).

B.5) Methods, Subjects, first paragraph:
The authors should give more details on the inclusion process, in particular the overall response rate and the inclusion criteria. Information about criteria for age would be important, as the participants in this cohort seem younger than in most studies about frailty (in particular Fried's study, which included participants 65 years and older).

B.6) Methods, Subjects, second paragraph:
Could the authors comment on the representativity of the subsample used for prospective mortality data (>25% of baseline participants without data on
mortality) ? Are there any differences in frailty or other covariates in this subsample?

B.7) Methods, Measures for cross-sectionnal correlations, Number of chronic diseases:
It would be interesting to have a list of the comorbidities included and to have some details on the way they were evaluated (self reported diseases diagnosed by a doctor?).

B.8) Discussion, first paragraph, second sentence:
The authors write that a “biopsychosocial approach to frailty was adopted”. Could the authors clarify what they mean by this sentence? In my understanding, they have evaluated the association of frailty with psychosocial variables, but they have not added a psychosocial dimension in their definition of frailty. See also the Background, second paragraph, third sentence, where they state that a “good definition should not only capture the biological, but also the psychosocial correlates of frailty”.

B.9) Discussion:
A discussion about the difference of age in this cohort and in previous studies, such as Fried’s study, would be interesting, in particular to evaluate when it would be appropriate to use the frailty calculators (> 50 years, > 65 years?). Comments about this could be included in the 4th paragraph of the discussion, which appropriately address some limitations of the study.

C) Discretionary Revisions

C.1) Abstract, Methods, Measures:
The reference (Santos-Eggimann) is not needed in the abstract.

C.2) Background, first sentence:
Adding some references showing the associations of frailty with falls, disability etc… would be useful for the reader.

C.3) Methods, Frailty definition and Measures for cross-sectional correlations and Mortality measures:
Is it really useful to give the SHARE questions and variables codes in the main text? It is a little bit distracting and annoying for the reader. If the authors want to keep them, it would be better to have them all in an appendix.

C.4) Methods, Psychological and cognitive domains, EURO-D depression scale:
A reference for this scale would be useful.

C.5) At the beginning of a sentence, it would be better to write numbers in letters (see Methods, Subjects, first sentence; Methods, Prospective validation of the DFactor, 5th sentence; Results, Estimation of the DFactor model, female, second sentence, same for the male results below).

Level of interest: An article of importance in its field
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 no competing interests