Reviewer's report

Title: Back Complaints in the Elders (BACE); design of cohort studies in primary care: an international consortium

Version: 1 Date: 29 May 2011

Reviewer: Alex Burdorf

Reviewer's report:

1. Will the study design adequately test the hypothesis?
2. Are sufficient details provided to allow replication of the work or comparison with related analyses: if not, what is missing?
3. Is the planned statistical analysis appropriate?
4. Is the writing acceptable?

Major Compulsory Revisions

1. Introduction: the potential differences between younger and older age subjects will not be studied, hence, this part of the rationale should be phrased more carefully.

2. The term 'developing chronic back complaints' may create confusion, since this study is about the transition for acute back complaints to chronic back complaints. thus, it is about aggravation whereas developing may also include onset.

3. The secondary aim of "To determine the level of functional disability, quality of life and loss of productivity associated with back pain in older people" must be rephrased, since the cohort does not include subjects without back complaints. It will only be possible to study prognostic factors for these endpoints

4. A clear definition of chronicity is not provided and essential for this study. How does the definition applied relate to the follow-up period of at least 12 months and the timing of the questionnaires with regard to duration of back complaints. In addition, how does chronicity relate to recurrence?

5. Treatment received should be part of the prognostic factors, please provide information. Also, the aim to establish the influence of national systems on the prognosis is not addressed in the data collection.

6. Since the development of a prognostic model is one of the goals of the study, simple logistic regression analysis will not be sufficient. How will authors achieve:
   - development of a model with regard to overfitting and shrinkage?
   - test the development model in other populations in order to validate the predictive power?

[or alternatively, the aim should be strictly limited to insight into prognostic factors]
7. The discussion is not really a discussion. Important issues to address are:
- generalisibility of the prognostic model in different countries (how does one want to achieve this? is there information from literature to guide?)
- comparability of the prognostic factors among older people with published models for younger people
- cross-cultural appreciation of back complaints as part of the influence of national systems.

Minor Essential Revisions
1. The inclusion criterion of not having visited a GP in the past 6 months does not completely select only acute episodes. One would think that subjects with chronic back episodes during e.g. the last 2 years should be excluded as well.
2. Blinding of participants for the clinical examination is required, please provide details.
3. It does not make sense to include falling in older people in this international study, since it is limited to only one national cohort
4. Why are different follow-up periods used? My guess would be that a one-year follow-up may be too short depending on the definition of chronicity. Perhaps it should be stated that the core of the project is 1-yr follow-up, but that some national cohorts will have longer follow-up periods.

Discretionary Revisions

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**
'I declare that I have no competing interests'