Reviewer's report

Title: The impact of acquired brain damage in terms of epidemiology, economics and loss in quality of life

Version: 1 Date: 3 January 2011

Reviewer: Kit Simpson

Reviewer's report:

Major Complimentary Revisions

Under estimation of prevalence, end of 3rd paragraph. You state that "the model was run adding the probabilities of progression after the acute event to ABD and independence". However, your data is from a cross-sectional study and you provide no information on these progression probabilities. This is an essential flaw in your paper. The reader needs to know the source of this evidence, and see a table with the model progression data. This may be expected to greatly affect the validity of your prevalence and costs.

You are using utility weights from the EQ5D questionnaire. Please state exactly what you used. The EQ5D has two components; the five questions with three levels and the visual analog scale. Which part did you use, and how did you convert these data to utility values? It is essential that this be discussed in more depth because you reference is in Spanish and not accessible to all readers. Also, you are allowing negative dysutilities for the worst health state. This is essentially saying that Eutanasia would be preferable to living in this health state. This will have a major impact on the model estimates, and needs much more explanation.

Any modeling paper requires a sensitivity analysis so that the reader can get an idea of how the results may be affected by variation in the model inputs, please provide this.

Minor Essential Revisions

It is often not clear in your paper which data come from the model estimates and which are from the survey. Please edit the paper to make this more obvious.

Please insert a table that provides the actual input values for your DES model as well as the ranges that you tested in sensitivity analysis.

There are many, many minor sentence structure problems in your paper where fragments of sentences are remaining after you have made some edits, please correct these.

Level of interest: An article whose findings are important to those with closely related research interests
Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.

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