Reviewer's report

Title: Health, Social and Economic Consequences of Ischemic and Hemorrhagic Stroke: A Controlled National Study Evaluating Societal Effects on Patients and Their Partners

Version: 2  
Date: 27 February 2015

Reviewer: Rebecca Kandiyali

Reviewer's report:

The strength of this paper is the quantity and completeness of the data, especially with respect to the broader societal costs. This would definitely be of interest to those working within the field. The paper would benefit from editing – there are a few typos, and the odd issue with diction and syntax.

Major compulsory revisions

1. Title: a paper on “health, social and economic consequences” of stroke anticipates a broader coverage than this paper – this is a cost study and does not focus on health consequences in terms of health related quality of life. Replace with costs or resource use and costs? This paper will be useful to others looking for costs in the field, if you have a more focussed title you will be more likely to be identified. In general, try and refrain from making too many broad claims about health and social consequences.

2. In general, the discussion could benefit from a clearer structure and redrafting of sections (some indicated below). Repetition should be avoided. Some elements appear more speculative or anecdotal, and more reference could be made to the methods and findings in the paper. Please redraft the discussion, paying attention to the specific points following.

3. Please ensure consistency of terms (e.g. various terms used to refer to transfer payments, patients /people/cases) throughout.

4. Page 7 (4) This paper needs to also include methods that cover data handling (missingness) and statistical methods (survival analysis methods).


6. Page 10 (6) “stroke had significant health and social effects on caregivers” – while burden of stroke has impacts in terms of both QoL and healthcare resource use this study does not demonstrate this.

7. Page 10 (17) patients do not present “social limitations” – please reword, do you mean role limitations?

8. Page 11 (3) I do not understand the paragraph “social compensation were made in the selection” – neither do I understand “occurrence and management of stroke following a social gradient”. Are you making a statement about socioeconomic status in terms of the incidence and management of stroke?
Please reword as appropriate.

9. Table 3 and 5: Please order more logically first left hand column. There are too many sums in bold and the reader can not see how they have been arrived at. Please order in a logical sequence (inpatient before outpatient) and restrict the number of summary totals. The reader may need to know what net costs are (net from whose perspective?). Additionally, don’t assume that the reader is familiar with a health insurance scheme – you might provide more info about how healthcare is funded (see point 4. Below).

Minor essential revisions

1. Please provide a clear reference to the study design in the introduction. Wording needs to be simple and explanatory.

2. Within introduction: Provide a brief explanation of the means by which healthcare costs are reimbursed in Denmark.

3. Page 1 (3-5) First sentence is almost a tautology – can you make it more interesting and relevant to the study?

4. Page 1 (15) Note that QoL is not the same as QALYs which should be glossed as quality-adjusted-life years. QUALY is not the usual spelling.

5. Page 5 (24) Please explain what the Coherent Social Statistics database is? Should all words be capitalised?

6. Page 9 (20) not sure you can apply term “impact” in this way.

7. Page 10 (17) by patients do you mean cases?

8. Page 11 (7) “consequence on social life and the greater burden” this appears speculative – not based on evidence from this study.

9. Page 11 (19) Please clarify if this means that some patients with strokes prior 1997 are presented as your “before stroke” group and what it might mean in terms of biases.

10. Table 2 and 4: Distribution of healthcare – make clear if this is % and also if resources have ever been used or were used over a specific time period or time point. Not clear how to interpret. Consider charting?

11. Page 21 (all figures) could this be done for all stroke rather than just ischemic stroke?

12. Within discussion: The most interesting study finding is the association this study makes in relation to resource use prior to stroke and partner resource use. Can the discussion draw out why these associations may be, and perhaps be a bit more explanatory – e.g. could make reference to lifestyle factors like exercise and diet.

Discretionary revisions

1. Within discussion/conclusion, consider adding implication for practice and research (that are practicable). For instance Page 12 (9-11) Are CV risk factors not assessed in Denmark for this purpose already – can the authors provide more context?
2. I am aware of other cost studies in stroke other than those referenced—consider comparing results with those conducted in other countries. You might also find the way they present your equivalent of tables 3 and 5 useful.

3. Page 6 (1) Could clarify (in a footnote?) what you mean by “unsuccessful matching” and what you did.

4. Figures need improved formatting where possible.

**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, but I do not feel adequately qualified to assess the statistics.

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