Reviewer's report

Title: The effectiveness of very early rehabilitation for acute stroke patients in Japan: a nationwide cross-sectional survey

Version: 1 Date: 26 April 2010

Reviewer: Chris Sutton

Reviewer's report:

• Major Compulsory Revisions
  None.

• Minor Essential Revisions
  The author can be trusted to make these. For example, missing labels on figures, the wrong use of a term, spelling mistakes.
  1) Review notation for ICD-10 codes and correct inclusion of both I67$ and I679.
  2) Remove ambiguity regarding mRS=2 as cut-off (cut-point is between 1 and 2; stating cut-off as 2 does not indicate whether 2 is allocated to the lower or higher group.
  3) Under ‘Statistical Analysis’, 2nd paragraph amend to: “The day of admission should be related to service use variation, but not to outcomes except through service variation’.
  4) Revise terminology regarding ‘weekend admissions’; Friday is not normally viewed as ‘weekend’ – surely using the term ‘Friday admission’ throughout would be more appropriate?
  5) Explain to reader that (marginal) effect size is not easily interpretable from a (bivariate) probit model in either Methods or Discussion.
  6) Results (2nd para): mRS of <=1 is not ‘moderate’ – replace by a more appropriate term (e.g. ‘mild’).
  7) Results (Stratified analysis sub-section ...): Replace term ‘insignificant’ by ‘non-significant’.
  8) Discussion (para 3): “... might suffer from overestimation of the causal effect of treatment ...”.
  9) Discussion (para 4): “... recently conducted randomised controlled trial ...”.
  10) Discussion (para 6): “... suggesting that VEI was not likely to lead to death.”
  11) Discussion (para 10): “… the average functional outcomes in those hospitals with relatively low training intensity tended to be worse ...” (lower mRS is better!).
  12) Improve layout of Table 1 and change notation for variable contents (e.g. from 2:CI/1< to 2:CI: >1)
13) Missing ‘s’ from ‘variables’ in caption for Table 1.

14) Correct captions got Tables 3 and 4: these are not solely ‘Effects of VEI’ but include effects of other variables.

15) Review age scale used in Table 4 – estimate and CIs effectively meaningless.

16) Study flowchart: Replace term ‘Missing variable’ by ‘Missing data’.

• Discretionary Revisions

1) Discussion (para 5): Rephrase “Thus, treatment of ... effect of VEI.” to clarify meaning (by improving language).

Level of interest: An article of importance in its field

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