Reviewer's report

Title: Management of high-risk patients with hypertension and left ventricular hypertrophy in Germany: role of cardiac specialists

Version: 1 Date: 28 June 2006

Reviewer: Michael Ho

Reviewer's report:

1. Is the question posed by the authors new and well defined?

Yes, the questions posed are well defined. The practice of inpatient management of hypertension, however, may not be applicable to other healthcare systems.

2. Are the methods appropriate and well described, and are sufficient details provided to replicate the work?

The methods are appropriate, however additional clarification is needed regarding the methods used.

- What were the specific criteria for LVH used?
- The patient inclusion criteria should be further clarified.
- Please clarify the following sentence, “In the outpatient cohort, only patients who were followed-up for at least 3 days were included.” Were patients followed-up on a daily basis as an outpatient?
- Please clarify the sentences about sample size and intention-to-treat principles? It seems like this was a retrospective cohort study and all patients were included. It is not clear how sample size considerations were accounted for in the study. In addition, it is not clear how intention-to-treat applies to the current study?
- Since patients were referred by the PCP to either inpatient or outpatient treatment of hypertension, there is a referral bias and would recommend using propensity analysis to try to account for this bias. In addition, since patients are clustered according to inpatient facilities and/or providers, would recommend accounting for the clustering of patients using hierarchical models.

3. Are the data sound and well controlled?

See comment above.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?

Yes

5. Are the discussion and conclusions well balanced and adequately supported by the data?

Yes

6. Do the title and abstract accurately convey what was found?

No, it seems like the title may be slightly misleading. The study focuses on the differences between inpatient and outpatient management of hypertension rather than the role of cardiac specialist as all patients were managed by cardiac specialists.

7. Is the writing acceptable?

Yes

Discretionary revisions

- Would consider shortening the introduction
- How was abnormal renal function defined?
- What was the median number of medications used for each of the 2 groups rather than the mean number of drugs?
- Is there data on dose intensification?
Minor essential revisions
- Figure 1 is difficult to read. Would consider changing the format to a Table.
- The Y-axis needs a label for Figure 2. In addition, the figure needs a title to explain what it is showing or a legend.
- Figure 3 needs to be explained better via a title or legend.
- Figure 4 is very difficult to understand.

Major compulsory revisions
- Propensity analysis to account for referral bias.
- Hierarchical models to account for the clustering of patients by providers and/or facilities.

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions.

Level of interest: An article of limited interest.

Quality of written English: Acceptable.

Statistical review: No.

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

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