Reviewer's report

Title: Bayes Rules for Optimally using Hierarchical Regression Models to Identify High-Mortality Hospitals

Version: 1 Date: 6 January 2008

Reviewer: Byron J Gajewski

Reviewer's report:

- Major Compulsory Revisions

None.

- Minor Essential Revisions

1. P. 16. The author indicates that a hospital is included in the analysis only if there are at least 30 AMI patients in that hospital during a 12 month period. The author claims that this exclusion is common practice and gives references. I would like to see a paragraph or so devoted to explaining this reason. Further, I do not see why this exclusion is necessary. I think that it is fairly clear that one of the strengths of the hierarchical model is that hospitals can borrow information from others.

2. P. 19, fourth paragraph, line 3. I think it should say “hospitals A and B should be...”

3. P. 20. The author defines the unacceptable high mortality to be $\beta_0 + \log(1.5)$ and to be a fixed point. But since $\beta_0$ is a distribution, this should be made clear that the line is the expected value of this threshold. Perhaps it would be more appropriate to place a 95% interval in Figures 1 and 2 instead of a fixed point.

- Discretionary Revisions

1. P. 7. The author defines $\beta_{\text{thresh}}$ as the threshold for acceptable quality of care. It would be beneficial to the reader to offer some real guidance on how this threshold can be defined. For example, Gajewski et al (2006) discusses this point and offers references for defining acceptable thresholds for different outcomes in the nursing home. It would be interesting if the author could offer other references.

References:


What next?: Accept after minor essential revisions
Level of interest: An article whose findings are important to those with closely related research interests

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.