Reviewer’s report

Title: Factors affecting hospital resource utilization associated with road traffic-related injuries in Iran

Version: 1 Date: 13 February 2012

Reviewer: Arthorn Riewpaiboon

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Major compulsory review:
1. Study design must be defined as prevalence-based cost-of-illness but covers only the first acute treatment.
2. Sample must be clearly defined by ICD codes (as addition to period and hospitals). It seems not to cover out-patients. This must be clarified.
3. Results in the main text and Table 1 are conflicted e.g. blue-collar workers; 26% vs 29%.
4. Table 2 should present the results by categories similar to Table 1. This is because, in the main text, the authors have indicated statistically significant differences for many independent variables. Therefore, readers need to know values of each category.
5. In the multiple regression analysis, normally we transform cost to log form to meet the assumption of normal distribution. The author must explain why they used ordinal scale. In addition, power of explanation (adjusted R square) and model diagnostics must be reported.
6. In the Results, it is not clear why "Use of safety equipment" was presented separately from the charge/LOS model. Normally, it should be put in the model as one of potential predictor variable.
7. In Discussion, when severity has been put in the model, it has been control, so this must not be cause of difference in other parameters.
8. In Discussion on effect of safety belt and helmet, please explore number of persons who have died in the events. These persons were not mentioned in the study. They may not included in the database.
9. In Discussion, it was stated that "Therefore the true hospital costs of RTIs are likely to be underestimated in this study." There should be more evidence or explanation of difference between cost and charge in Iran setting.
10. Since RTI is important national problem, the authors should present policy recommendation in the Discussion.

Minor essential revision:
1. In Introduction, please rewrite the part of insurance schemes (i.e., public sector employees vs government employees, self-employed in the Social Security Organization and the Medical Service Insurance Organization.)
2. Use of p value should be followed guidelines. In the paper, both p<0.010 and <0.016 are used.

**Level of interest**: An article whose findings are important to those with closely related research interests

**Quality of written English**: Acceptable

**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’ below.