Reviewer's report

Title: Spatial pattern of severe acute respiratory syndrome in-out flow in 2003 in Mainland China

Version: 2 Date: 10 October 2014

Reviewer: Eric Lau

Reviewer's report:

The paper authors have addressed most of my previous comments satisfactorily and clarified definitions of different quantities in the study. However, I still have some concern in large percentage of incomplete data particularly in Beijing and Guangdong. It would improve the results if some adjustment is made to account for the missing information.

Major Compulsory Revisions

I do not totally agree with lines 170-172 that “there is no evidence there is systematic bias of the sampling”. From Table S3, Beijing and Guangdong has at least 95% and 59% of the cases without complete data and were removed from the analysis, while the other provinces have at most 10% of the cases without complete data. As a result, the in-out flows for Beijing and Guangdong in Figure 2, 3 and 6 were severely underestimated and provided a distort view of the movements of SARS case. Would it be possible to impute these missing data, by possibly considering age, sex or migrant, so that the figures will provide a more accurate picture of the relative flow across provinces?

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.