Reviewer's report

Title: Syndromic surveillance for influenza. A comparison with notification data before and during a pandemic

Version: 1 Date: 22 February 2011

Reviewer: Eric Lau

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Major Essential Revisions

1. The title should clarify the main purpose of the paper: it seems that the paper have less focus on comparing surveillance performance in pre-pandemic and pandemic period

2. Methods, line 2: is there any reference describing the surveillance programme ‘SynSurv’?

3. Methods, Inter-hospital consistency: consistency between the two hospitals was not mentioned in the results

4. Results, page 9, line 7: the levels of both SynSurv cases and notified cases are much higher than in other influenza seasons (Figure 1). A scatter plot of the data between SynSurv cases versus notified cases will show two almost separate clusters which represent the 2009 pandemic and the normal influenza season. The use of correlation over the whole period from 2001 to 2009 may pose a problem as a measure of overall correlation (similarly to Simpson’s Paradox). For example, the correlation between J11 and cases from NID in 2001-2009 is 0.909 (Table 1), but it is possible that both correlations in 2001-2008 (0.651) and in the 2009 pandemic are much lower. Hence, the correlation calculated for the whole period may not be suitable as a measure to rank performance of the ICD codes. To assess the performance of the ICD codes during pandemic, the authors may consider calculating correlation using data in the 2009 influenza season only, though the number of data points will be relatively small.

5. Correct all the Table and Figure number.

Minor Essential Revisions

1. Table 1-6 titles: specify that the correlation coefficients were calculated between cases from ICD-10 code and NID

2. Reference 1: the last update date should be 'April 2009'

Level of interest: An article of limited interest

Quality of written English: Acceptable
Statistical review: No, the manuscript does not need to be seen by a statistician.

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