Author's response to reviews

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

Authors:

Karen Moore (karen.moore@monash.edu)
James Black (jim.black@unimelb.edu.au)
Stacey Rowe (Stacey.Rowe@health.vic.gov.au)
Lucinda Franklin (Lucinda.Franklin@health.vic.gov.au)

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Author's response to reviews: see over
4 May 2011

Dear Dr. Cowling

**MS: 1056779472512312**  
Syndromic surveillance for influenza in two hospital emergency departments. Relationships between ICD-10 codes and notified cases, before and during a pandemic

We are pleased to submit the revised manuscript to your editorial committee.

We are grateful to the three reviewers, who raised some important points that led to substantial revisions to the manuscript. We hope that by responding to their comments we have made the paper stronger, although in essence our conclusions remain basically unchanged.

I have listed our responses in point form below.

Reviewer Antonio Valdivia:

**Major revisions**
1. The distributions were indeed mostly non-Gaussian so the analysis was repeated using Spearman’s Rho. This has resulted in smaller correlations and some minor changes to the ICD-10 codes identified, but not to the basic conclusions of the paper. The changes to the text and tables have been corrected. Figure 2 has been removed as it is no longer relevant.

**Minor revisions**
2. The tables and figure numbers have been corrected.

**Discretionary revisions**
We agree that regression analysis may indeed provide a better estimate of the adjusted correlations for each time lag but we believe that is outside the scope of this paper, which is already quite long.

Reviewer Wendy Chapman:

**Minor revisions**
1. The tables and figures have been corrected

**Discretionary revisions**
We have provided a more detailed statement for our inference that ‘baseline data from non-pandemic years are not useful in assessing the true scale of a pandemic outbreak’ in our discussion. The table headings have been modified so that they can stand alone.

We agree that the calculation of the positive and negative predictive value for the codes would be interesting but because we used aggregated data it is not possible to do.

Reviewer Eric Lau:

**Major revisions**
1. The title has been modified to more clearly reflect the purpose of the paper.
2. A reference to a paper providing more detail on SynSurv has been included.
3. A statement regarding the results from the inter hospital consistency analysis has been included.
4. A scatter plot did not show two separate clusters of cases (I have included the plot on page 3). We performed the correlations for the 2009 season, which further strengthened our previous conclusions. These are included in the paper.
5. Table and Figure numbers have been corrected
6. Table titles have been altered to specify correlations between ICD-10 and NIDS cases
7. Reference 1 has been updated.

Sincerely,

Ms Karen Moore
On behalf of co-authors: A/Prof Jim Black, Ms Lucinda Franklin, Ms Stacey Rowe
Scatter plot of NIDS counts and combined top ICD-10 code cases