Reviewer's report

Title: The representativeness of a European multi-center network for influenza-like-illness participatory surveillance

Version: 2 Date: 29 June 2014

Reviewer: Marianne A.B. van der Sande

Reviewer's report:

The authors have aimed to assess the representativeness of participants who volunteered for Influenzanet in the 2001-2012 season in one of seven European countries. This was done by comparing self reported characteristics of the volunteers to data available from public sources. They concluded that there were significant differences between Influenzanet volunteers and the general populations and recommend to take their quantification of the biases into account to improve analysis of Influenzanet data. This is a relevant study for reflection on the contribution of Influenzanet-like initiatives towards surveillance.

Just a few comments/questions to clarify:
- quantification was based on a single season only, how confident are the authors that these differences are stable over time? how much sensitivity analysis around the estimates would be indicated?
- please discuss how likely or not the effect of other unmeasured confounders might be on the quantification of the overall bias?
- please clarify why some countries required ethical approval, others not, and discuss how this may have impacted upon uptake?
- if absence of updating of the intake survey with the baseline data by 89% reflects misreporting for some of these variables, how could that have impacted on the results?

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'