Reviewer’s report

Title: Transmission dynamics and control of Ebola virus disease (EVD): A Review

Version: 2 Date: 17 September 2014

Reviewer: Alessandro Vespignani

Reviewer’s report:

This is a timely review of the transmission dynamics and modeling of EVD. The paper is certainly going to be a relevant resource in the current and future modeling efforts concerning the west African EVD outbreak.

This review provides a thorough discussion of past epidemiological data, models and how modeling efforts can help assessing the effectiveness of public health measures.

The paper shall be certainly published (possibly fast tracking it) after the authors have considered the following remarks.

Major compulsory revisions

The authors provide a thorough presentation of the various epidemiological data and modeling approaches to EVD. The only part that falls short of the mark is the discussion of the transmission of the disease in funeral settings. This is a major component of the disease transmissibility that it is discussed in one of the modeling approaches that the authors themselves define as key studies (ref. s 18, 19). Unfortunately while the authors dive into many details of the balance between the community and hospital transmissibility, they do not discuss in detail the issue of the funeral settings. Furthermore they do not offer a short presentation of the model of Legrand et al. (ref. 19) where this component is explicitly modeled. I believe that for the sake of completeness the authors shall discuss the funeral transmission and its modeling in more detail.

Discretionary revisions

In the last few weeks several papers have been published concerning the analysis of the current WA outbreak, including a paper from the authors of this submission. Although I know it is difficult to keep the pace with an obviously growing literature on the WA outbreak,

I believe that the present review would be benefit (make it more updated) of one or two paragraphs concerning those modeling approaches in the discussion section.

In summary I believe that the authors can consider the above remarks and provide a new version of the manuscript in a very short time ensuring a fast publication of this extremely relevant reference work.
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