Reviewer's report

Title: Improved coverage and timing of childhood vaccinations in two post-Soviet countries, Armenia and Kyrgyzstan

Version: 2 Date: 29 May 2015

Reviewer: Giovanni Rezza

Reviewer's report:

- Major Compulsory Revisions

1) In the Cox model, it would be better to use a regional indicator for deprivation, in order to evaluate whether the delay in vaccination varies in accordance to poverty in the geographical area;

2) The interaction between rurality and family poverty should be better investigated:

3) The model does not take into account the study design (multi-stage clustered sampling design). A multilevel model should be used (Proportional hazards mixed effects model).

4) In Table 3 it is shown that children living in urban areas have a higher probability to be vaccinated compared with those living in rural areas; surprisingly, rurality is not even mentioned in the 'results' while it is mentioned in the 'discussion' section. This should be adequately redressed.

The author must respond to these before a decision on publication can be reached. For example, additional necessary experiments or controls, statistical mistakes, errors in interpretation.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.