Reviewer’s report

**Title:** Intervene before leaving: clustered lot quality assurance sampling to monitor vaccination coverage at health district level before the end of a yellow fever and measles vaccination campaign in Sierra Leone in 2009

**Version:** 1  **Date:** 22 March 2012

**Reviewer:** Mark Myatt

**Reviewer’s report:**

This is (IMO) a much improved article.

The method describes has considerable promise for improving vaccine coverage and deserves a wider audience.

Major compulsory revisions

NONE.

Minor essential revisions

I think the article would benefit from further proofreading.

Figure 1 could be much improved if redrawn with x-axis limits of 65% and 100%. The y-axis label should be something like "Probability of classification". The title is confusing as the probability increases with coverage. This is the inverse of what is implied in the title.

Figure 2 is an interesting and informative addition. I think that this could be modified for black and white printing. If kept in colour then the number of colours used should be reduced (see : http://en.wikipedia.org/wiki/Four_color_theorem) and standard mapping colours used.

Figures 3 & 4 could be combined. These seem rather small and of poor quality in the supplied PDF.

Discretionary revisions

Figure 2 : It is a little disappointing that some discussion of the applicability of PPS to coverage problems was not prompted by this map. PPS places data collection in the most populous communities. These are the easy to cover communities. PPS also does not yield a spatially even sample as can (e.g.) be clearly seen in the sampling locations of Moyamba district.

**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.

**Declaration of competing interests:**

I declare that I have no competing interests.