Reviewer’s report

Title: Mass campaigns with antimalarial drugs: A modeling comparison of artemether-lumefantrine and DHA-piperaquine with and without primaquine as tools for malaria control and elimination

Version: 2
Date: 2 January 2015

Reviewer: Emmanuel Arinaitwe

Reviewer’s report:

This is a well written paper covering an important topic on mass drug campaign against malaria. I have a few minor essential comments which include:

1) Limitations are not well stated which could include inability to model effect of MDA on malaria transmission to mosquitoes/transmission blocking and its effect on EIR, use of a high detection threshold leading to much of the parasitaemia undetected, not modelling the roll of sub-patent parasitaemia or effect of MDA on sub-patent parasitaemia etc

2) On page 5 line 187, semi-immune patients are mentioned and it is not clear who these patients are. Non-immune patients are clearly understood, but semi-immune patients need to be defined.

3) If possible, the model could be adjusted to include EIR beyond 50 infectious bites per person per year since some places in Africa have EIRs of as high as 500.

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