Reviewer's report

Title: Impact of Routine PCV7 (Prevenar) Vaccination of Infants on the Clinical and Economic Burden of Pneumococcal Disease in Malaysia

Version: 2 Date: 22 June 2011

Reviewer: Kenneth KC Lee

Reviewer's report:

Overall, the authors should be commended for performing the first cost-effectiveness analysis for pneumococcal vaccine in the Malaysian healthcare system. The method adopted was appropriate and findings have been interpreted in a proper manner.

Disease Incidence Estimation
1. The sentence "Where available, laboratory data records were merged with hospital discharge records to identify patients with laboratory confirmed infections" is confusing, weren't the cases all identified by ICD codings? In addition, laboratory test for S. Pneumoniae is not routinely done in public hospitals due to cost contraints. The authors should explain clearly on what they did in identifying their study patients.
2. How valid was the assumption to project from the UKM Medical Centre to project to the entire population?
3. How valid was the assumption that each hospital provided treatment for 50% of cases within its catchment area?

Vaccine efficacy
1. Ref (18) was published in 2008, is there a more update one as serotype figures tend to change constantly?
2. a 90% coverage of birth cohort and 100% compliance rate assumption would need to be justified

Outcomes estimation
1. 2006 data on population and life expectancy: any more update figures?

Cost estimation
1. cost of outpatient treatment that did not link to any hospital admission were not included: explanation required as attendance at public outpatient clinics also involves public resources 2. Please explain how representative the UKM Medical Centre Clinical Costing Software is

Recurring cost
1. Please explain how utility costs due to water, electricity ..... were calculated 2.
Please explain why benefits were not discounted

Sensitivity analysis
1. the sensitive variables should be reported in "Results" instead of mentioning in "Discussion"

Discussion
1. Please clarify whether RM33,624 was "CER" or "ICER", if it was "CER", then it may not be appropriate for the present context as "ICER" is used in the present study

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.