Reviewer's report

Title: Community ophthalmology in rural Nepal: a cost-effectiveness study

Version: 1  Date: 30 June 2009

Reviewer: Daniel Grima

Reviewer's report:

Overall, this is an interesting study that addresses practical issues in the provision of health care to rural areas.

Major issues:

1) Cost-effectiveness analyses seek to quantify the ratio of incremental costs over incremental benefits of one intervention versus another. Most health economic guidelines seek the use of a common effectiveness measure such as a QALY to allow comparisons between interventions. This study uses average cost effectiveness (not an incremental analysis) and a very specific effectiveness measure, as such it differs from many guidelines. The study should clearly define the cost-effectiveness parameters, currently there use is inconsistent. The results provide cost per camp and cost per transported patient. But the methods report the efficacy measure as utilization of cataract services which implies the results should be cost per surgery performed. The methods should be revised to clarify the analyses being performed and these should be consistent with the methods.

2) The title should be revised to provide more information on the comparison being made. Possibly: Evaluation of alternative outreach models for cataract services in rural Nepal.

3) The objective of the article is stated several times in different ways – intro paragraph 4, Discussion paragraph 1 and conclusion. I assume the objective was to compare the impact of the two program models on program costs, program utilization, hospital direct payments and patient equity. This should be stated clearly in the introduction and referred to in the discussion. Again the objectives should be answered by the cost-effectiveness results reported.

4) The impact of the programs on patient equity is listed as a potential issue and noted as unaffected in the conclusion. However, the authors note an apparent shift in age of cataract patients in table 1. This is a potential equity issue which deserves some discussion as to causes. Maybe fewer camps means patients have to travel farther and older patients are unable or unwilling to travel the extra distance. Does the increase in younger patients mean that demand exceeds capacity so that when older patients do not come to clinic their spaces are filled by other patients who would not otherwise be seen? The conclusion should state that the utilization of the camps was unaffected but an age shift may have occurred.
5) On page 4 (intro) the list (procedure for DST camps and …) seems out of place and may be better positioned in the methods.

6) Page 4 (intro) – the second paragraph (The hospital philosophy…). The new program decreased repeat visits to sites which is in contrast to this stated philosophy.

7) The second program used fewer, more concentrated and distant camps. The results report the number of camps but do not discuss average distance of camps from the hospital with the second system. So the reader cannot tell if more distant camps were used or the magnitude of the change. The proportion of camps in urban areas increased from 7 of 151 to 5 of 75, which would indicate close camps where retained. It would be useful to understand how much farther the new camps where or how the geographic distribution changed.

Minor

8) Introduction: paragraph 2 lists advantages of the camp model over other options but does not describe the options (I assume no camps). This is confusing and not directly applicable to the article as both options assume DST camps are used.

9) The total in paragraph 6 of the discussion appears to be incorrect ($35 from paragraph 5 plus $12 from paragraph 6 for a total of $47 not $40)

10) Table 4 – It is unclear what cost is referred to by per diem, please clarify.

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.

Declaration of competing interests:

None