Reviewer's report

Title: A cost minimisation analysis of a telepaediatric otolaryngology service

Version: 1 Date: 6 July 2007

Reviewer: Yogesan Kanagasingam

Reviewer's report:

General

Cathy Xu et al in their submitted manuscript titled "A cost minimization analysis of a telepaediatric otolaryngology service" compare the cost of telepaediatric otolaryngology service and that of conventional outpatient ENT department (OPD-ENT) service.

Cost-minimization analysis compares two or more interventions of equal value to a patient and assesses which is less costly. The major difficulty encountered with cost-minimization analysis is that the interventions often are not exactly equivalent in all aspects. The authors demonstrated various clinical outcomes, but less cost when tele-ENT consultation was performed in a remote center, as compared to a center at city.

1. In this study the authors conducted 88 tele-ENT consultations for 70 patients. What happened to the patients who need a full, face to face examination and what about these costs? To examine and treat fewer patients will of course cost less. The comparison is therefore meaningless. The authors must provide information about the number of patients (N) included in the unit costs calculations for each option. This is also important because the costs in tele-ENT consultation depend on N.

2. The authors should also explain why they have not included a cost-minimal analysis for other options like ENT specialists visits to Bundaberg. Can the patients have a full ENT examination via tele video consultation and not by a visiting specialist? Or do the patients need to travel to an ENT clinic to have a full ENT examination? If one of the options provides an inferior service to the patients, the options in question cannot be compared. If on the other hand both the ENT consultation and the visiting service offer less than a full eye examination these two cannot be compared with tele ENT option and option of patient traveling to RCH. This needs clarification.

3. The authors claimed to have compared the cost-minimization of the teleENT consultations with cost-minimization of RCH outpatient options. A cost-minimization analysis requires that the costs are somehow related to the some kind of minimization measurement. The minimization side of the equations were not fully described and accounted for. They have only compared the unit costs between these two options.
Other comments:

4. The sensitivity analysis should be more than a best case scenario. The authors should test the validity of the result by varying the assumptions (the equipment lifetime, maintenance costs and so on).

5. The author should discuss the need for a teleconsultation. Can a patient have a consultation without a referral from the GP? If so can this be one of the reasons for the increase/decrease in ENT-related consultations in the area? Was one goal to reach patients with an unmet need for ENT-examinations? The use of local advertising (if any) to increase the demand for tele ENT services should have been discussed.

6. Did the follow-up rate differ between the two options? And if so were the costs of this difference in follow-up consultation included?

---

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

---

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

---

Discretionary Revisions (which the author can choose to ignore)

---

What next?: Accept after discretionary revisions

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

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