Reviewer's report

Title: A retrospective review of telehealth services for children referred to a paediatric nephrologist

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Reviewer: Brian McCrossan

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Introduction
Good background and rationale

Methods
Cost analysis: societal / patient costs are not generally recognized as important factors in health economics (P8 L3-4). The point-of-view is generally that of the provider ie the health service. Therefore the real analysis is what was the difference in health care costs to the Queensland State of providing the 2 care pathways.
Therefore the state subsidy should be included but not the patient/ family’s direct costs.
It is OK to treat the fixed costs as “sunk.”
I agree that the ancillary costs borne by the family should not be included.
If possible it would be preferable to employ some standardized costs so that other institutions within Australia and further afield may replicate these results ie in the UK it would be the PSSRU. However, perhaps this type of health economic data is not available in Australia.

Discussion
Agree with the premise that tele-nephrology or indeed the vast majority of tertiary specialties are better served by a telemedicine service in such a large geographical area.
A “result” such as the average consultation time should be stated in the Results.
Again it is not permissible to describe results in the discussion section: ie the ESKD patients undergoing transplantation. What is meant by similar results? I think it is fine to describe the range of patients in a bit more detail in the discussion to highlight special subgroups of patients who probably particularly benefit from the telemedicine service. However, unless there is supportive data presented one should not insert results and assertions of outcomes in the discussion.

The last paragraph suggests that the telemedicine service may be cost saving to the health service. This may well be true but it is not how the data have been presented as the investigators state in the methods section that they lumped
health service and family costs together. However, in Table 2 it is not stated what the family costs were. If the investigators only included costs borne by the health service then this should be made clearer in the Methods.

It is also not good practice to calculate the costs on the year of greatest activity as this will naturally bias the results in favour of telemedicine.

It is a pity the investigators did not conduct a survey of the attitudes of the patients and healthcare staff involved in the telemedicine service.

This study certainly supports the “feasibility” of tele-nephrology as it is a well established service. However, it does not support the term “effectiveness” – there is no data presented which describes either “cost-effectiveness” or health care outcomes.

On the whole, I think this is a valuable addition to the literature as it demonstrates clearly that a tele-nephrology service is used consistently over a prolonged period.

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

Quality of written English: Acceptable

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

Declaration of competing interests:

I declare that I have no competing interests