Reviewer’s report

Title: Clinical Outcomes Resulting from Telemedicine Interventions: A Systematic Review

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Level of interest: A paper of considerable general medical or scientific interest

Advice on publication: Accept without revision

Review of paper by Hersh et al, “Clinical outcomes resulting from Telemedicine Interventions: A systematic review”

This is an excellent review paper which comprehensively addresses outcome measurement using telemedicine. The methodology of the review is appropriate and thorough, and the conclusions drawn from the review are logical. Two areas were examined, office based, and home based telemedicine. The focus was on clinical outcomes, rather than diagnostic efficacy, which is what many studies have examined, and the authors rightly suggest a strong need for more comprehensive better planned studies in future. My only criticism of the study is the assumption that home based telemedicine should show better outcomes than ordinary home based care, especially as office based telemedicine was required to show only equal outcomes to ordinary office based care. If the comparator for home based care is no care, then it is reasonable to make this assumption, but in some of the studies quoted, such as the Kaiser one by Johnston et al, the telemedicine home care was equivalent to ordinary home care in quality, but proved to be cheaper, hence suggesting that more care could be provided for the same quantum of resources, surely an improvement in clinical outcomes. At this stage it would be my view that the comparison in both cases would be that telemedicine is no worse than conventional care, rather than as is suggested in this paper.

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Competing interests:

None declared.