Reviewer's report

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

Authors:

William R Hersh MD (hersh@ohsu.edu)
Mark Helfand MD, MPH (helfand@ohsu.edu)
James Wallace (wallacej@ohsu.edu)
Dale Kraemer PhD (kraemerd@ohsu.edu)
Patricia Patterson PhD (patterson@ohsu.edu)
Susan Shapiro (shapiros@ohsu.edu)
Merwyn Greenlick PhD (mitchg@ohsu.edu)

Version: 1 Date: 31 Oct 2001

Reviewer: Dr Bonnie Wakefield

Level of interest: A paper whose findings are important to those with closely related research interests

Advice on publication: Accept after revision, which I do not need to see

This paper is well-written and easy to read. The authors conducted a thorough review of the state of the art in telemedicine evaluation. I have two minor criticisms of the paper. First, the authors state there is "good evidence" supporting care in the ER and ICU, as well as diagnostic teledermatology (p. 14). Based on the criteria used to evaluate the studies, only one (the ER study) was classified as a properly designed randomized controlled trial (Class I) with a strong positive effect. The others fell into the category of Class II or III studies with weak positive effect. Therefore, I would delete the word "good" and state there is evidence supporting the care. Second, on page 14 the authors suggest "tracker trials". It would be helpful to insert a one to two sentence description or definition of a tracker trial.

We have a way to go in proving the efficacy and effectiveness of telemedicine. This excellent review of current studies should provide the impetus for clinical trials or, at a minimum, systematic program evaluation focused on important variables such as utilization, access, costs, clinical outcomes, and satisfaction. The growing acceptance of telemedicine as a feasible care delivery system demands continued exploration of the application of new technologies using systematic and sophisticated evaluation methodologies.

Competing interests:

None declared.