

How good is telehealth assessment for the diagnosis of dementia and mild cognitive impairment?

Clinical Question	How accurate are telehealth assessments for the diagnosis of dementia and mild cognitive impairment (MCI)?
Bottom Line	<p>The available data suggest that telehealth assessment may be highly sensitive and specific for the diagnosis of all-cause dementia when assessed against a reference standard of conventional face-to-face assessment, but the estimates are very imprecise due to small sample sizes and between-study heterogeneity and may apply mainly to telehealth models which incorporate a considerable amount of face-to-face contact with healthcare professionals.</p> <p>It is not possible to draw conclusions about the accuracy of diagnosis of dementia subtypes. For the diagnosis of MCI by telehealth assessment, best estimates of both sensitivity and specificity were somewhat lower than for all-cause dementia but were based on a single study. Errors occurred at the healthy / MCI and MCI/dementia boundaries. However, there is no evidence that diagnostic disagreements were more frequent than would be expected due to the known imperfect inter-rater reliability of the reference standard.</p>
Caveat	<p>The principle weakness of the review is the small number of studies and participants.</p> <p>Only one of the included studies gave clinicians the option of diagnosing mild cognitive impairment (or cognitive impairment falling short of dementia criteria) although this is a diagnosis commonly made in memory clinics. The presence or absence of this option may influence the 'threshold' of impairment at which a clinician makes a diagnosis of dementia, i.e. the application of the reference standard, and may contribute to between-study heterogeneity in the review.</p>
Context	<p>Many millions of people living with dementia around the world are not diagnosed, which has a negative impact both on their access to care and treatment and on rational service planning. Telehealth - the use of information and communication technology (ICT) to provide health services at a distance - may be a way to increase access to specialist assessment for people with suspected dementia, especially those living in remote or rural areas. It has also been much used during the COVID-19 pandemic. It is important to know whether diagnoses made using telehealth assessment are as accurate as those made in conventional, face-to-face clinical settings.</p>
Cochrane Systematic Review	McCleery J, Laverty J, Quinn TJ. Diagnostic test accuracy of telehealth assessment for dementia and mild cognitive impairment. Cochrane Database of Systematic Reviews 2021, Issue 7. Art. No.:

CD013786. DOI: 10.1002/14651858.CD013786.pub2. This review contains 3 trials with a total of 136 participants.

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Systematic review link:

<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD013786.pub2/full>