Automated tests for diagnosing and monitoring cognitive impairment: a diagnostic accuracy review

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Declared competing interests of authors: Rumona Dickson is on the Health Technology Assessment Evidence Synthesis Board.

Published October 2016
DOI: 10.3310/hta20770

Plain English summary

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Health Technology Assessment 2016; Vol. 20: No. 77
DOI: 10.3310/hta20770

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The number of people who have problems with their memory and thinking is rising. The testing of memory and thinking is difficult and, in the early stages, the person with problems may show only small changes.

Pen-and-paper tests are often used to test memory loss and thinking problems, alongside discussions with health-care specialists and the individual, often in the company of their families or caregivers. Depending on the level of memory loss and thinking problems, some people are offered treatment, whereas others are followed up to see if their symptoms become worse. New tests to assess these problems have been developed that are computer based and sometimes do not need a specialist to be involved.

We carried out a systematic review (a review of studies conducted by others) to look at how well these computer-based tests diagnosed people with memory loss and thinking problems. We found limited evidence to support the use of these computer-based tests in clinical practice without the involvement of a health-care specialist. For this reason, at this time, we would recommend against approaches that use computerised tests by themselves.

We also asked a person living with memory problems for their views on the results of this research.
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This report

The research reported in this issue of the journal was funded by the HTA programme as project number 15/67/01. The contractual start date was in August 2015. The draft report began editorial review in March 2016 and was accepted for publication in August 2016. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The HTA editors and publisher have tried to ensure the accuracy of the authors’ report and would like to thank the reviewers for their constructive comments on the draft document. However, they do not accept liability for damages or losses arising from material published in this report.

This report presents independent research funded by the National Institute for Health Research (NIHR). The views and opinions expressed by authors in this publication are those of the authors and do not necessarily reflect those of the NHS, the NIHR, NETSCC, the HTA programme or the Department of Health. If there are verbatim quotations included in this publication the views and opinions expressed by the interviewees are those of the interviewees and do not necessarily reflect those of the authors, those of the NHS, the NIHR, NETSCC, the HTA programme or the Department of Health.

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