

<b>Title:</b>	<b>Multifocal Multichannel Objective Perimetry, November 2002</b>
<b>Agency:</b>	<b>Medicare Services Advisory Committee (MSAC) Mail Drop Point 107 Commonwealth Department of Health and Ageing GPO Box 9848 Canberra ACT 2601 Australia</b>
<b>Reference:</b>	<b>MSAC reference 13 Assessment report, ISBN 0 642 821437, ISSN 1443-7120, <a href="http://www.msac.gov.au">http://www.msac.gov.au</a></b>

### **Aim**

To assess the safety, effectiveness and cost-effectiveness of Multifocal Multichannel Objective Perimetry (MMOP) and under what circumstances public funding should be supported for the service.

### **Conclusions and results**

*Safety* There was a lack of safety data, although risks to subjects should be minimal as the test is non-invasive.

*Effectiveness* Limitations associated with the available evidence preclude evaluation of the clinical effectiveness of MMOP. Two studies with sub-optimal design for determining the effectiveness of a diagnostic test were identified. Both reported sensitivities ranging from 95 to 100 per cent and specificities from 93 to 97 per cent, which are likely to be overestimates, as the included studies were susceptible to bias due to study design constraints resulting in a failure to meet important validity criteria. In particular, the test and the reference was not performed in a consecutive set of patients, but rather in a group known to have the target disorder and a group of control subjects known not to have the disease. As patient management and clinical outcomes were not addressed in any of the available studies it cannot be determined whether the test would improve patient management or whether it could help to slow the progression of glaucoma or any other disease that results in visual field defects.

*Cost-effectiveness* There is no reliable, high quality evidence with regard to the costs or outcomes of MMOP in Australia or overseas.

### **Recommendation**

Public funding should not be supported at this time for MMOP in Australia.

### **Method**

MSAC conducted a systematic review of medical literature using the Cochrane library, Medline, PreMedline, EMBASE, CINAHL, Current Contents, and Biological Abstracts databases from 1966-2002 to identify the accuracy and precision of MMOP and its usefulness in terms of patient outcomes. This report adopted the criteria for assessment of validity of evidence recommended by the Cochrane Methods Working Group on Systematic Review of Screening and Diagnostic Tests. This assesses evidence against the ideal study design for assessing accuracy of diagnostic tests defined as follows. Patients in the study should have undergone both the diagnostic test in question and a reference gold standard test that would provide confirmatory proof that they do or do not have the target disorder.

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