Title: Transient Elastography for Evaluation of Liver Fibrosis: Guidelines and Clinical and Cost Effectiveness

Date: 11 April 2008

Research question:

1. What is the evidence for the clinical benefit and harm of transient elastography (FibroScan) for measuring liver stiffness to evaluate liver fibrosis in patients with liver disease?

2. What is the cost effectiveness of transient elastography (FibroScan) for measuring liver stiffness to evaluate liver fibrosis in patients with liver disease?

3. Are there any guidelines for the personnel or training required for using transient elastography?

4. Is the FibroScan or other transient elastography device licensed in Canada?

Methods:

A limited literature search was conducted on key health technology assessment resources, including PubMed, the Cochrane Library (Issue 1, 2008), University of York Centre for Reviews and Dissemination (CRD) databases, ECRI, EuroScan, international HTA agencies, and a focused Internet search. Results include articles published between 2003 and April 2008, and are limited to English language publications only. No filters were applied to limit the retrieval by study type. Internet links are provided, where available.

Results:

HTIS reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews and meta-analyses are presented first. These are followed by economic evaluations, randomized controlled trials (RCTs), observational studies and evidence-based guidelines.

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Three systematic reviews and 31 observational studies were identified pertaining to the clinical effectiveness of transient elastography for the evaluation of liver fibrosis. No health technology assessments, economic information or RCTs were identified on the use of transient elastography. In addition, no guidelines were identified on the use of transient elastography and the training or personnel required. No licensing information was found for the FibroScan device, although the Hi Vision 900™ device (Hitachi) is licensed in Canada (see section on “licensing information”)

**Health technology assessments**

None identified

**Systematic reviews and meta-analyses**


**Economic analyses and cost information**

None identified

**Randomized controlled trials**

None identified

**Observational studies**

*Patients with hepatitis*


**Patients with cirrhosis**


**Patients with chronic liver disease (unspecified type)**


**Patients with HIV-associated liver disease**


**Patients with other types of liver disease**


**Guidelines and recommendations**

None identified

**Licensing information**


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Appendix – Further information:

Review articles


Additional references


