TITLE: Indirect Calorimetry versus Thermodilution and Echocardiography for Measuring Cardiac Output: Comparative Clinical and Cost-Effectiveness

DATE: 25 February 2010

RESEARCH QUESTIONS:

1. What is the comparative clinical effectiveness of indirect calorimetry versus thermodilution and echocardiography for measuring cardiac output to determine the presence or severity of heart valve disease?

2. What is the cost-effectiveness of indirect calorimetry versus thermodilution and echocardiography for measuring cardiac output to determine the presence or severity of heart valve disease?

METHODS:

A limited literature search was conducted on key health technology assessment resources, including PubMed, Embase the Cochrane Library (Issue 2, 2010), University of York Centre for Reviews and Dissemination (CRD) databases, ECRI, EuroScan, international health technology agencies, and a focused Internet search. The search was limited to English language articles published between 2000 and February 2010. No filters were applied to limit the retrieval by study type. Internet links were 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 randomized controlled trials, controlled clinical trials, observational studies, economic evaluations, and evidence-based guidelines.

Two observational studies regarding the comparative clinical effectiveness of indirect calorimetry versus thermodilution and echocardiography for measuring cardiac output to determine the presence or severity of heart valve disease were identified. No relevant health
technology assessments, systematic reviews, meta-analyses, randomized controlled trials, or controlled clinical trials were identified. No information was identified regarding cost-effectiveness of indirect calorimetry versus thermodilution and echocardiography for measuring cardiac output to determine the presence or severity of heart valve disease. Additional articles of potential interest, including articles discussing the inert gas rebreathing method, can be found in the appendix.

**Health technology assessments**
No literature identified

**Systematic reviews and meta-analyses**
No literature identified

**Randomized controlled trials**
No literature identified

**Controlled clinical trials**
No literature identified

**Observational studies**


**Economic evaluations**
No literature identified

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APPENDIX – FURTHER INFORMATION:

Observational studies


Review articles
