Title: Temporal Artery Thermometers in Pre-Hospital Settings: Clinical and Cost Effectiveness

Date: 25 April 2008

Research questions:

1. What is the clinical effectiveness of temporal artery thermometers compared with oral, rectal, or tympanic thermometers for the detection of fever or hypothermia in pre-hospital settings?

2. What is the cost effectiveness of temporal artery thermometers compared with oral, rectal, or tympanic thermometers for the detection of fever or hypothermia in pre-hospital settings?

Methods:

A limited literature search was conducted on key health technology assessment resources, including PubMed, the Cochrane Library (Issue 2, 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, observational studies and evidence-based guidelines.

The literature search identified one evidence based guideline that relates to the research questions. No health technology assessments, systematic reviews, economic evaluations, randomized controlled trials, or observational studies were found that specifically addressed the

Disclaimer: The Health Technology Inquiry Service (HTIS) is an information service for those involved in planning and providing health care in Canada. HTIS responses are based on a limited literature search and are not comprehensive, systematic reviews. The intent is to provide a list of sources of the best evidence on the topic that CADTH could identify using all reasonable efforts within the time allowed. HTIS responses should be considered along with other types of information and health care considerations. The information included in this response is not intended to replace professional medical advice, nor should it be construed as a recommendation for or against the use of a particular health technology. Readers are also cautioned that a lack of good quality evidence does not necessarily mean a lack of effectiveness particularly in the case of new and emerging health technologies, for which little information can be found, but which may in future prove to be effective. While CADTH has taken care in the preparation of the report to ensure that its contents are accurate, complete and up to date, CADTH does not make any guarantee to that effect. CADTH is not liable for any loss or damages resulting from use of the information in the report.

Copyright: This report contains CADTH copyright material and may contain material in which a third party owns copyright. This report may be used for the purposes of research or private study only. It may not be copied, posted on a web site, redistributed by email or stored on an electronic system without the prior written permission of CADTH or applicable copyright owner.

Links: This report may contain links to other information on available on the websites of third parties on the Internet. CADTH does not have control over the content of such sites. Use of third party sites is governed by the owners’ own terms and conditions.
clinical or cost effectiveness of temporal artery thermometers in pre-hospital settings. Articles of interest are included in the appendix. The observational studies in the appendix assess the clinical effectiveness of temporal artery thermometers in hospital settings or controlled research settings.

**Health technology assessments**
No literature identified

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

**Economic analyses and cost information**
No literature identified

**Randomized controlled trials**
No literature identified

**Observational studies**
No literature identified

**Guidelines and recommendations**


**Prepared by:**
Karen Cimon, Research Assistant
Charlene Argáez, MLIS, Information Specialist

Health Technology Inquiry Service
Email: [htis@cadth.ca](mailto:htis@cadth.ca)
Tel: 1-866-898-8439
Appendix – Further information:

Observational studies


Review articles


Additional references

