TITLE: Cone Beam Volumetric Tomography for Patients with Dental or Maxillofacial Abnormalities: Clinical Effectiveness and Guidelines

DATE: 14 January 2009

RESEARCH QUESTIONS:

1. What is the clinical effectiveness and safety of cone beam volumetric tomography for patients with dental and/or maxillofacial abnormalities in hospital and outpatient settings?

2. What are the guidelines for use of cone beam volumetric tomography in hospital and outpatient settings?

METHODS:

We contacted ECRI’s hotline service to request information on cone beam volumetric tomography for dental or maxillofacial abnormalities. References and abstracts from the systematic review and observational studies identified by ECRI are included below.

Supplemental searches for reports from Canadian health technology assessment agencies were performed, along with European sources including National Institute for Clinical Excellence (NICE) and the NIHR Health Technology Assessment programme.

RESULTS:

ECRI provided the following documents, which are a guide to the available evidence on the topic with context about the evidence provided by ECRI. They are based solely on a review of the article abstracts, not an analysis of full published articles.

Hotline response:

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.

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References and abstracts from the systematic review and observational studies identified by ECRI are included below. One systematic review and 42 observational studies were identified. Two Canadian guidelines for the use of cone beam volumetric tomography were located in the supplemental search. No health technology assessments, randomized controlled trials, or controlled clinical trials were identified in the search. Some additional information contained in the ECRI report including recent narrative reviews on the topic are included in the appendix.

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, controlled clinical trials, observational studies, and evidence-based guidelines.

**Health technology assessments**

No literature identified

**Systematic reviews and meta-analyses**


**Randomized controlled trials**

No literature identified

**Controlled clinical trials**

No literature identified

**Observational studies**


**Guidelines and recommendations**


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APPENDIX – FURTHER INFORMATION:

Review articles


**Position Statement:**


**Additional references**


*Note: product descriptions, news and additional information are available for several products.*
