Economic evaluation in oral health care

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Introduction

Economic evaluation attempts to weigh costs and effects of alternative interventions with the goal that available resources are used to achieve maximum benefits for patients in terms of health and quality of life. In emerging technologies this is particularly important to avoid inappropriate and excessive use.

Objectives

To analyse evidence on economic evaluation in oral health care, particularly on diagnostic imaging methods, by systematic review.

Material and methods

A search for literature was made starting with a hand made search according to the pearl growing model. This search strategy means that articles and relevant literature are retrieved by talking to renowned specialists in the subject area and by finding indexing and MeSH terms by looking at those articles and their reference lists. From seven articles indexing terms and MeSH terms were chosen and searches were made from PubMed, the Cochrane Library and Science Citations Index. The retrieved primary studies that according to the abstract contained a cost-effectiveness analysis were interpreted by two reviewers using a check-list for assessing economic evaluations (Drummond et al. 2005).

Results

The literature search yielded 258 titles and abstracts. Out of these, 93 studies were selected and read in full text. There was a vast heterogeneity in study design. No clear evidence was found. Methodology regarding the odontological part was acceptable in a few studies but the methodology for the economic evaluation was insufficient.

Conclusions and discussion

This review reveals a need for studies with improved quality in economic evaluation in oral health care. We will propose and discuss a model for economic evaluation of diagnostic methods that will contain information of how to (i) identify costs (ii) categorise costs and (iii) value costs. This model will be applied in the SEDENTEXCT project on Cone Beam Computed Tomography.