Im Geschäftsbereich des Bundesministeriums für Gesundheit und Soziale Sicherung

HTA REPORT | VOLUME 6 | EXECUTIVE SUMMARY

Health economic short HTA reports – systematic review of methods and implementation

Aidelsburger P, Felder S, Siebert U, Wasem J in Kooperation mit Greiner W, Leidl R HTA Schriftenreihe, Band 6, Hrsg.: Rüther, Dauben, Warda, Köln, 2003. ISBN 3-89906-7207.

INTRODUCTION

The German Agency for Health Technology Assessment (DAHTA) at the German Institute for Medical Documentation and Information (DIMDI) commissions research projects for Health Technology Assessment (HTA) based on the legal order to build up an information system for the evaluation of health technology assessment. In this context the need for a shortened approach for economic HTA compared to the usual comprehensive HTA was expressed, with the aim to get information for decision makers in a shorter time period. An instrument for the conduction of rapid health-economic HTA does not exist hitherto in Germany. Aim of a health-economic HTA is to give information about the cost-effectiveness of a medical technology compared to another technology. Comparative statements about the costeffectiveness of a medical technology can be obtained by health economic evaluation studies. A health-economic HTA is usually based on these types of studies. While there is some experience with comprehensive health-economic HTA in Germany, rapid assessments are a new approach in technology assessment in Germany.

STUDY QUESTION

Aim of the present project was to answer the following questions:

- What information can be obtained from the existing literature with regard to methodological guidelines for rapid health-economic HTA? What recommendations can be derived from the literature that reduce the period of time that is needed to conduct a brief HTA in comparison to a comprehensive HTA report by simul-taneously guaranteeing high quality?
- What recommendations can be derived from an analysis of comprehensive HTA as conducted at present in Germany?
- What possibilities exist to implement the methodological recommendations for the conduction of a rapid health-economic HTA?

METHODS

In order to develop a methodological instrument for a rapid health-economic HTA, a systematic literature search with the aim to identify existing methodological descriptions was performed in relevant medical and economical literature databases and HTA-databases as well as an extensive search at various Internet presentations of the main international HTA-organisations. We shortly described the three identified and considered studies as well as a discussion of the strong and weak points of every study. The recommendations in the studies have been compared and recommendations for the German context have been formulated. They have been discussed at a panel of health-economic working-groups.

RESULTS

The literature search included all publications that dealt with methods of conducting a rapid HTA. No limits were given in respect to just including explicitly health-economic orientated descriptions. Three publications were identified. They were the basis for the data extraction and for the following information synthesis. Similarities and differences of the identified publications concerning rapid healtheconomic HTA were elaborated. A clear and unanimous definition of rapid health-economic HTA could not be derived. Time horizon for conducting a rapid health-economic HTA should be between three and six months. On the one hand in the publications the formulation of a study question is suggested as a compromise between quality and time span, on the other hand it is suggested to focus the study question enough to enable the study at a given time frame without any loss of quality. Statements about relevant databases have been very heterogeneous. Mainly the databases MEDLINE, EMBASE, HTA databases and the Cochrane library were mentioned. Questionnaires to experts are regarded as reasonable albeit not of all authors. The opinions about the application of Standard Operating Procedures (SOPs) are divided. Different approaches for the conduction of a literature search are suggested. Predominantly it is recommended to perform a review process with rapid HTA reports. Concerning the assessment of information, data extraction, implementation of results and quality assessment no comparison was possible due to lack of data. The authors of this report worked on own recommendations - under cooperation with the health-economic expert panel. Accordingly a rapid health-economic HTA is a unique method for a targeted assessment of the cost-effectiveness of a medical technology within a short time frame. It marks off clearly from a comprehensive HTA. The methodical recommendations should enable to conduct a rapid healthDeutsches Institut für Medizinische Dokumentation und Information

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economic HTA with high quality for decision making processes.

RECOMMENDATIONS

The recommendations are as follows:

- A rapid health-economic HTA should be done in three months including the review process not more than six months.
- The precise formulation of the study question is a crucial point for the further work. The number of compared technologies should be restricted, the target population must be defined clearly and precise. It could be restricted with regard to demographic characteristics (e.g. age, gender) and clinical characteristics (e.g. relevant pre-existing diseases). The study question should consider specific aspects with special interest for the recipients of a HTA report.
- Background information should be limited to aspects that are relevant for the specific study question. The compared technologies should be shortly described, for descriptions in detail should be referred to further publications, preferably to HTA reports concerning medical effectiveness.
- The social perspective should be chosen in rapid health-economic HTA that means all resource consumptions should be considered independently from the fact who has to bear them. Depending on the existing study question and on the study's principal an additional perspective (e.g. the payer's perspective) can be taken.
- Decision analysis can be appropriate as a method to structure the rapid health-economic HTA. Calculating a model in form of a simple decision tree or a simple Markov Model can be helpful as long as valid data are available. Complex models with a greater number of parameters, complex sensitivity analysis, especially multivariate probabilistic sensitivity analysis with Monte Carlo simulation can not be realised in a rapid health-economic HTA.
- The way to search for information must guarantee high quality, must be comprehensive and must assure that all relevant publications respectively studies are identified. Relevant databases the first line are in MEDLINE/PreMEDLINE and EMBASE. Depending on the study question more specific literature databases can be considered. The HTA databases (DARE, HTA and NEED) of the National Health Service (http://nhscrd.york.ac.uk) are relevant for health-economic questions. The development of SOPs with methodical recommendations for the conduction of a literature search is not regarded as useful. The search strategy has to

be developed individually for each study question.

- An instrument for the valuation of each identified study was developed and proposed. This checklist for the valuation of the methodical quality covers seven dimensions with 25 questions. Each valuation of the strong and the weak points of a study should be preceded by a short description of the study. For this description a standardised structure was formulated.
- The data of the included studies should be synthesised. If several studies are included, their results should be presented in a comparable way as it is essential for answering the study question.
- Discussion and conclusion with corresponding recommendations should be as conclusive and comprehensive as in a comprehensive healtheconomic HTA report. The discussion should point out the most important weaknesses and strength of the report, point out limitations and express further need for research. It has to be paid attention to the fact that the conclusion answers the study question and gives relevant information to the addresser.
- To guarantee high quality apart from standardisations a review process is recommended.
- Rapid health-economic HTA reports should be available via Internet and in printed form. Dependent on the study question an active dissemination to decision makers or potentially interested persons should be considered.

These guidelines should be tested by conducting rapid health-economic HTA with different study questions. A first phase of testing this guideline will result in a revision of the guidelines.

All HTA reports are available for free as full texts in the HTA database (only in German). (www.dimdi.de – HTA)

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