

# Equity and Health Technology Assessment

## A Systematic Review of the Literature



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### Introduction

Health Technology Assessment (HTA) is one of the main forms of policy-informing research and the primary tool of health technology regulation in many countries. After many years of methodological development, one of the challenges still facing HTA production is the consideration of equity aspects.

Equity in the realm of healthcare has been equated to distributive justice and resource allocation, access to and utilization of services and health technologies of different patient groups (most notably according to the PROGRESS acronym<sup>1</sup>) and the health inequalities between them. These issues have received considerable attention in the form of research both on a theoretical and on a methodological level.

The concept of equity is inherent in several of the aspects a robust HTA report has to address. Our project aims at providing a comprehensive approach for considering equity when conducting a HTA report in order to facilitate fair decision-making in light of the limited resources available in any health system. As a first step we performed a systematic review of the literature in order to identify existing evidence on the issue.

### Methods

We adopted the structure of the HTA Core Model<sup>TM</sup> developed during the EUnetHTA project 2006-2008 as state of the art for report methodology in Europe<sup>2</sup> and looked for possible equity dimensions in all issues of the nine HTA domains (Figure 1).

The identified issues were used to develop the systematic search strategy<sup>3</sup>. Combinations of the following terms were used: health technology assessment, HTA, equity, bias, equitable, inequity, fair, economic evaluation, cost-effectiveness, effectiveness, efficacy, social, socio-, ethics, ethical, legal, justice, subgroup. Boolean operators were used accordingly for synonyms and multi-word terms (AND, OR, ADJ).

The search included PubMed, PsycINFO, Social Science Citation Index, SAGE, Emerald, SOMED, EconLit and Google Scholar and was last updated in March 2010. Reference lists of the included publications were also scrutinized for further information retrieval.

The recovered literature was assessed with regard to relevance. The inclusion criteria were a) methodological relevance to HTA production in general or to one of the identified issues in particular, b) equity consideration pertaining to the actual report production and not the HTA production process as a whole (thus eliminating, for example, publications on priority-setting or dissemination) and c) publication in English or German language.

Relevant literature was systematically reviewed and information concerning equity was extracted. In order to identify focal points of discussion, information was categorized by HTA domain and synthesized accordingly (Table 1).

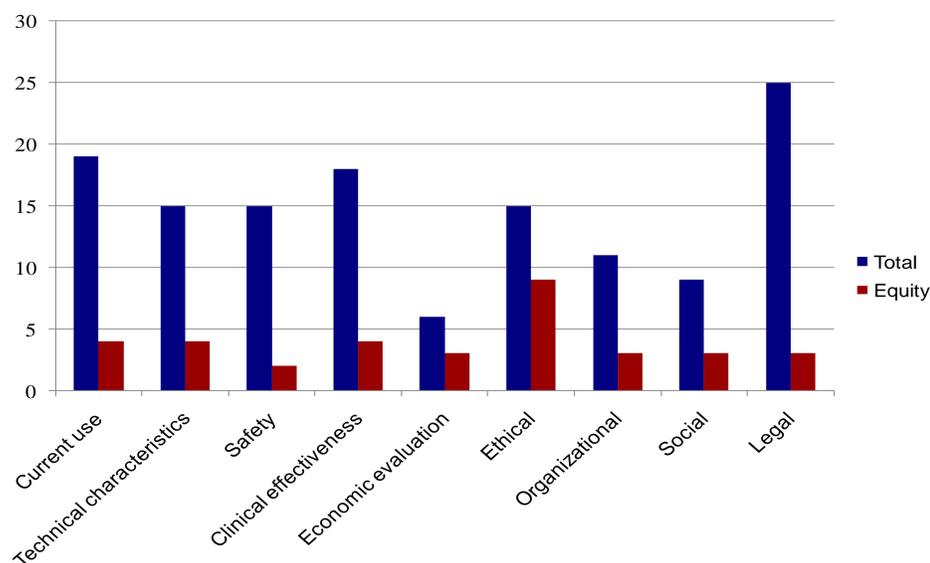


Figure 1: Equity-related issues in the 9 HTA Core Model<sup>TM</sup> domains

### Results

The scrutiny of the EUnet HTA Core Model<sup>TM</sup> yielded 35 out of 133 issues (26%) that could be connected to methodological equity concerns (Figure 1).

Our search yielded 1682 hits, out of which after eliminating double entries and applying the inclusion criteria, 272 proved to be relevant. Several publications dealt with more than one issue of equity, while others discussed the issue in more general terms.

We identified 60 publications discussing equity with relevance to the HTA report production as a whole. 181 discussed economic evaluation, while 79 included the ethical aspects of health technology. Social aspects were addressed as a focal point in 10 publications, while issues from the legal domain were discussed in 11. Issues pertaining to clinical effectiveness were mostly included in the general publications, which was also the case for organizational issues. These results are visualized in Figure 2.

The focal points raised by the identified publications are shown in Table 1 categorized by Core Model<sup>TM</sup> domain.

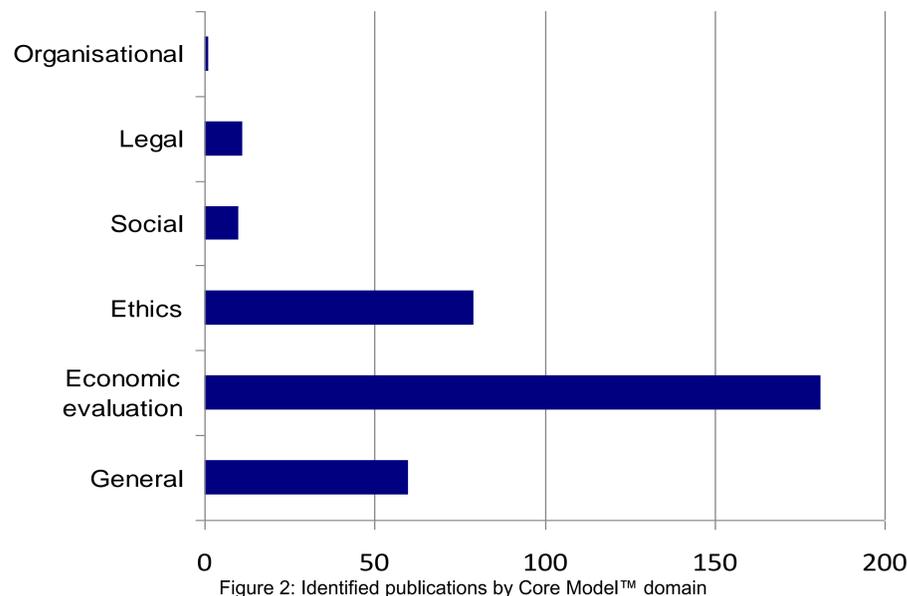


Figure 2: Identified publications by Core Model<sup>TM</sup> domain

Core Model <sup>TM</sup> domain	Focal discussion points
Health problem and current use of technology	Utilization
Description and technical characteristics	Access
Safety	Compliance
Effectiveness	Reporting of outcomes (PROGRESS) Impact on efficacy
Economic evaluation	Appropriate outcome measures (QALY, weighting) Opportunity cost, indirect cost
Ethical aspects	Principle and mode of ethical analysis in/of HTA
Organizational aspects	Acceptance, decentralization
Social aspects	Qualitative research incorporation, mode of implementation
Legal aspects	Access
General HTA methodology	Mode of incorporation Transferrability of existing equity tools to HTA

Table 1: Main points identified in the resulting literature organized by domain

### Discussion

It is evident from the 35 relevant issues we identified in the Core Model<sup>TM</sup>, that equity has an important role to play in a thorough report that aims at providing representative evidence on a technology's effects for the purpose of decision-making. This is also reflected in the substantial body of literature on the issue and in the several initiatives already taking place (see, for example "Equity-oriented Toolkit for HTA", WHO Collaborating Center for Health Technology Assessment<sup>4</sup>).

However, as demonstrated by most of the publications we identified, the consideration of all those issues is complicated both by the limited time and resources allocated to producing a HTA report and by the nature of the issues themselves.

In the next stages of our project we will attempt to provide a comprehensive approach for the consideration of the identified equity issues in HTA production, using the information provided by the literature as well as expert input.

### References and Acknowledgements

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