

# WHICH CRITERIA ARE USED IN HEALTHCARE DECISIONMAKING AND PRIORITY SETTING? A LITERATURE REVIEW FOR AN INTERNATIONAL SURVEY OF DECISIONMAKERS

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## Background

- Resource allocation is one of the most challenging issues faced by health policy decision-makers requiring efficient consideration of many factors.<sup>1-3</sup>
- The increasing scarcity of resources and widening inequities in healthcare access both underline that resources allocation need to be optimized.<sup>1,4</sup>
- There is a need for better understanding of how priority-setting is performed and for effective and pragmatic tools to facilitate this process.<sup>1,2,5</sup>
- This project is the foundation of a large collaborative study, the International Survey on decision criteria.

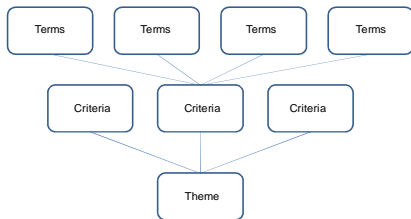
## Objectives

- Objective of the international survey on decision criteria is to explore and identify criteria used by healthcare decisionmakers from all regions of the world.
- Specific objective of the literature review is to identify criteria to serve as the basis for development of the questionnaire for the survey.

## Methodology

- Literature review on decision criteria**
- An extensive literature search was carried out in June 2010 in Medline and EMBASE databases to identify articles reporting decision criteria for healthcare decisionmakers. The research was limited to articles published in English, French, or German over the last 10 years.
- Studies conducted with healthcare decisionmakers (e.g., empirical studies, field-testing of decisionmaking tools, focus groups, questionnaires, interviews), conceptual and review articles, as well as articles describing decisionmaking tools were included.
- Data extraction & classification of terms**
- Abstracts were screened to identify if the study describes decisionmaking criteria.
- Selected full text articles were reviewed and data was extracted in a table to collect the exact term for each criterion as reported/described in each study (with weights if available).
- Given the variability of terms to describe conceptually similar decision criteria, a hierarchical classification system was developed as follows
  - Terms referring to the same decisionmaking concept (e.g. "side-effects" and "harm") were grouped under one **Criterion** (e.g., Safety). Related criteria were grouped under **Themes** (e.g., Health outcomes).

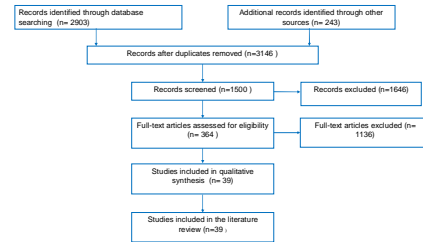
### Classification System



## Results

### Prisma diagram<sup>6</sup> for the literature review on decision criteria

- 39 studies included in the literature review
- All studies were published after 1997 and 32 in the period of 2006-2010

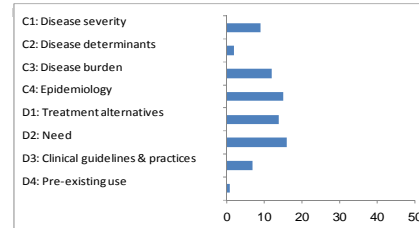
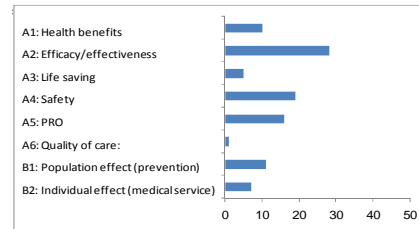


### Decision criteria classification and statistics

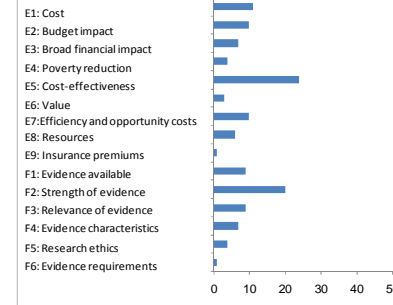
Large variations in terminology used to defined criteria were observed and 338 different terms were identified.

These were assigned to 58 unique criteria which were classified under 9 different themes including: A) health outcomes and benefits of intervention, B) types of health benefit, C) impact of disease targeted by intervention, D) therapeutic context of intervention, E) economic impact of intervention, F) quality/uncertainty of evidence, G) implementation complexity of intervention, H) priority, fairness and ethics, I) overall context.

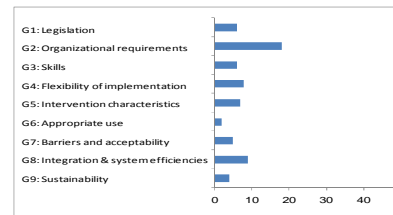
### Health outcomes & benefit



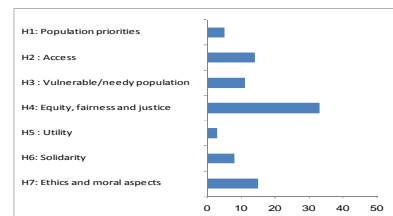
### Economic impact of the intervention/Quality & Uncertainty of evidence



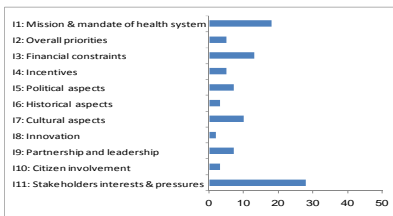
### Complexity of the intervention



### Prioritizing specific population



### Overall context



### Decision criteria classification and statistics

- Analysis of the literature indicated that the 10 most frequently mentioned criteria were:
  - equity/fairness (33 times),
  - efficacy/effectiveness (28 times),
  - healthcare stakeholder interests and pressures (28 times),
  - cost-effectiveness (23 times),
  - strength of evidence (20 times),
  - safety (19 times),
  - mission and mandate of health system (17 times),
  - need (16 times),
  - organizational requirements and capacity (17 times),
  - patient reported outcomes (16 times).

## Discussion

The literature review reveals a growing number of studies examining healthcare decision criteria and criteria-based decisionmaking tools over the past few years.

Variability of terminology used in the literature limited analysis due to subjective interpretation of terms reported by the authors. It also underlines one difficulty of standardizing the decisionmaking process, as argued by several authors,<sup>2,4</sup> and emphasizes a need for tools with well defined criteria to avoid such confusion.<sup>1,7</sup>

This study provides a strong foundation for the ongoing international decision criteria survey, to build perspective on which criteria are actually considered in real-life decisionmaking and how important they are perceived to be.

This work also suggests further reflection is needed about the importance of harmonization of terminology and tools to support efficient healthcare decisionmaking and priority-setting.<sup>9</sup>

## Acknowledgments

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