



## Incorporating cost-effectiveness data in a fair process for priority setting efforts

### Comment on “Use of cost-effectiveness data in priority setting decisions: experiences from the national guidelines for heart diseases in Sweden”



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#### Abstract

Cost-effectiveness data is useful for use in priority setting decisions in order to improve the efficiency of resources used. This paper thereby responds to Eckard *et al.* which addressed the use of cost-effectiveness data in the actual prioritization decisions in the Swedish national clinical guidelines for heart diseases. Based on a set of experiences on the use of economic evaluation in priority setting processes, this paper emphasizes the potential approach to incorporating cost-effectiveness data in the prioritization process to enhance transparency of the decisions, and highlights the importance of designing a fair decision-making process that can enforce the sustained implementation of cost-effectiveness data.

**Keywords:** Cost-Effectiveness Analysis, Priority Setting, Decision-making Process

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The World Health Report 2010 estimated that around 40% of total healthcare expenditures in all healthcare settings have been wasted (1). Health economic evaluation and its components such as cost-effectiveness analysis, has been employed as an explicit consideration for guiding efficient resource use. However, the practical implementations of incorporating cost-effectiveness data in priority decisions of a wide array of health policy issues (2) are inadequate. This paper thereby responds to an article by Eckard *et al.* (3), in which the authors address the use of cost-effectiveness data in Swedish priority setting for producing evidence-based national clinical guidelines for heart diseases. The article also reveals a number of obstacles that limit the use of cost-effectiveness data in actual decision-making including lack of trust in the available data, limited understanding of the data and the difficult balancing between cost-effectiveness data and other types of evidence. In recognizing the need for improving efficiency of the use of cost-effectiveness data in priority setting processes, this paper proposes three potential approaches to overcome these obstacles.

First, focusing on distrust in cost-effectiveness data, methodological and contextual issues would affect decision-makers' acceptance of the data. Empirical research has shown that one of the reasons for rejecting or partially accepting the use of evidence, generated in other settings, is that the decision-makers are aware of diversities in social, economic, and health backgrounds across settings. This rationale is supported by the suggestion from a study by Teerawattananon *et al.* (4) where the decision-making processes for including health interventions in the Thai universal health coverage

benefit package was examined. The Thai study highlights that cost-effectiveness data generated in the local context will be more acceptable and reasonable for the decision-makers, and it is plausible that this also applies in making recommendations in the clinical guidelines.

Second approach regards to the issue of decision-makers' limited understanding of cost-effectiveness data. Several scholars (4,5) including Eckard *et al.* (3) indicated that even if cost-effectiveness data were available, the decision-makers may not be willing to use the data as a tool in their decisions due to a lack of understanding. Decision-makers are not usually familiar with cost-effectiveness data and its interpretation in clinical issues. The concept of the common outcomes of cost-effectiveness analysis – quality-adjusted life years – is not intuitively understood by most clinicians or policy-makers, and its current use may not be seen as reasonably measured in the clinician's perspective (6,7). Improving the decision-makers' understanding of cost-effectiveness data is needed; otherwise, the use of the data in decision-making is unlikely to happen. The inclusion of health economists in the prioritization process is indeed important – as in the case of the Swedish framework (3) – to help explaining interpretation and improving understanding of scientific content for decision-makers who are non-health economists.

Third, to address the issue of the difficulty of balancing cost-effectiveness data with other evidence, the development of a multi-criteria approach to priority setting has recently been identified as one of the most important issues in prioritizing decision-making processes (8,9), including in guidelines

development (10). In short, cost-effectiveness data, clinical evidence, and the evidence of other important factors should be used in combination as part of holistic decision-making processes. Besides the incorporation of cost-effectiveness data in decision-making, social values come into play (11–13). Some Thai studies revealed that the incorporation of social values of equity into decision-making can enhance the acceptance of cost-effectiveness data (4,13,14). Health interventions that are not cost-effectiveness may still be recommended in the clinical guidelines if there are other strong supporting factors.

The above-mentioned section illustrates a number of approaches that could improve the use of cost-effectiveness data in prioritizing decision-making and thereby enhance transparency of the priority setting decisions. Based on Thailand's experience, cost-effectiveness data is a very useful guiding tool to inform national policy decision-making in important health issues, including development of the universal coverage health benefit package (14) and development of the national list of pharmaceutical reimbursement (15). This accomplishment of incorporating cost-effectiveness data as well as other relevant evidence in the national health priority setting decision-making process is a long journey that requires a number of supporting factors, including commitment from all stakeholders involved in the process and the willingness to use the evidence of the decision-makers at every level.

Moreover, priority setting decisions in general are largely made in the context of scientific uncertainty and priority setting itself is a dynamic process. There is no gold standard to judge the adequacy of priority setting decisions. Therefore, the only attempt of incorporating scientific evidence, such as cost-effectiveness data, in priority setting process may not help improving the rational decision-making. Instead the 'Accountability for Reasonableness' (A4R) framework (16) proposes to concentrate more on a 'fair' priority setting process that specifies conditions for fair decision-making: reasonableness, publicity, revisable, and enforcement (9). In doing so, the framework considers aspects of rational and transparency at the same time. Therefore, this paper proposes a number of recommendations for priority setting process, on the basis of the Thai experience on development of the universal coverage health benefit package (17), that incorporate cost-effectiveness evidence and include the fair notions.

First, strengthening explicit and rational priority setting in healthcare requires the involvement of all relevant multiple stakeholders right from the beginning of the priority setting process. This is to include all relevant perspectives to improve legitimacy of final decisions. Again, to make effective use of cost-effectiveness data, health economists should be one of the stakeholders involved in the process.

Second, it is important to have a locally meaningful set of priority setting criteria by consulting the panel, and to design the way to assess the performance of a set of interventions on the criteria. This is to present the reasonableness and transparency of the process.

Third, the reliability of prioritizing decision-making cannot be guaranteed if there is no comparable local evidence for supporting the assessment of the interventions' performance.

Therefore, country-specific and more reliable evidence should be developed in a uniform methodology.

Fourth, setting healthcare priorities is not likely to succeed without considering deliberative processes among the concerned stakeholders. Although all evidence are collected and used in the process, decision-makers still require room to justify their own reasons in the final step to maintain their authority in decision-making (9). Some considerations such as social and ethical considerations cannot be measured as objective parameters, and are usually applied in the decision-making as subjective descriptions. Although the deliberative process for making recommendations in the clinical practice guidelines involve mainly clinical expert groups, such as medical specialists, clinical professionals, and a health economist as in the case of the Swedish framework, there are some scholars who support the idea of patient and public involvement in the clinical practice guidelines development to make the recommendations more acceptable and adherent to the treatment choice (18,19).

In summary, Eckard *et al.* (3) have highlighted the use of cost-effectiveness data in real-world decision-making processes and this paper emphasizes the potential approach to incorporating cost-effectiveness data in priority setting processes to enhance reasonableness and transparency of the decisions and the importance of designing a fair decision-making process that can support the continuous implementation of cost-effectiveness data.

#### Ethical issues

Not applicable.

#### Competing interests

Author declares that she has no competing interests.

#### Author's contribution

SY is the single author of the manuscript.

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