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Five pillars for societal perspective

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In economic evaluation, the healthcare perspective has gradually given way to use of the societal perspective, as this perspective is often advocated for support in making optimal societal decisions. In practice, economic evaluations conducted from the societal perspective ignore, fail to measure and/or fail to monetize many of the costs that fall outside of the healthcare sector. To limit bias and increase decision-supportive power, researchers could strengthen their evaluations by adhering to a few basic principles. Five "pillars for the societal perspective" are proposed. First, who bears the cost and who does not is irrelevant. Second, it is imperative to consider including costs for sectors outside the healthcare sector. Third, both high frequent costs and costs with high unit prices should be considered. Fourth, double counting should be avoided. And fifth, researchers should reflect on choices related to costs, i.e. cost omission and problems with identifying, measuring, and valuing costs.

Why the Societal Perspective?

One of the major problems in health economic evaluation is adequately assessing the societal costs of an intervention. The core of the solution is the choice of perspective. The healthcare perspective has gradually given way to use of the societal perspective, as this perspective is often advocated for support in making optimal societal decisions (1–3). With welfare economics as its underlying theoretical framework, adopting a societal perspective facilitates policies aimed at maximizing the welfare gains to society (2;4). From this perspective, to optimize the decision-supportive power of these evaluations, all societal costs resulting from the intervention under analysis should be incorporated, regardless of who the payer is (5). In practice, economic evaluations conducted from the societal perspective ignore, fail to measure and/or fail to monetize many of these costs (6–8). Illustrative earlier reviews on paediatric urology (9) and depression (10) discuss this issue with regard to the variability in the operationalization of this perspective. Furthermore, research shows that some authors use the denominator "societal perspective" yet include only those costs falling within the healthcare sector (6). As a result, many evaluations in which this perspective has been adopted have limited supportive power for decision making.

Problems with Operationalizing the Societal Perspective

The underlying reasoning and the methodological choices which lie at the foundation of this limitation remain hidden and are likely to vary among researchers. Such choices may have been made either unintentionally or deliberately, both in conducting and reporting evaluations, and costs might have been left out of the equation due to the lack of knowledge, to misconception of what the societal perspective is, and to poor operationalization of it. However, even those knowledgeable with regard to the operationalization of this perspective face challenges in producing the most optimal assessment, and may produce evaluations that are too narrow in scope. This is primarily because currently available methods for identifying, measuring, and valuing costs are limited with regard to the societal perspective. Research on revealed preference methods for valuing costs outside the healthcare sector is restricted mainly to productivity costs (the human capital method, the friction cost method) and costs of informal care (the opportunity cost method, the proxy good method) (11-14), while research into measuring and valuing costs in other sectors, for example the educational and criminal justice sectors, lags behind. Several costing studies on mental illness and substance use show that costs in these sectors can be substantial (15-19). For such health domains in particular, leaving these costs out of the equation can lead to biased economic evaluation results.

A second practical issue is that researchers are also dealing with limited time and resources, and therefore face trade-offs in selecting and measuring costs. Consequently, evaluations vary not only in terms of quality, but also in terms of costs selection, and this negatively affects their comparability. However, even within the methodological constraints, researchers should strive to produce high-quality evaluations which are decision supportive. Ultimately, the decision-supportive power of an evaluation depends, among other factors, on the degree to which

costs are reflected in the evaluation. The question remains whether, in general, researchers actively strive to produce the most optimal cost assessment possible.

Principles for Using Societal Perspective

To limit bias and increase decision-supportive power, researchers adopting the societal perspective could strengthen their evaluations by adhering to a few basic principles. The following five "pillars for the societal perspective" are proposed; these will be particularly helpful to those with limited experience in conducting health economic evaluations. First, who bears the cost and who does not is irrelevant. If there is a mechanism for others to be affected, researchers should strive to measure and value the spill-over costs for others than the primary affected individual, such as relatives, insurers, and others. Second, when adopting a societal perspective, as opposed to the healthcare perspective, it is imperative to consider including costs for sectors outside the healthcare sector. This could mean looking beyond labor productivity and informal care. For example, depending on the intervention, researchers could consider assessing costs within other sectors, such as the educational and criminal justice sectors (1;20). Third, both high frequent costs relevant to the evaluation and costs with high unit prices, outside the healthcare sector as well as within it could be measured and included in analyses. Any uncertainty related to ex ante decisions in cost selection should be addressed by consulting literature, e.g. exemplary costing studies, or experts in the contextual field of research, i.e. disease type, type of intervention, target population, et cetera. Any uncertainty related to the causality between the intervention and costs could be addressed by conducting appropriate additional scenario or sensitivity analyses. Fourth, when a societal perspective is adopted, researchers might need to include broader outcomes besides clinical outcome measures or generic healthrelated quality of life measures such as the quality adjusted life year (QALY). In an economic analysis, researchers should value only costs that have not been included as an outcome. For example, lost days of productivity at work should not be valued if this is the main outcome of the cost-effectiveness analysis. Irrespective of the chosen perspective, double counting by including items both in the input side of the evaluation, i.e. costing side, and the output side, i.e. the QALY or other outcome measures, should be avoided at all times (21). Finally, like for other methodological choices, researchers should reflect and report on choices related to costs, i.e. cost omission and any problems with identifying, measuring, and valuing costs. Although guidelines for reporting economic evaluations prescribe that methodological limitations should be discussed (22), there is little reflection on choices about costs as a methodological strength or limitation (6).

Conclusion

Worldwide, still many health economic guidelines have not adopted the societal perspective as the leading perspective (23). Furthermore, given that many societal decisions are made within the limits of budget silos, estimating the return of investment for a payer or the healthcare sector itself might often be prioritized over estimating the cost savings for other sectors. Consequently, despite the many arguments for the use of the societal perspective (1–3), in practice the choice for the more methodologically feasible narrow perspective is still often favored. Yet, taking societal welfare, and not practical feasibility as a starting point, striving

towards a more complete picture of the societal impact of interventions needs to be supported. The societal perspective in economic evaluations is important because of its higher decision-supportive power to optimize resource allocation. HTA- and health economics researchers should, therefore, strive to develop methods for bringing economic evaluations as close to a true societal perspective as possible. This includes developing methods for including non-healthcare costs and outcomes in the equation, instead of listing these separately. Furthermore, for each separate economic evaluation, authors should consider whether the use of the term "societal" can be justified (1). For many economic evaluations, using terminology such as "healthcare", "payer", or other proposed terms such as "restricted societal", "limited societal", or "health systems" (24), might be more appropriate.

Contributor and Guarantor Information

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