Tools and methods for assessing the transferability of health technology assessment results across jurisdictions: a systematic review

Elham Ahmadnezhad[1], Mehrnaz Kheirandish[2*], Ali Akbari-Sari[3], Arash Rashidian[2]

1. Health System Observatory Secretariat, National Institute of Health Research, Tehran University of Medical Sciences, Tehran, Iran
2. Division of Science, Information and Dissemination, WHO Regional Office for the Eastern Mediterranean, Cairo, Egypt
3. Division of Health Management and Economics, School of Public Health, Tehran University of Medical Sciences, Poursina Ave, Tehran, Iran

Abstract

Background: There has been a growing interest in using Health Technology Assessment (HTA) as a tool for supporting decision making in health policies. However, the complexity of HTA methods and a lack of local expertise have limited its usage in many countries. The World Health Organization has taken measures in recent years to encourage countries to conduct and use HTA, including through resolutions from the Eastern Mediterranean (EM) Region Regional Committee, which in 2019 called for increased investment in strengthening national institutional capacities for evidence-informed policy making through the use of HTAs. Given the limitations in national technical capacities, there is a focus on adapting HTA results from other settings to the national context of countries. The aim of this study is to systematically review the tools developed for HTA transferability and evaluate their strengths and limitations.

Methods: The systematic review was conducted between 1995 and 2021 and included studies that introduced tools, methods, and frameworks for transferability of HTA results across jurisdictions. Databases such as MEDLINE, EMBASE, Cochrane Library, Epistemonikos, Web of

Sciences, EconLit, Economic Working Papers Database, Health Economic Evaluation Database, the NHS Economic Evaluation Database, Scopus, and Google Scholar were searched, along with relevant bibliographies. The data was extracted and assessed by at least two reviewers and synthesized using both tabulation and narrative approaches.

Results: A total of 10,375 documents were evaluated, resulting in 17 studies that met the inclusion criteria. These 17 studies consisted of 13 newly developed tools (methods) that were appraised based on 12 critical elements, including ease of use, rapid screening criteria, and factors affecting transferability. The majority of the models were checklists, with only a few deemed suitable for full HTA. Three models have been validated through published studies, but there is no evidence of utilization in the countries of the EM region.

Conclusion: While the existing tools provide valuable resources for evaluating transferability, there remains a need for a more comprehensive tool to support decision-makers in low-resource settings considering country context and capacity.