Health Technology Assessment will make drug repurposing more successful

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Abstract

To ensure successful drug repurposing, determining where a drug can contribute (the most) value is key. The value of a health technology, such as a drug, is not intrinsic, but manifests itself through its use. Health technology assessment (HTA) is “a multidisciplinary process that uses explicit methods to determine the value of a health technology at different points in its lifecycle; the purpose is to inform decision-making in order to promote an equitable, efficient, and high-quality health system” (O’Rourke, 2020). HTA consists of several domains; EUNETHTA, the European Network of HTA agencies, distinguishes between core domains (current use, technical, safety, clinical effectiveness) and other domains (economics, ethics, organization, social and legal). It is important to evaluate these domains in coherence, and with involvement of all relevant stakeholders. Such a participatory approach is increasingly embraced. We propose the use of HTA methods to facilitate value-driven drug repurposing. Traditionally, HTA is use-focused. And still, it is predominantly used to make formal decisions regarding the use (and reimbursement) of a health care technology in a specific context. Perhaps HTA is best known for the role the safety, clinical effectiveness and economic domains play in informing decisions about access to (expensive) new drugs in many jurisdictions. But the awareness that HTA should be used to determine value iteratively along the lifecycle of the development of a health care technology is growing. This type of HTA is earlier and the focus is much more on steering development than deciding upon use. It therefore has been labelled development-focused HTA (df-HTA; Bouttel, 2021). It is meant to facilitate value-driven innovation instead of technology-driven innovation. It is also meant to stimulate more efficient innovation, and, in the end, more affordable health care. Df-HTA differs from use-focused HTA in a number of ways, and methodologies still need to be further developed. Not in the least because early in the life cycle the reliance on models, and the uncertainty, is high. Df-HTA can be used for horizon scanning, and to prioritize and abandon certain potential use-cases. It can also be used to develop roadmaps for drug development and design the research that will address decision makers’ needs. There are many reasons why drug research may be abandoned or shelved (Krishnamurty, 2022). Df-HTA is can help to remedy a number of these factors. In order for that to be successful, methods need to be improved and made accessible, and the place of df-HTA in health technology innovation, and drug repurposing specifically, needs to be determined and established, together with all stakeholders.

Keywords

Health Technology Assessment. Development-focused HTA, early HTA, road mapping, value-driven innovation, Participatory modelling.
References


EUNETHA. https://www.eunetha.eu/hta-core-model/
