

## Digital Technology and Healthcare: The Role of Health Technology Assessment

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### Abstract

*Background and Aim:* Digital health technologies (DHTs) are one of the most promising perspectives in healthcare. On the other hand, the investment in of DHTs has an impact on the (ethical, economic, organizational, environmental) sustainability of National Healthcare Systems (NHSs). A relevant tool for supporting healthcare decision-makers is Health Technology Assessment (HTA), ‘a multidisciplinary process that summarizes information about the medical, social, economic and ethical issues related to the use of a health technology in a systematic, transparent, unbiased, robust manner’ (EUnetHTA 2007). The aim of our contribution is to deal with HTA around DHTs, particularly ethical, legal and social implications (ELSI). *Materials and Methods:* The literature/documentation review on HTA and DHTs was carried out on PubMed database through a query, merging the following MESH terms: “digital technolog\*”; healthcare; health technology assessment; HTA (last access. August 17, 2021). *Results:* 90 items were found: 4 were considered relevant for our analysis. The literature on our focus is at the very beginning. Early contributions underline as follows: 1. current HTA frameworks are not well equipped for assessing DHTs. The development of DHT-specific content for HTA frameworks is hampered by DHTs having varied benefit and risk profiles (von Huben et al., 2021); 2. existing HTA process should be adapted for assessing DHTs, including to make provisions for an assessment of app cybersecurity, the impact on DHT clinical utility of software updates, and compatibility issues (Moshi et al., 2020) as well as the need for standardization of reporting characteristics of eHealth services, and specifying assessment outcomes and methods following a stepped-approach tailored to the functional characteristics of eHealth services (Vis et al., 2020); 3. attention should also be paid to ethical issues, such as data privacy, and technology specific characteristics (Moshi et al., 2018).

**Keywords:** Health Technology Assessment; Digital technology; Ethical issues; Legal issues; Social issues