

Understanding How Health Technology Assessment Bodies Select Medical Technology for Review: Results of an Online Survey



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BACKGROUND

- Health technology assessments (HTA) of pharmaceuticals have been performed for some time. In recent years, HTA organisations have also started to assess medical technologies (MTs) to a greater extent.¹
- However, the assessment of MTs by HTA organisations is still developing, with no current consensus as to process and methods.² HTA requirements for MTs can vary among authorities globally. They can also vary within an authority.
- Up-to-date, publicly available information on the types of MTs (devices, diagnostics, digital health technologies) that are eligible to undergo HTA is difficult to find.

OBJECTIVE

- To identify HTA processes and requirements for MTs globally.
 - More specifically, we sought to determine how MTs are selected for HTA and whether the process differs by type of MT and by country.

METHODS

- We developed an online survey requesting information on the selection process, general submission process, and types of evidence considered part of the clinical and economic assessment of MTs.
- The survey was sent to 55 HTA organisations worldwide in spring 2023.

- The survey requested information on the type of MT that can undergo an HTA and how MTs are selected for HTA. This research focused on digital (e.g., apps, software), non-invasive devices (e.g., glucose monitor), invasive devices (e.g., tricuspid valve), and diagnostics.
- Quantitative and qualitative data were obtained and collated in Excel.

Figure 1. 12 HTA Bodies From Across the World That Assess MTs Responded



Table 1. How are Medical Technologies Selected for HTA by Your Organisation?

HTA organisation	Country	Digital	Non-invasive devices	Invasive devices	Diagnostics
CADTH	Canada	External referral process			
DEFACTUM	Denmark	External referral process			
DHTC	Denmark	Other			
FinCCHTA	Finland	Requested directly by a medical technology company	Other		
G-BA	Germany	Other			
NIPH	Japan	Not applicable		External referral process	Not applicable
Nye Metoder	Norway	External referral process, internal selection process and requested directly by a medical technology company			
AQuAS	Spain	External referral process			
TLV	Sweden	External referral process			
INEAS	Tunisia	External referral process			
NICE	UK	Internal selection process		External referral process	Internal selection process
AHRQ	US	Internal selection process			Not reported

AHRQ = Agency for Healthcare Research and Quality; AQuAS = Agency for Health Quality and Assessment of Catalonia; CADTH = Canadian Agency for Drugs and Technologies in Health; DHTC = Danish Health Technology Council; FinCCHTA = Finnish Coordinating Center for Health Technology Assessment; G-BA = Federal Joint Committee; INEAS = National Authority for Evaluation and Accreditation in Health; NICE = National Institute for Health and Care Excellence; NIPH = National Institute of Public Health; TLV = Dental and Pharmaceutical Benefits Agency.

Table 2. What Types of Medical Technologies Can Undergo HTA at Your Organisation?

HTA organisation	Country	Digital	Non-invasive devices	Invasive devices	Diagnostics	Other
CADTH	Canada	✓	✓	✓	✓	✓
DEFACTUM	Denmark	✓	✓	✓	✓	✗
DHTC	Denmark	✓	✓	✓	✓	✗
FinCCHTA	Finland	✓	✓	✓	✓	✗
G-BA	Germany	✓	✓	✓	✓	✓
NIPH	Japan	✗	✗	✓	✗	✗
Nye Metoder	Norway	✓	✓	✓	✓	✓
AQuAS	Spain	✓	✓	✓	✓	✓
TLV	Sweden	✓	✓	✓	✓	✗
INEAS	Tunisia	✓	✓	✓	✓	✗
NICE	UK	✓	✓	✓	✓	✗
AHRQ	US	✓	✓	✓	✓	✓

Table 3. What HTA Process Is Used to Assess Medical Technologies by Your Organisation?

HTA organisation	Country	Dedicated HTA process for MT	General HTA process	Other
CADTH	Canada	✗	✓	✗
DEFACTUM	Denmark	✓	✗	✗
DHTC	Denmark	✓	✗	✗
FinCCHTA	Finland	✗	✓	✓
G-BA	Germany	✗	✓	✗
NIPH	Japan	✗	✓	✗
Nye Metoder	Norway	✓	✗	✗
AQuAS	Spain	✓	✗	✗
TLV	Sweden	✓	✗	✗
INEAS	Tunisia	✓	✓	✗
NICE	UK	✓	✗	✗
AHRQ	US	✗	✓	✗

RESULTS

- Of the 55 HTAs contacted, 17 responded (30.9%). The completion rate was 27.3%.
- Of the 17 responders, 12 confirmed that they assessed MTs, 3 stated they did not assess MTs, and 2 declined to participate.
- The 12 represented HTA organisations span the globe—Tunisia, Germany, the United Kingdom (UK), Canada, Spain, the United States (US), Finland, Denmark (2 HTA organisations), Sweden, Norway, and Japan (Figure 1).
- How MTs are selected for review varies across organisations; 66.7% primarily select MTs through external referral processes (e.g., local government), 25% through internal processes, and 16.7% allow requests directly by an MT company. 58.3% stated they do not differentiate their selection process by MT type; 16.7% do differentiate (Table 1).
- The survey ascertained which types of MTs can undergo HTA. All of the HTA organisations assess invasive devices, and 91.7% assess digital technologies, non-invasive devices, and diagnostics (Table 2). AHRQ, AQuAS, CADTH, GB-A, and Nye Metoder also assess MTs other than digital, non-invasive devices, invasive devices, and diagnostics. CADTH assesses a broad definition of MT (i.e., models of care, clinical interventions, programs of care). Similarly AQuAS, AHRQ, and Nye Metoder assess all MT in the context of healthcare processes/healthcare systems.
- 7 (58%) HTA organisations have a dedicated HTA process specifically designed for MTs. The remainder assess MT under the general HTA that covers all products/medicines (Table 3). FinCCHTA (Finland) does not have a dedicated HTA process for MT per se, but they do have an HTA process specifically designed for the assessment of digital technologies.

CONCLUSIONS

- The HTA selection process is a critical factor that influences market access for MTs.
- HTA organisations review a wide range of MTs and have varying selection processes.
- The majority of HTA organisations use external or internal processes to select MTs for assessment, with little opportunity for companies to request a direct assessment of their MT. Therefore, an MT's value proposition is crucial in facilitating topic selection because those without a value proposition or with an unclear value proposition risk being overlooked or not selected by decision-makers.

REFERENCES

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