

Perspective

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The 'Top 10' Challenges for Health Technology Assessment: INAHTA Viewpoint

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The International Network of Agencies for Health Technology Assessment (INAHTA) spans the globe as a network of 50 publicly-funded health technology assessment (HTA) agencies supporting health system decision making for 1.4 billion people in thirty countries. Agency members are non-profit HTA organizations that are part of, or directly support, regional or national governments. Recently, INAHTA surveyed its members to gather perspectives from agency leadership on the most important issues in HTA today. This paper describes the top 10 challenges identified by INAHTA members. Addressing these challenges requires a call for action from INAHTA member agencies and the many other actors involved in the HTA ecosystem. In opening this call for action, INAHTA will lead the way; however, a comprehensive undertaking from all players is needed to effectively address these challenges and to continue to evolve HTA in its role as a strong and effective contributor to health systems.

The International Network of Agencies for Health Technology Assessment (INAHTA) was established in 1993 by the heads of fourteen health technology assessment (HTA) agencies who recognized the value of collaboration and information sharing (1). Today, INAHTA is as an international network of fifty publicly-funded HTA agencies supporting health system decision making for 1.4 billion people in thirty countries. All agency members are non-profit HTA organizations that are part of, or directly support, regional or national governments. The strength of INAHTA comes from the diverse expertise and knowledge of our members and the different health systems in which we work.

The INAHTA Strategic Plan 2017–2020 (2) sets out a series of ambitious goals and objectives for the network. These goals were designed to deliver value to our members, cultivate awareness of INAHTA by promoting its leadership role in the global HTA community, and to promote INAHTA's sustainability by strengthening and growing the network.

In November 2017, the INAHTA Board of Directors conducted a survey of network members to inform the implementation of the initiatives identified in the Strategic Plan. Referred to as the INAHTA "hot topics" survey, the objective was to better understand the challenges being faced by INAHTA member agencies so that the programs and services offered to members, and the strategic initiatives undertaken by the Board, continue to align with member needs. The hot topics survey also provided an opportunity to seek agency leadership perspectives on the most important issues in HTA today. This discussion paper presents a summary of the top 10 challenges identified by INAHTA members.

Survey Methods and Participants

The survey was developed by a Board task group and comprised four open-ended questions to gather information about:

- the biggest challenges the agencies are facing;
- the methods or processes the agencies would like to know more about;
- the unique skills, processes, or programs the agencies would be willing to share with other INAHTA members; and
- what the agencies see as the two or three "hot" or important topics in their country or region.

The survey was administered in English and provided in both MS Word and online survey formats. It was deployed by the INAHTA secretariat on 1 November 2017 with a deadline of 28 November 2017 with one reminder sent. Survey responses were compiled and qualitative

analysis was conducted by the secretariat. Common themes were identified and the number of times each theme was mentioned was totaled.

The survey was answered by thirty of the forty-eight agencies that were members of INAHTA at the time of survey administration (a 63 percent response rate). Forty-seven percent of agency respondents were from Europe, 27 percent from the Americas, 20 percent from Asia and Oceania, and 7 percent from Africa. Seventy-seven percent of responses were from agencies in high-income countries (3), and 23 percent from low- and middle-income countries.

Top 10 HTA Challenges

Presented below is a summary of the top 10 HTA challenges from the INAHTA hot topics survey.

No. 1: Scarcity of human resources to conduct HTA

Of the thirty agencies replying to the survey, nine agencies (30 percent) saw the lack of human resources as their foremost challenge. The scarcity of human resources as well as the inability to compete with private sector salaries is creating both a recruitment and retention challenge. Ongoing training needs for agency staff in an environment of rapid technological advancement was also identified as a significant challenge, particularly in areas such as network meta-analysis, collection and analysis of real-world data, health economics, and budget impact analysis. Agency leadership indicated that investing in training is important, but it can be expensive and takes time away from work.

No. 2: Need to design better approaches to involve stakeholders in HTA

Nine agencies (30 percent) responded that one of their biggest challenges was designing an effective and efficient process for engaging stakeholders, primarily patients and clinicians. Patient involvement was considered most challenging in rapid HTA processes where short deadlines allow little time for input. Public engagement was also identified as a challenge, mostly related to the appropriate and efficient inclusion of citizens. Other identified stakeholder challenges included how to effectively involve representatives from the health system, industry, policy makers, procurement organizations, and charitable foundations that donate technologies to hospitals.

No. 3: Pressure to evolve existing HTA methods and processes

Methods and tools were identified as a challenge by nine agencies (30 percent). There were a number of methodological and process challenges articulated, ranging from balancing timelines, budget, and rigor in order to meet deadlines, to questions on how to incorporate process advances to improve efficiency and timeliness, such as big data and machine learning. Use of an evidence grading system such as the GRADE system (4) when formulating recommendations was identified as a challenge, specifically in how to apply these when translating research findings to conclusions in HTA reports. Other areas mentioned included determining the most appropriate outcome measures to use, defining a cost-effectiveness threshold, and applying methods for indirect comparisons.

No. 4: Inadequate data management and the declining quality and validity of evidence

Seven agencies (23 percent) saw evidence and data issues as a major challenge. Factors like inadequate data management systems and having no centralized database across public healthcare institutions were considered challenging. Other challenges included having limited data for economic evaluations and for assessing local innovations. Furthermore, there is a perception from agencies that the quality of evidence is declining, with fewer randomized trials being done and more observational and real world data being used. It was also noted that there is an increasing need to take a broader lifecycle approach to HTAs, thus a greater need for incorporating observational and real world data into the assessment process.

No. 5: Fragmented health systems and shifting political contexts

Issues concerning the broader healthcare system were seen as challenging to seven agencies (23 percent). Agencies reported issues such as frequent changes to and/or fragmentation of health system structures and the increasing frequency of shifts in the political context. It was also noted that tension between Federal governments and States or Provinces within a country can create challenges to the governance, mandate, funding, and operations of an agency.

No. 6: Enlarged scope of HTA and increased range of demands placed on HTA agencies

Of the thirty agencies replying to the survey, seven (23 percent) were concerned that the traditional scope of the HTAs conducted by their agency was increasing to encompass additional domains of enquiry and evaluation. The nature of that expansion varied from agency to agency as HTAs are often conducted differently between countries and it depends on what each agency is currently required to do. Some agencies noted that they were now required to provide early advice on technologies and felt this was problematic as the available evidence was of poor quality. Other areas identified included assessing social services, value-based health care, parallel processing for both regulatory and reimbursement purposes, and assessing the budget impact (affordability) of a technology. Another common theme was the transformation of HTA to include health technology management. This meant that evaluation was moving beyond technology assessment to broader assessments of diseases and care pathways and determining the optimal use of all technologies and interventions within that pathway.

No. 7: Increasing the impact and influence of HTA

Six agencies (20 percent) felt that measuring and assessing the impact of their HTAs was important and challenging. It was noted that evidence of the impact of an HTA on policy decisions was often lost because of staff turnover or organizational changes in the requesting body, suggesting that a formal feedback loop and tracking process was needed between the requesting body and the HTA agency. Agencies also want to demonstrate the impact in terms of changes in clinical practice, beyond just the policy decision (5). There was concern from agencies about how their work could be better disseminated in order to influence clinical practice. Agencies were also uncertain as to how this wider clinical impact could feasibly be measured.

No. 8: Increasing demand for HTA and pressure for rapid assessments

Agencies indicated that they were facing increasing demand for HTA in their jurisdictions often without increased resources.

Six agencies (20 percent) noted that this demand often exceeded the ability of agencies to supply the HTAs. Agencies stated that this demand often came from the government and may be the result of an increasing number of expensive medicines and disruptive technologies being launched. The increasing demand was often accompanied by a request for greater speed, leading to an increased demand for rapid HTAs (6–8). With the number of HTA requests starting to overwhelm some systems, an additional challenge identified was instituting a formal, effective, and acceptable prioritization process.

No. 9: Translating HTA into policy and practice

This challenge is related to Challenge 7, “assessing impact of the HTA.” The implementation of recommendations from an HTA was seen as an important challenge. Of the thirty agencies replying to the survey, six (20 percent) indicated that implementation was a problem, although some agencies felt this was not in their remit to address. The main challenge expressed was how to effectively translate HTA recommendations into policy and clinical practice.

No. 10: Insufficient financial resourcing of HTA

The final challenge where there was a reasonable consensus amongst the survey respondents was the resourcing of HTA, particularly as the demand for HTA continues to rise. Four agencies (13 percent) felt constrained in their ability to conduct HTA as a consequence of a lack of financial resourcing. Specifically mentioned was the challenge associated with the commissioning model as this limits agency autonomy and that a fixed budget would be preferred.

Discussion

HTA agencies make a vital contribution to the creation of equitable, high-quality, and sustainable healthcare systems. As the international network of HTA agencies, INAHTA provides leadership on matters that affect how our members conduct HTA, including the identification of opportunities to better support healthcare decision making.

The survey results confirmed that the goals and objectives of the INAHTA Strategic Plan (2) are consistent with the issues identified by member agencies and the INAHTA Board has used the results to initiate activities, for example, new learning groups for members on priority topics and the piloting of a process to create INAHTA position statements.

Robust pipelines of promising, disruptive, and costly innovations are creating a demand for more rapid, complex, and broader technology assessments and HTA agencies are increasingly challenged to meet this demand. Agencies are recognizing the need to implement new methods and processes in order to address early access, different forms of evidence, and affordability concerns; however, the scarcity of experienced staff and a lack of financial resources continue to be a challenge. Agencies are being asked to go beyond technology assessment by supporting implementation into policy and clinical practice. We are expected to demonstrate the value of HTA by measuring the impact of our work on health outcomes and efficiency. Stakeholder engagement is also becoming an essential component of HTA, with INAHTA member agencies identifying the need to develop smarter approaches to meaningfully engage with various stakeholders such as patients, clinicians, manufacturers, and citizens.

INAHTA is well positioned to address these challenges by capitalizing on existing tools and launching new initiatives. For our members, we have tools for knowledge exchange and learning such as the INAHTA listserv that allows members to ask questions of colleagues in other agencies about methodologies, reimbursement decisions, policies, processes, and many other HTA best practices. INAHTA impact stories and webinars provide other opportunities to share knowledge and build partnerships. Looking ahead, INAHTA will be conducting roundtable discussions to explore possible solutions to these top 10 HTA challenges. Other network activities to address these challenges are planned or underway such as updating HTA tools and checklists to address the widened scope of HTA, hosting the international HTA database and HTA glossary, leading the development of new methodologies and educational programs, and creating increased opportunities for networking.

INAHTA's international collaborations are further advancing actions to address these top 10 challenges. INAHTA is leading a joint task group with regional HTA networks in Europe (EUnetHTA), Asia (HTAsiaLink), and the Americas (RedETSA) to investigate the development and usage of real-world evidence in HTA. INAHTA and HTAi are co-leading a global joint task group to update the definition of HTA, which is showing that even something as “simple” as defining HTA can inspire lively discussions about what should be within the scope of an HTA to ensure the best products for decision-maker needs. In collaboration with Guidelines International Network (G-I-N), INAHTA is working to bring the HTA and guideline development communities closer together to improve clinical acceptance of HTA advice and recommendations and to support adherence to clinical practice guidelines. Furthermore, to promote broader national-level capacity building, INAHTA is planning to reach out to countries or regions that have an interest in developing a public HTA function within their healthcare system to learn more about HTA.

A Call for Action

HTA plays a crucial role in an increasingly complex web of healthcare systems and healthcare decision making. Addressing the top 10 challenges identified in this paper requires a call for action to INAHTA member agencies and the many other actors involved in the HTA ecosystem. In opening this call for action, INAHTA will lead the way; however, we need a comprehensive undertaking from all players if we are to effectively address these challenges and continue to evolve HTA in its role as a strong and effective contributor to health systems.

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