

# **How to Measure the Influence of HTA**

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## How to Measure the Influence of HTA

This resource covers the need for HTA programs to consider the influence their reports have on the decision – makers they inform, as an indication of program performance. Steps in the process and indications of influence are followed by approaches to assessment, challenges and reporting of HTA influence. It draws in part on material prepared and used by members of the International Network of Agencies for Health Technology Assessment (INAHTA).

The primary purpose of HTA is to inform decisions relating to health care systems. Measurement of the influence of an HTA must determine whether the information it provides has had any effect on decision - makers and in what ways. A definition of HTA influence that has been used by INAHTA is *“any action or activity that can be credibly linked to information provided by an HTA to a decision – maker”* (1).

Assessment of influence may be applied to individual reports, to HTA programs or to HTA generally. Examples of types of decisions informed by HTA are shown in Table 1.

Table 1. Types of decision informed by HTA

Decision-makers	Types of decisions that are informed
Government agencies, parliaments	Regulatory approval, reimbursement, public health programs
Health care professionals	Adoption of technologies, practice guidelines
Hospital and other health care administrators	Equipment procurement, availability of procedures, service delivery
Private sector insurance	Scope and extent of coverage
Manufacturing industry	Product development, marketing
Patients, carers, and their representatives	Guidance for treatment and support, access to services, shared decision making with health care professionals

### Why measure HTA influence?

Measurement of the influence that its assessments have had should form part of the routine management of an HTA program. Reasons include:

- An HTA program should know where its reports are going, whether they have been received, if they have been understood, if there are any difficulties, and whether further work is needed. Addressing such issues provides a form of audit for the program.
- HTA programs will have reporting obligations to a governance entity of some sort. Reporting to those responsible for the HTA program is important to demonstrate that agreed objectives have been met.
- Demonstration of the influence of the HTA program will help to get and keep funding and resources for its activities.
- To contribute to knowledge on the assessment of specific technologies.

### Levels of influence

There may be interest in the influence of an HTA:

- *On policy and administrative decisions:* Much of the work on HTA influence has been at this level.
- *On subsequent administrative action:* Administrative action is dependent on the availability of effective machinery and the willingness of the decision - maker to make use of it. The HTA program may be distanced from this process. Other influences on the decision - maker may become more significant.
- *On delivery of health care and on the health status of patients:* Changes to health care or health outcomes related to a health technology may have a tenuous link to the HTA report. The influence of an HTA report on subsequent action and outcomes within a health care system depends on the actions of many individuals and organizations (2).

### Steps in the process

Table 2 illustrates steps in determining HTA influence. The first three are focused on audit of the HTA program. Step 1 is important for laying the basis for subsequent appraisal of influence and Step 3 includes important checks prior to follow up with the decision - maker.

Step 4 covers matters following completion of the report and its delivery to the decision - maker. These issues can give a preliminary indication of its influence. The last three steps follow at some time after dissemination of the HTA report and take account of decisions and actions taken on the health technology, and available data on its use and related health outcomes.

Step	Focus	Issues
1. Developing the topic and research question(s)	Audit	Interaction of the HTA program and decision-makers Agreement on content, purpose, timeline of the HTA
2. Data analysis by the HTA program	Audit	Data selection, synthesis, and analysis (covered by quality assurance of the HTA program's products).
3. Presentation of findings and recommendations	Audit	Clarity and relevance of material: Does it match the decision-maker's request? Is it consistent with the HTA analysis? Are recommendations realistic in the context of the health system?
4. Dissemination to decision-makers	Audit and Influence	Timeline - responsiveness to decision-makers Interaction of the HTA program with decision-makers Initial consideration of findings
5. Subsequent decisions	Influence	Position taken by decision-makers Extent of influence of the HTA on decisions
6. Implementation of the decisions	Influence	Action taken by decision-makers
7. Effects of implementation	Influence	Subsequent action by decision-makers Statistics on use of the health technology Health outcomes related to use of the technology

### Step 1 – before starting an assessment

Activities related to measurement of HTA influence should commence before an assessment is started. Consider the context:

- What is being asked, who is the client, the decision-maker?
- The expected content: what is the HTA project and report to include?

Negotiation with the decision-maker is a first step in the assessment process. The HTA program and the decision-maker must both be clear on what the question is and how it is to be addressed (2). The decision-maker will need to know what parts of the question of interest are likely to be usefully addressed by the assessment. Those in the HTA program will need to confirm that the proposed task is within its mandate and that the nature of the request is matched by the resources available. From a decision - making perspective, if an HTA does not meet a specified deadline the opportunity to influence the decision may be lost. If a full answer to the question is unlikely in the time available, this needs to be established early and clearly (2). Interim advice, including use of rapid assessments, may be a useful option.

Other matters for discussion may include how the HTA is to be used by the decision-maker, and the types of decision that it is likely to influence.

It will be helpful if the HTA program has an awareness of the machinery for decision making and the level at which decisions on the health technology are to be taken.

### Points to discuss before starting an assessment

- How will the HTA be used by the decision-maker?
- What types of types of decision will it inform?
- Scope of the HTA – which aspects of the technology will be covered?
- Content - in what detail and level of certainty?
- Urgency – how quickly can the report be prepared?

It is advisable to prepare a protocol for the assessment, following the discussion with decision-makers. For some assessments this might be quite short. Subsequent changes to the protocol and reasons for these should be recorded. This can provide a useful history of the project for reference and discussion purposes.

### **Step 4 - Dissemination to decision- makers**

Follow up with the decision-maker to obtain initial reaction to the HTA report should be arranged soon after its completion. This will end the audit component of the activities given in Table 11-1. There will be the opportunity to confirm that the report was understood by the decision - maker, covered the issues agreed in the initial discussion, and met the specified timeline. It may be possible to get initial reaction to the report's conclusions or recommendations. Not all HTA reports will include recommendations, but the direction of findings will provide information to the decision-maker and also a reference point for any future influence.

At this stage, if there are no confidentiality requirements, dissemination of the HTA report should include provision of details to other potential decision-makers who might find it of interest. These could include government agencies, professional bodies, individual health care professionals, patient organizations and manufacturing industry. This wider dissemination process will typically use a short summary of the report and its findings, with the full report being available through a website or on request.

Further follow up with decision-makers to obtain initial indications of HTA influence should be taken some time later, to allow for discussions between decision-makers and other parties and development of options for acting on decisions. Approaches developed by INAHTA and the Québec agency AETMIS specify waiting for six months after publication of the report.

The Québec HTA approach (3) used semi-structured telephone interviews with HTA requesters and users to obtain reactions to HTA reports and details of intended action on the technologies that had been assessed. Outcomes discussed included dissemination of reports by requesters and users, their satisfaction with reports, use of material in the reports, and intention to adopt recommendations. This approach does not measure the actual influence of an HTA report, but the perceived relevance of recommendations and intention to adopt them can be used as a proxy for influence.

### Indications of HTA influence

INAHTA developed a data collection framework intended for routine use in assessing the influence of an HTA report (4). The date of the record made when using the framework should be not less than 6 months after the publication date of the HTA report. The framework includes sections for the origin of the request for an HTA, the purpose of assessment, conclusions reached, indications of HTA impact and opinion on the level of impact. The eight indications of influence are shown in Table 3. More than one may apply to an assessment. Provision is made in the framework to add other types of influence.

Table 3. Indications of influence from an HTA

Indications	Details
1. The HTA was considered by the decision - maker	The HTA was considered but further influence of the assessment was not apparent.
2. The HTA recommendations or conclusions were accepted	There was clear acceptance of the HTA findings. Often, but not necessarily, this would be linked to action by the decision-maker.
3. The HTA demonstrated that a technology met specific program requirements	In situations where the HTA and its findings were linked to a governmental or other program. For example, where minimum standards must be met before some type of approval for the technology is given.
4. HTA material is incorporated into policy or administrative documents	Material presented in an HTA is cited in subsequent documentation.
5. HTA information is used as reference material	The HTA is used by decision-makers, and others, as an ongoing source of information.

Indications	Details
6. The HTA is linked to changes in practice	The HTA may be one of a number of factors influencing such changes
7. HTA is linked to changes in health status	
8. No apparent influence	No reaction to the HTA is apparent

**Other measures of influence**

The indications listed above may be supplemented by other measures of influence such as awareness of an HTA program and its products. These can be useful in indicating the level of contact of decision-makers with the HTA program but they are weak measures of HTA influence. Actual decisions or activities as a result of an assessment should be sought.

The INAHTA framework includes four categories of opinions on HTA influence, one of which should be selected by the agency or program for each assessment:

- Minimal
- Some consideration of HTA
- Some input to decisions
- Major influence on decisions

The basis for the selected opinion should be indicated briefly. For example, reasons for the report having no apparent influence, or the way in which the agency’s opinion has been formed.

INAHTA has suggested that, as a basic routine, HTA agencies or programs should obtain sufficient information on each assessment to assign it to one of the framework categories. Preferably, the rating given is compared with external opinion, for example from the organization that requested the HTA, and from professional bodies (1).

This routine recording of initial findings on influence could form part of the record of its assessments kept by an HTA program. An example of an information collection form, based on that used by a Canadian HTA program, is shown in Appendix A. It includes sections for details on formulation of the question, the HTA product, dissemination, HTA program management, and influence.

### Follow up to initial appraisal of influence

Longer term follow-up beyond the initial appraisal of influence requires decisions by the HTA program. Consideration must be given to its other commitments and available resources. Any detailed appraisal of HTA influence, especially in the longer term, can become a significant research project. Such projects may be resource intensive and undertaken only occasionally. Points to consider include the type and topic of the report, the sort of data that will be required and expectations of clients.

Table 4 gives some examples where further follow up may be needed to provide advice to decision-makers where policy and other issues related to technology are still emerging.

### Approaches to assessment of influence

A study by INAHTA found that e-mail and surveys were the most common approaches used by its members to obtain feedback on the influence of their HTA products. They also used telephone, video or face to face meetings and reviews of publications and data bases (5).

A subsequent review by INAHTA considered publications on HTA influence and its measurement, where influence had been demonstrated (6). The most commonly used approach was review of policy, and of acceptance of HTA recommendations. Several studies used more than one approach in combination. Details are shown in Table 5.

Table 4. Examples of longer-term follow up on HTA influence

Type of follow up	Purpose
In coverage with evidence development (CED)	Gathering data for follow up assessment to inform coverage decisions
Uptake and outcomes from screening programs	Detailing uptake of services and outcomes achieved in a target population
Follow up of a preliminary assessment, a rapid review of an emerging technology	Full assessment as further data become available
Overviews of policy action/ decisions	Program management for both the HTA program and the host organization



Table 5. Approaches used in 51 studies to assess the influence of HTA

Type of approach	Proportion of studies, %
Review of policy, and of acceptance of HTA recommendations	51
Qualitative interviews with decision-makers	16
Questionnaire surveys of decision-makers or agencies	16
Analysis of administrative data	14
Review of policy and of administrative data	12
Review of the effects of primary studies	12
Qualitative interviews plus review of decisions	4

### Examples of HTA influence

In some cases, HTAs inform government decisions within a well-defined framework. Influence can be indicated through monitoring decisions and subsequent action flowing from them.

#### HTA informing a government decision (7)

An Australian HTA found that double balloon enteroscopy for examining the small intestine was effective and probably safer than the alternative procedures for patients with obscure gastrointestinal bleeding. Its use would likely give savings to the Australian healthcare system. The HTA provided input to a decision-making process of the Federal Health Department through its Medical Services Advisory Committee. Public funding, through the national insurance program, was recommended by the committee, and this was accepted by the Minister.

Measuring HTA influence may be relatively straightforward when applied to a hospital or other local setting.

### HTA in a hospital system (8)

University Health Centre (five teaching hospitals) within the Québec healthcare system. Local evaluation of how 55 HTA reports from an in-hospital HTA unit had influenced hospital policy decision making and spending. Feedback from individuals responsible for the technologies that were assessed. Of 63 policy recommendations, 45 were accepted and incorporated into Health Centre policy. Nineteen reports resulted in conservation of hospital resources. For 15 of these, the estimated overall savings were \$9,840,270.

However, frameworks are often less definite and HTA influences can be broader, longer term and harder to measure.

### Sweden - National and regional health services (9)

An HTA agency measured the extent to which its reports had affected decisions, guidelines, research or clinical practice. The project used documentation, before-after surveys and time series register data. Indications of influence from decisions and actions of national and local government bodies, professional organizations and changes in use of technologies and services. HTA reports had a large influence on clinical guidelines, and a moderate or large influence on comprehensive decisions, initiation of research and changes in clinical practice.

## Points to consider when evaluating reports of HTA influence

The INAHTA systematic review used a data collection form that included the following five indicators of study quality and scope (6). Quality ratings were given by the number of indicators that applied to each study, with scores from 1 to 5. Higher scores indicated that greater confidence could be placed in the quality and applicability of the study findings.

- Were the findings of the HTA report(s) summarized?
- Was the decision - making process that was influenced by the HTA described or referenced?
- Was the approach used to assess HTA influence described?
- Were outcomes or influence reported?
- Were non – HTA influences considered?

These points might also be used as a guide during evaluation of reports on HTA influence and in following up progress of an HTA report after its dissemination.

### **Other hurdles for influence measurement**

The overall influence of an assessment will in part be determined by the effectiveness of other organizations. Availability of data related to indications of HTA influence may be an issue. Access to records may need to be negotiated, or surveys of users of health technologies put in place.

Access to data may be an issue. The INAHTA review noted the limited number of studies that had followed change in clinical practice and health outcomes and suggested that these areas need much more attention in the future (6). That may be helped by the increasing availability of clinical quality registers and clinical databases.

Inefficiencies in client and other organizations external to the HTA program may undermine the potential influence of HTA products and contribute to difficulties in their production.

Typically, there will be many influences and inputs to policy making, including political influences. Important non-HTA factors can include political views, existing policies, administrative feasibility, timing, and equity.

Another issue is the volatility of policy areas, with rapid turnover of staff and reshaping of administrative structures. Decision-makers will move on and their successors will need educating. In some countries, such changes have been rather frequent, and variation in administrative arrangements can be complex. Difficulties may be compounded by delays within government and other bureaucracies in responding to requests for information on matters related to HTA reports.

### **Reporting on the influence of HTAs**

Providing generally accessible information on the influence of an HTA program's products can help raise its profile and broaden the knowledge base on the interaction of information from assessments with actions from decision-makers.

One approach could be to provide only successful examples of influence to foster an awareness of HTA and its benefits. However, inclusion of 'failures' as well gives a more realistic picture both of the performance of HTA programs and the use of their advice in development of policy and practice.

## How to Measure the Influence of HTA

INAHTA projects on HTA influence have recommended open provision and wide distribution by HTA programs of information on their influence (1, 6). Report both successes and failures, but consider which details of HTA influence are appropriate for wider release. Take account of 'other hurdles' issues.

Details of HTA influence may be appropriately included in outputs from HTA programs, such as annual reports, newsletters and website articles. These outputs should be supplemented, if possible, by articles in peer - reviewed journals.

## Appendix A: Information Collection Form

Title of report:		HTA program contact:
FORMULATION OF THE QUESTION		
Origin of request:		
Date of request:	Expected timeline:	
What was the question/issue?		
Was there discussion to confirm issue/ approach?		
Any relationship to other HTA reports?		
HTA PRODUCT		
Type (series):	Authors:	
IS support:	Other support:	
Reason for this type (series) of report?		
Any external collaboration? (indicate who, why, role)		
Was collaboration through contract, other agency, free advice/ input, other?		
Start date:	Review date:	Publication date:
Approach [tick one or more]: - systematic review - narrative review - admin. data analysis - cost/ economic analysis - survey - other:	Issues addressed [tick one or more]: - safety - efficacy - effectiveness - economic influence - access - social - ethical - other:	Internal review  External reviewers:
Report title		
DISSEMINATION		
Approach for primary target:	<input type="checkbox"/> Mail paper copy <input type="checkbox"/> E-mail <input type="checkbox"/> Face to face discussion <input type="checkbox"/> Longer dialog <input type="checkbox"/> Other	
Approaches for wider dissemination	<input type="checkbox"/> Standard circulation list, newsletter, website <input type="checkbox"/> HTA data base <input type="checkbox"/> INAHTA website <input type="checkbox"/> Media release/ conference <input type="checkbox"/> Meeting / seminar <input type="checkbox"/> Conference presentation <input type="checkbox"/> Other	
Persons involved in dissemination	<input type="checkbox"/> Author(s) <input type="checkbox"/> Other HTA program <input type="checkbox"/> Other within agency <input type="checkbox"/> External to agency	(Details)
GOVERNANCE, RESOURCES, STAFF & STRUCTURE		
Any information or issues regarding this assessment related to Governance (eg CEO, Board, and Minister), Resources, Staff and Structure of HTA program?		

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