A preliminary survey on the influence of rapid health technology assessments

David Hailey

Institute of Health Economics

Objectives: The aim of this study was to obtain information on rapid health technology assessments (HTAs) prepared by members of the International Network of Agencies for Health Technology Assessment (INAHTA).

Methods: A questionnaire was prepared, drawing on earlier INAHTA documents for recording HTA impact. A request for responses was sent to member agencies, seeking information on rapid HTA reports prepared during 2006.

Results: Responses were provided on fifteen rapid HTAs, which covered both new and widely distributed technologies. The most common purpose for the HTAs (n=8) was to inform coverage decisions, but other reasons included capital funding, formulary decisions, referral for treatment, program operation, guideline formulation, influence on routine practice, and indications for further research. All the rapid HTAs were considered by the agencies to have had some influence. The most common indications of influence were consideration by the decision maker, use of the HTA as reference material (both n=10), and acceptance of recommendations or conclusions (n=8). **Conclusions:** Rapid HTAs are used for a broad range of technologies, to inform several types of decision, and are effective in informing the decision-making process. Supplementation of their findings by further assessments will be appropriate in some cases.

Keywords: Health technology assessment, Rapid review, Decision making

Rapid health technology assessments (HTAs) fall within a continuum of assessment products, somewhere between "full HTAs" with a rigorous approach at all stages, and mini-HTAs (2) or horizon scanning reports. There is a trade-off between providing relatively rapid advice to decision makers and losing the detail and assurance provided by use of a more comprehensive process.

From the decision-maker's perspective, rapid HTAs have the attraction of providing faster responses to questions than full assessments, contributing to a more rapid decisionmaking process. Rapid reviews can be highly responsive to the development of new technologies and techniques (2).

There is still little published information on the influence of rapid HTAs. McGregor and Brophy have described the policy impact of sixteen within-hospital rapid HTAs in Quebec (4). Recommendations from all the assessments were incorporated into hospital policy, with estimated budget sav-

ings of \$CD3 million per year. An earlier Canadian publication reported on the influence of twenty rapid HTAs on decisions related to coverage, capital funding, referral for treatment, and influence on routine practice. Fifteen of the rapid HTAs influenced decisions, three provided guidance or background information, and two had no apparent influence (3). An Australian report included comparison of rapid and full reviews but did not include consideration of the influence of these HTAs on policy and other decisions (5).

Rapid HTAs are undertaken by members of the International Network of Agencies for Health Technology Assessment (INAHTA), and the application and influence of such assessments are of interest to the network. The survey described here was carried out by an INAHTA working group to obtain preliminary information on the use and influence of these HTA products.

Table 1. Framework for Reporting on the Influence of Rapid HTA Reports

- A. Agency
- B. Name of technology
- C. Date of completion of report
- D. Time taken to prepare HTA
- E. Origin of request for the HTA
- F. Purpose of the HTA

Type of decision (one or more):

- 1. Coverage
- 2. Capital funding
- 3. Formulary
- 4. Referral for treatment
- 5. Program operation
- 6. Guideline formulation
- 7. Influence on routine practice
- 8. Indications for further research
- 9. Other (specify in F2)
- G. Conclusions reached by the HTA
- H. Indications of influence (one or more)
 - 1. HTA considered by decision maker
 - 2. HTA recommendations/conclusions accepted
 - 3. HTA demonstrated that technology met specific program requirements
 - 4. HTA material incorporated into policy or administrative documents
 - 5. HTA information used as reference material
 - 6. HTA linked to changes in practice
 - 7. Request for a follow-up HTA or data collection
 - 8. No apparent influence
 - 9. Other
- I. Agency's opinion on level of influence of the HTA
 - 1. No apparent influence
 - 2. Some consideration of HTA by decision maker
 - 3. Informed decisions
 - 4. Major influence on decisions
- J. External opinion on level of influence of the HTA

Source of opinion:

- 1. No apparent influence
- 2. Some consideration of HTA by decision maker
- 3. Informed decisions
- 4. Major influence on decisions

Note. Further details were invited for items B, F, H, I, and J.

HTA, health technology assessment.

METHODS

A questionnaire and instructions on its use were prepared, drawing on previous documents for recording HTA impact that had been developed by INAHTA. Items covered in the questionnaire are shown in Table 1. The survey questionnaire and instructions were posted on the INAHTA Web site, and member agencies asked for responses regarding rapid HTAs that they had prepared during 2006. For the purposes of the survey, rapid HTAs were taken to be assessments that had been completed between 1 and 6 months after receiving a request, following the approach taken in a report on rapid versus full systematic reviews (5).

RESULTS

Seven member agencies—AETMIS, CADTH, IHE (Canada), AETS (Spain), AHTA (Australia), DECIT/CGATS (Brazil), and VATAP (USA)—provided completed questionnaires on fifteen rapid HTAs. Nine of the rapid HTAs were prepared in 1–3 months and six of them in 3–6 months.

Most of the requests for rapid HTAs came from health ministries or departments. For one of the reports, there was also input to the request from a national parliament and five assessments were requested by a public sector service provider.

Table 2. Findings and Influence of Rapid HTAs

Category	Technology	Type of decision	Direction of findings	Influence
Drug, other substance	Topical benzocaine, dental	Formulary, routine practice	Positive, no evidence re: safety concern	Informed decisions Policy direction was consistent with HTA findings
	Triptans for acute migraine	Coverage	No differences between triptans	Informed decisions Further research under way building on the information provided in rapid review
	HPV vaccine	Coverage, further research	Effective in countries with good diagnostic coverage; in local context, costs might be unacceptable	HTA considered by decision maker, request for follow-up; showed necessity of identifying costs and value for the national policy
	Filler material for the treatment of HIV lipodystrophy	Coverage	Insufficient evidence of effectiveness and safety	Informed decisions; procedure was not included in national health benefits package
Device	Excimer laser in refractive surgery (myopia)	Coverage	Effective but optical correction more cost-effective; some risks not established	Informed decisions
	Noninvasive ultrasonic cardiac output monitor	Coverage	Not superior to current (invasive) technology	Influenced decision on consideration for provincial review
	Scanning laser ophthalmoscopy & polarimetry	Coverage	Value in diagnosis unclear	Information considered valuable by decision maker but coverage proposal withdrawn, information would have influenced any decision made
	Robotic surgery	Coverage, capital funding, referral for treatment	No clear advantage over standard procedures	Major influence on decisions
Procedure	Autologous blood donation	Program operation	Few reasons to support	Used to inform a general statement of ministerial policy; used by hospital managers to establish rules concerning utilization of services
	Hysteroscopic tubal ligation	Coverage	Appears safe and effective, but longer term comparative trials needed	HTA report used in decision on feasibility of implementing technology in a health region
	Bone marrow transplantation for MS Laparoscopic electrosurgery	Referral for treatment, guideline formulation Routine practice	Provision of information only Risk of thermal injury likely to be low	Material used in planning meetings Used to support agency response to a media
	Double balloon	Coverage	Effective and likely to be	inquiry Informed decisions
	enteroscopy Hip/knee replacement	Program operation	safer than the alternative Both evidence-based and arbitrary benchmarks available in the literature	International benchmarks used to compare and inform development of
Medical condition	Endometriosis	Guideline formulation, routine practice, further research	Advice and research on management is needed	performance measures Informed decisions, meeting of health professionals & patient groups with ministry

HTAs, health technology assessments; HIV, human immunodeficiency virus; HPV, human papillomavirus; MS, multiple sclerosis.

Table 2 summarizes the technologies addressed by the reports, types of decisions informed by the rapid HTAs, the direction of assessment findings, and influence on decisions. A wide variety of interventions was considered. There were several assessments of new technologies, but it was notable that there was interest also in older, widely distributed interventions.

The agencies provided twenty-two responses on the purposes of the fifteen rapid HTAs. The most common purpose (n=8) was to inform coverage decisions. It is of interest that, even in this small sample of assessments, all other purpose categories given in the questionnaire attracted some responses.

Five of the HTAs supported use of the technology and current practice, while three reports had positive findings but indicated that there was a need for further data and appraisal. Five reports found there was insufficient evidence of efficacy and/or safety, and one found that a technology was not cost-effective. The remaining HTA found that there was no difference between competing products.

The most common indications of influence were consideration of the assessment by a decision maker, use of the HTA as reference material (both n=10), and acceptance of recommendations or conclusions (n=8). All of the rapid HTAs were considered by the agencies to have had some influence, with "Informed decisions" being the most common category. External opinions were available for nine of the HTAs and were consistent with the agencies' opinions.

DISCUSSION

This survey was undertaken using a relatively short questionnaire that was intended to obtain basic information on rapid HTAs and their use and influence. Following previous work within INAHTA, information on influence was placed in context, including details of where the question addressed by the HTA had come from, the purpose of the assessment, conclusions reached, and outcomes of the HTA as judged by subsequent actions affecting the health technology. More elaborate approaches would be needed to give a more detailed description of the role and influence of rapid assessments.

Nevertheless, responses to the survey provided some useful preliminary information on rapid HTAs from public sector programs and how they are being used. Rapid HTAs may often be requested on emerging technologies, but are frequently also applied to those that are well established.

The survey indicated a range of purposes for rapid HTAs, including all the categories listed in Table 1. This resembles the findings of a Danish study that mini-HTAs were used for all forms of health technology and for many different purposes (2).

Given the urgency and pressures associated with rapid HTAs, it is of some interest to confirm that such reports are at least considered by decision makers. The results of the INAHTA survey were reassuring on this point. Almost all the rapid HTAs had been used by the decision makers who requested them. "Use of HTA information as reference material" was given as an indication of influence for ten of the fifteen rapid HTAs in the survey. This seems consistent with reports on the requirements for those in policy and administrative areas for clear general descriptions of technology-related matters (1).

Results from this preliminary survey give a further indication that rapid HTAs are a useful form of HTA, helping to meet decision-makers' requirements for urgent advice on a wide range of topics.

CONTACT INFORMATION

David Hailey, MSc, PhD (dhailey@ozemail.com.au), Visiting Fellow, Centre for Online Health, University of Queensland; Senior Advisor, Institute of Health Economics, #1200, 10405 Jasper Avenue, Edmonton, Alberta T5 J 3N4, Canada

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