

## COMMENTARY

# Evaluation of Interventions: Role of Health Technologies Assessments Agencies

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Today, more than ever there are a greater number of health technologies available for the purpose of improving health. However, the needs, demands and expectations of professionals and patients also continue to increase. For this reason, there is increasing pressure to ensure that the resources available are used more efficiently for the priorities within the identified alternatives. Governments all over the world need evidenced based information on interventions to effectively achieve the health objectives of the population.

From their origins in the United States to the beginning of the 1970's, Technology Assessment Agencies (AETS) have sprung up all over the world. This growth has paralleled the development of various Evidence Based Medicine Centres or similar, such as the International Cochrane Collaboration, which has also provided quality information sources.

The wide variety of topics (new and emerging technologies are only a small part) covered by AETS and similar organisations, the costs involved in their assessment and the true impact that is expected from these technologies, requires tools that will help to determine which of them have to be assessed and prioritised. Likewise, coordination mechanisms must be established to avoid duplication of the efforts among the different organisations that assess technologies. The paper on "new and emerging technologies" presented by Vidal F et al<sup>1</sup> give, as the authors say, points for reflection by knowing the concerns of the professionals as regards the technologies to develop and assessments by AETS, and provides some data to improve coordination between the different health protagonists. In this sense the objective of the paper is to investigate how to find out the needs for technology assessments in advance (early assessments). Therefore, this study could be seen as a system for detecting new and emerging technologies, which at international level is known as "horizon scanning,"<sup>2</sup> and as well as identifying potential assessment topics for the AETS, and their prioritisation, attempts:

– To clarify expectations for the indications of a technology

## Key Points

The current debate on the technology evaluation agencies is centred on the following questions:

- Transfer of knowledge from the scientific evidence to the clinicians, managers and politicians
- Cooperation between the technology evaluation agencies, companies and health services
- Integration of the patient perspectives and their preferences
- Overcome the tension between the scientific evidence and political decisions
- The skills of the technology evaluators
- Management of conflicts of interest
- The evaluation of technology evaluation agencies
- Collaboration and coordination between agencies

- To increase public awareness of new technologies
- To estimate the health results expected and the financial impact that may be involved
- To identify the critical thresholds of improved efficiency in relation to the additional costs, for example, to demonstrate the results of a new intervention
- To anticipate the social, ethical or legal implications of a new technology

The article by Vidal F et al,<sup>1</sup> describes the role of the AETS in our country, and the authors reflect on the potential importance of these agencies and at the lack of evidence of their true impact, as well as the difficulties they have in responding to the real needs of the professionals.

Through this article and other publications, among them the book of abstracts from the last HTAI (Health Technology Assessment International) congress which took place in Barcelona<sup>3</sup> and the summary entitled, “a critical look and a positive thought on health technology evaluation in Canada,”<sup>4</sup> we can understand the substantial changes that technology evaluation is experiencing. Through all this material we can see that, at international level, the AETS protagonists themselves are reflecting on their role.

The current debate is focussed on different questions. Some of which we will comment on:

- The transfer of knowledge. Knowledge derived from the scientific evidence or, for example, the health technology assessments themselves, is not always used by those who make decisions: doctors, managers, and politicians. Part of the problem lies in that the producers of the knowledge (knowledge brokers), and those who use it, belong to different groups, realities and cultures. This situation has led to strengthening of this line by creating knowledge agents (knowledge brokering) with the objective of establishing networks that provide a more effective exchange of mutual knowledge and learning between the different agencies (hospitals, primary care, universities, research centres, politicians, and/or companies)
- Cooperation-collaboration between AETS, companies and health services. The main objective is to improve the quality of life of patients, for this reason, all the protagonists, those who develop and those who use health technologies, must collaborate more and achieve the best use of the available resources. On the one hand, cooperation could help manufacturers develop and invest more resources in those products that would be of most benefit for the health services. At the same time the health services will benefit as they could maximise the value of their resources and direct their investment strategies of the industries towards the needs of the population they serve
- Integration of the patient perspective and their preferences. Many countries take the integration of the patient perspective into consideration and look for ways to have rhetorical discussions so that the patients are really involved
- Overcome the gulf between the scientific evidence and political decisions. For example, passive smoking continues to be a frequent cause of death and avoidable disease. The chronic exposure to the smoke of another smoker increases the risk of suffering from lung cancer by between 20% and 30% in non-smokers, and from suffering a coronary disease between 25% and 30%. Few people quit smoking in a public place due to data on damages of environmental tobacco smoke. Although there is legislation on the prohibition of smoking in public places (with the intention of protecting the health of non-smokers), it is not always supported by convincing actions

- The knowledge and skills of the people who assess technologies. The quality and importance of the AETS reports increase when it also takes into account whether it is worth implementing the technology and up to what point it is useful and for whom, the evaluators also know the operating mechanism of that technology they assess. In this context the training demands of the assessor should be different. In the order of things, the training of the assessor could be better if he/she was able to carry out and assess a qualitative investigation or, for example, an economic evaluation. Also, to know the context in which the technology is going to be applied could help to make a report more relevant and more effective. To clarify these aspects we should be able to reflect on whether this knowledge and skills are currently being taught in training courses and whether training programmes currently on offer respond to these needs

- The management of conflicts of interest. The AETS reports are made in the context of the various providers involved and are not always exempt from conflicts of interest

- Evaluation of the AETS. Production processes, quality, and performance should be systematically evaluated with the intention of helping the AETS to achieve their own goals. Some AETS are considering making their results public

- Collaboration and coordination between agencies. It would be positive to adopt a global perspective by understanding the production from a group of agencies and by creating tools aimed at opening channels of communication that will help in sharing the work. A better coordinated task would allow the AETS to meet the challenges and would achieve better scientific credibility, relevance, and usefulness, and thus the technologies assessed would be of more benefit due to higher use and impact

During the last 10 or 15 years, some autonomous regions in Spain have been forming groups, teams, institutes or agencies dedicated to assessing technologies in health.<sup>5</sup> These groups have reached a more acceptable level of development and influence in their respective fields and have benefited from the new found coordination which in some cases has enabled them to function as a network.<sup>5</sup> However, the experiences and problems of AETS at international level, are likely to be similar to those in our country. As some experts say, the scenario of decentralisation of the health system, can lead to greater difficulties.

Therefore, there are many challenges. During 2006 the Ministry of Health and Consumer Affairs (MSC) developed a specific plan for the assessment of health technologies in line with the proposals made by the AETS of the Carlos III Health Institute and the corresponding AETS of the Autonomous Regions. The MSC Quality Plan, in its Objective 6 (To assess the technologies and clinical procedures as support for making clinical and management

decisions) establishes agreements with the AETS. Likewise, Carlos III Health Institute, through its AETS, is developing a shared knowledge electronic platform to ensure the networking of all the agencies and health technology evaluation units of the autonomous regions.

The AETS also take part in encouraging the preparation and use of clinical practice guides (CPG) linked to health strategies, consolidating and extending the Guide-Health Project and training professionals (Objective 10.2 of the Quality Plan).<sup>5</sup>

The doctor in the daily clinic makes decisions on the indication or application of a great number of interventions with the purpose of improving, maintaining, or restoring health. Despite having more information and more quality available than ever before, from the perspective of the doctors we cannot think that the only appropriate decisions are those similar to AETS and associated organisations. In the last few years, systematic reviews, technology evaluation reports, CPGs and other tools for helping to

make decisions has been very useful for the professionals. However, we cannot forget that the daily task of medical clinics consists of deciding on the suitability of the generic recommendations for their specific patient.

## References

1. Vidal España F, Leiva Fernández F, Prados Torres JD, Perea Mi-lla E, Gallo García C, Irastorza Aldasoro A, on behalf of the NESPECIALIST group. Identificación de tecnologías nuevas y emergentes. *Aten Primaria*. 2007;39:639-44.
2. Douw K, Vondeling H, Oortwijn W. Priority setting for horizon scanning of new health technologies in Denmark: views of health care stakeholders and health economists. *Health Policy*. 2006;76:334-45.
3. IV Annual Meeting Health Technology Assessment International. HTA for Evidence-Based Public Health. Barcelona; 2007.
4. Briones E. Una mirada crítica y un pensamiento positivo sobre la evaluación de tecnologías sanitarias en Canadá. *Gestión Clínica y Sanitaria*. 2005;7:25.
5. Plan de Calidad para el Sistema Nacional de Salud. Ministerio de Sanidad y Consumo. Madrid, 2006.

# Material para internet

**ANEXO  
1****Spanish Health Technologies  
Assessment Agencies**

AATRM <http://www.aatrm.net/html/es/dir368/index.html>

The Catalanian Technical Assessment and Medical Research Agency

(Agència d'Avaluació de Tecnologia i Recerca Mèdiques de Catalunya-AATRM) is a non-profit making public company, attached to CatSalut-Catalonian Health Service.

AATRM provides information based on scientific knowledge and analysis in the health context, with the ultimate objective of ensuring that the introduction, adoption, and dissemination and use of medical technologies is done in accordance with the scientifically demonstrated criteria of efficacy, safety, effectiveness and efficiency, taking into account their effects on patients (survival, quality of life), and from the point of view of their clinical, financial, organizational, social, ethical and legal impact, to provide support in the making of decisions at different levels of the health system.

AETS [http://www.isciii.es/htdocs/investigacion/Agencia\\_quees.jsp](http://www.isciii.es/htdocs/investigacion/Agencia_quees.jsp)

The Health Technologies Assessment Agency was created in 1994 (RD 1415/1994) under the auspices of the "Carlos III Health Institute, to attend to the consultative needs of the National Health System with regards to the definition of its health provision policy, in line with the currently prevailing socially advance health systems.

To this effect it has to offer objective assessments of the health, social, ethical, organisational, and economic impact of techniques and procedures for medical-health use, that contribute to supporting, on a scientific basis, the decisions by authorities and other health agencies, therefore they are directed towards the systemised introduction of new technologies into clinical practice, the definition of the criteria for appropriate use of already introduced technologies, or the organisation of health services.

AETSA <http://www.juntadeandalucia.es/salud/orgdep/aetsa/default.asp>

The Andalusian Health Technologies Assessment Agency (AETSA) was created by the Andalusian Government in 1996, with the objective of standardising and increasing the resources dedicated by Andalusian Government Health Administration to research and analysis of health technologies, with the aim of helping to establish priorities in their use, based on their clinical, ethical, economic, and social evaluation. Decree 318/96 of 2nd July, by which the Andalusian Health Technologies Assessment Agency was created.

AVALIA-T <http://avalia-t.sergas.es/default.asp?Lang=es>

In the search for continuous improvement and quality control of health care in the Autonomous Community of Galicia, under the principles of universality, fairness, and efficiency, and being directed to improve the state of health of the population, the Galician Health Service required the integration of criteria and results of the various health interventions, for their application in the process of decision making, at any level where health care was provided.

Thus, the Health Department specified, in Decree 128/99 of 23rd April (DOG no 89, of 11 May 1999), the need for an administrative unit that could provide scientific recommendations, prepared using valid and reliable and contextualised information, and expressed this with the definition of the functions of the Galician Health Technologies Assessment Agency.

Pedro Laín Entralgo Agency <http://www.madrid.org/lainentralgo/>

Laín Entralgo Agency is the organisation responsible for the appropriate development of promotion, organisation, coordination, management, assessment, and accreditation of all training and research activities in health sciences. To do this, it promotes actions directed at improving and adapting the training of health professionals, scientific research and innovation in the specific field of biomedicine.

Its Health Technologies Assessment Unit has as its mission, to generate the scientific knowledge required to make decisions in the Community of Madrid health system by means of health technologies assessment, using the criteria of efficacy, safety, effectiveness and efficiency, accessibility and fairness.

Chapter X of the Law 12/2001, of 21 December, created the Community of Madrid Training, Research and Health Studies Agency (BOCM no 305, 26 December).

Osteba [http://www.osasun.ejgv.euskadi.net/r52478/es/contenidos/informacion/presentacion\\_osteba/es\\_1199/indice\\_c.html](http://www.osasun.ejgv.euskadi.net/r52478/es/contenidos/informacion/presentacion_osteba/es_1199/indice_c.html)

Osteba, Health Technologies Assessment Service, was established in autumn 1992. Its objective is to promote the appropriate use of health technologies in terms of safety, effectiveness, accessibility, and fairness, provided information necessary to make decisions.

Osteba is a founder member of the International Network of Assessment Agencies INAHTA and the International Network of Clinical Practice Guides (GIN), it also participates in the European network for exchanging information on early assessments of emerging technologies (Euroscan).