
NEW AND EMERGING HEALTH TECHNOLOGIES 2015. PRIORITIZED LIST

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Introduction: Not only does health technology assessment have a clear support role in decision-making at different levels, but today it possibly assumes even more importance for important reasons, such as demographic shifts in the population, increased life expectancy and the appearance of new health technologies, all of which makes changes in health policies a matter of necessity. With regard to the latter, health-service planning and management is being aided by early detection systems that target new and emerging technologies, with the aim of providing preliminary information about the effectiveness, safety, clinical utility and cost of technologies likely to have a high impact on health systems.

Health technology assessment agencies are tasked with identifying and selecting technologies of foreseeably high impact. It was to this end, therefore, that in 2011 *avalía-t* developed and subsequently validated a bibliographic search strategy to explore leading biomedical databases in search of new and emerging technologies likely to be of clinical interest. The technologies so identified are evaluated by health professionals who then help in assessing and prioritising the technologies selected. Prioritisation criteria were predefined for this purpose and a questionnaire was designed with explicit indications as to how to classify and score technologies. This study furnishes a list of new and emerging technologies, systematically prioritised on the basis of the views and values of health professionals implicated, whether directly or indirectly, in the application of such technologies.

This study was undertaken within the context of the 2015 Work Plan implemented by the Spanish Network of Health Technology Assessment Agencies and National Health System (NHS) Services, and funded by the Ministry of Health, Social Services and Equality for the purpose of providing the Directorate-General of the Basic NHS and Pharmacy Service Portfolio with a list of potentially high-impact technologies that might be eligible for inclusion in the service portfolio in the near future (0-2 years).

Objectives: This report was thus fundamentally aimed at drawing up a list of prioritised, new and emerging technologies eligible for inclusion in the NHS over the next 0-2 years.

Methods: The search strategy was launched in March 2015 and covered a period of 6 months (October 2014-March 2015). Technologies were grouped by medical-surgical specialisation, screened by *avalía-t* technical staff in accordance with a series of selection criteria, and underwent three internal screening processes designed to identify those which might be potentially relevant. Prioritisation questionnaires were then circulated to

health professionals engaged in the specialisations found (a minimum of 3 professionals per area) and seen as responsible for the respective technologies' application. These health professionals were recruited nationwide with the aid of the various agencies making up the Spanish Network of Health Technology Assessment Agencies.

The selection process allowed for a period of 8 months for internal screening and 2 months for questionnaire completion by specialists.

Questionnaire scores were analysed using the intraclass correlation coefficient (ICC) in EPIDAT 4.1.

Results: The search identified a total of 8708 references, 225 of which were selected in successive screenings. The latter corresponded to 37 medical-surgical specialisations, with the majority pertaining to radiology (n=34), general surgery (n=31), obstetrics and gynaecology (n=27), and neurosurgery (n=21). In 8 specialisations, the number of technologies detected ranged from 1-2: included among these were psychiatry and dermatology, with 2 technologies, and haematology and nephrology, with one. It should also be noted that a total of 90 technologies pertained to more than one specialisation.

Conclusions: The drawing-up of a prioritised list based on the opinion of professionals provides a good indicator of potentially relevant technologies likely to be adopted in the near future by health systems; even so, the opinion of health managers and other stakeholders will still be needed to ensure that future lists are more specific. Data must be summarised, with the aid of files, on each of the technologies, which may, among others, incorporate aspects of effectiveness and safety, for evaluation by external assessors prior to implementation.