

Health technology  
assessment  
(HTA)  
— Q&A —



This Myeloma Patients Europe Q&A explains the role of health technology assessment (HTA) in Europe. It covers what HTA is and provides a general picture of how it works within the context of reimbursement systems. It also covers topics including the types of information assessed during HTA, the decision-making criteria applied by HTA bodies and how patient organisations can get involved.

## WHAT IS HTA?

The World Health Organisation (WHO) defines HTA as:

“The systematic evaluation of properties, effects, and/or impacts of health technology. It is a multidisciplinary process to evaluate the social, economic, organizational and ethical issues of a health intervention or health technology.”

HTA is therefore a process that can help determine whether a medicine (e.g. myeloma drugs such as bortezomib) or other health technology (e.g. interventions that deliver treatment or monitor disease) should be made available in a health system. It generally looks at the impact that the intervention will have, including an assessment of its costs and benefits. HTA can also be used to generate guidance on how medicines and technologies should be prescribed safely and effectively, and how they fit into existing treatment pathways and systems for service delivery.

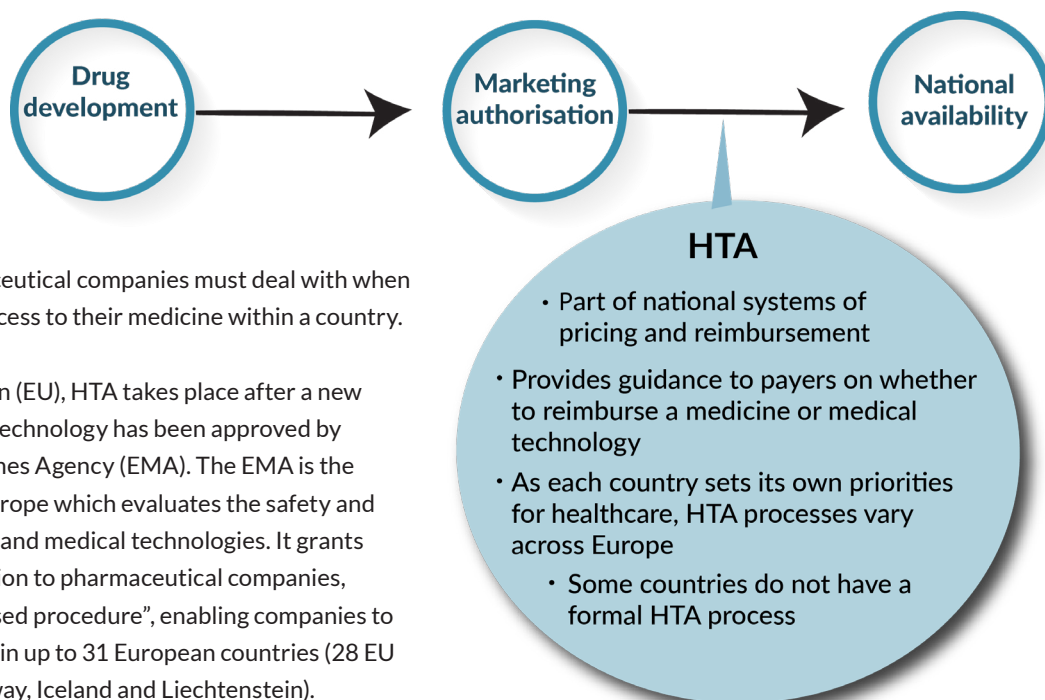
As most health and medicines budgets are finite, HTA plays an important role in determining whether the medicine or technology offers genuine value to a health system and whether resources should be allocated to making it available.

## WHEN DOES HTA TAKE PLACE?

HTA takes place late on in the drug development process and can be a vital step for market access. It is usually one of the final hurdles pharmaceutical companies must deal with when seeking to provide access to their medicine within a country.

In the European Union (EU), HTA takes place after a new medicine or medical technology has been approved by the European Medicines Agency (EMA). The EMA is the regulatory body in Europe which evaluates the safety and efficacy of medicines and medical technologies. It grants marketing authorisation to pharmaceutical companies, through the “centralised procedure”, enabling companies to market their product in up to 31 European countries (28 EU member states, Norway, Iceland and Liechtenstein).

A positive EMA approval means that the medicine is effective and safe to prescribe to patients. This is based on an assessment of clinical data from large randomised controlled studies, known as Phase III clinical trials. EMA marketing



authorisation does not mean that the new medicine or technology is automatically or routinely made available to patients across Europe.

To determine availability within a national health system, each European country has its own system of pricing and reimbursement (i.e. system of making medicines available). HTA usually forms part of this system – either providing non-binding guidance to payers on whether to reimburse the new intervention or providing the final reimbursement decision itself. It is important to note that the HTA process differs between the different European countries as each country sets its own priorities for health care; some countries do not have a formal HTA process.

## WHO CONDUCTS HTA?

Where an HTA system is in place, an organisation or sometimes multiple organisations are responsible for undertaking this process. These are referred to as “HTA bodies” or “agencies” and may either be stand-alone bodies or integrated into another organisation such as a government department. The function and role of these bodies, including the decision-making criteria and weighting of different factors to be taken into account within the decision-making, very much depend on the individual country and its political, economic and social situation.

HTA can take place nationally or regionally within a country. There may also be separate HTA bodies looking at different types of medical interventions – for example, HTA bodies that assess the value of new drugs and other HTA bodies that assess the value and purpose of medical devices or surgical procedures.

Examples of HTA bodies include:

- National Institute for Health and Care Excellence (NICE), England
- Gemeinsamer Bundesausschuss (GBA), Germany. Its work is usually informed by an initial economic evaluation by the Institute for Quality and Efficiency in Healthcare (IQWiG)
- Haute Autorité de Santé (HAS), France
- Israeli Ministry for Health, Israel

You can identify the HTA body in your country by looking at the MPE European Atlas of Access to Myeloma Treatment: <http://www.mpeurope.org/atlas/>

## WHAT TYPES OF INFORMATION DO HTA BODIES ASSESS?

The HTA process can be divided into two elements: assessment and appraisal (EUPATI 2016). The first element allows for a scientific assessment of the evidence and the second part allows for a broader assessment of the evidence alongside consideration of wider factors. These factors include social and cultural, political, economic, and ethical considerations within the specifics of an HTA. They may differ depending on the country but are generally similar across Europe.

For medicines, HTA usually starts when a pharmaceutical company makes a submission to an HTA body in order to market their medicine or technology within a country. The company makes a detailed case supported by clinical trial evidence as to why their intervention is suitable for reimbursement within a health system and why it is valuable to the health system. Information requirements may include:

- Intended patient population and relevant subgroups (e.g. if one group of patients is more likely to benefit from the new medicine or technology)
- How the medicine will be used (e.g. how administered, how often/frequency of dosing)
- Clinical effectiveness (i.e. what the clinical trials have found)
- Benefit versus risk
- Price and cost-effectiveness (i.e. does the new medicine give value for money?)
- Comparisons with existing treatments and current best practice
- Impact on health-related quality of life
- Level of innovation
- Burden of illness and unmet need for treatment
- Service delivery and budget impact

HTA bodies analyse and critique a submission, looking at whether the conclusions are supported by the information provided and how certain one can be about the conclusions and the case being made. Most HTA bodies have strict methods and guidelines that they follow to ensure that every new application is assessed in the same way, fairly and robustly. The assessment can either be done by the HTA body itself or outsourced, for example to an academic institution.

In some cases, HTA bodies proactively undertake searches for evidence and supplementary information to assist with their assessments/analyses. The assessors may also need to go back to the company and ask for further information.

## WHAT HAPPENS DURING AN HTA APPRAISAL?

Following the industry submission and HTA assessment process, a multi-disciplinary committee is generally convened to discuss the evidence assessment and to consider wider input from stakeholders such as doctors, patients and payers within the context of the healthcare system. This can help put the new drug or technology into context in the real-world setting and allows for a more holistic consideration of the benefits, risks and service delivery.

This is the stage where a decision or conclusion is reached on whether the new drug or technology offers value to the health system and should be recommended for reimbursement. How this decision is then used and disseminated for patients depends on the reimbursement system present.

## WHAT ARE THE BASIC CRITERIA THAT HTA BODIES APPLY IN THEIR DECISION-MAKING?

The comparative clinical and cost-effectiveness of a new drug or technology are key factors in HTA decision-making. In basic terms, HTA bodies want to know how much additional benefit a new drug will bring to a health system and at what cost. This makes it important that clinical trials provide clear data on the new drug in the patient population under consideration when compared with a relevant treatment for that health system/differences between a new drug or technology and the current standard of care. It follows that the more benefit the new drug brings and the more value it

offers, the more likely it is to receive a positive recommendation. A major issue for health systems is that many of the new treatments are much more expensive than existing treatments.

To assess comparative clinical and cost-effectiveness, HTA bodies use a range of health economic tools and analytical techniques. HTA submissions from pharmaceutical companies usually include a health economic analysis and the requirements are clearly stated by the HTA body in their methods and process guidelines. Two examples of health economic tools used in European HTA decision-making are:

- Incremental cost-effectiveness ratio (ICER), which is a common way of assessing comparative cost-effectiveness. It is the difference in cost between two possible drugs or technologies, divided by the difference in their effect.
- Quality Adjusted Life Years (QALY), a tool that assesses the impact that a new drug or technology has on someone's quality and length of life.

In some countries, such as the UK, a “willingness to pay” threshold is specified, above which a health system is unlikely to pay for a new intervention. Other countries, such as France, do not have an upper limit. It is policies such as these that may lead to differences in the recommendations made by European HTA bodies.

HTA bodies usually come to a price agreement within a country. Negotiations on price and different forms of discounting by companies are often part of HTA approval of a new medicine. For example, some HTA bodies can consider risk-sharing schemes which help to improve the value of a new medicine as it is introduced into a health system without impacting on the list price. This means that HTA bodies are often able to be flexible in their decision-making and can take into account factors that are not considered in health economic modelling. As discussed previously, these broader factors and the weighting they are given will depend on the country, what they factor into their decision-making and their willingness to pay for certain types of intervention. For example, the Scottish Medicines Consortium (the drug approval body in Scotland) is flexible with its willingness to pay threshold and will seek patients' opinions more widely in their decision-making on drugs developed for treatment at end-of-life and for debilitating rare diseases. This is because, following a politician-led review, it was deemed that shared decision making is particularly important for these types of drugs.

## WHAT DECISIONS DO HTA BODIES MAKE AND WHEN?

HTA is used to reach a decision about whether funding for a new medicine or technology should be made available within a health system. Access to the medicine or technology could be enabled by recommending that routine funding be made available within a universal health system or that the new intervention should be added to a list of approved drugs and technologies in an insurance based system.

Most HTA bodies assess only the regulatory licensed indications of the drug or technology. In Europe, this means a drug has to be approved by the EMA for use in a particular group of patients. For HTA, use of a drug may be restricted to a certain group of patients who benefit most from the drug. An example in myeloma is that Velcade® (bortezomib) is licensed by the EMA in all stages of the disease but in some European countries its use is restricted to specific stages of relapse.

The decisions reached by HTA bodies and their impact will differ depending on the system of pricing and reimbursement that is in place. For example, the HTA body in Finland (the Finnish Office for Health Technology Assessment – FinOHTA) works in a largely advisory capacity. In other countries such as the UK, the HTA decision forms the final reimbursement policy.

A recent development in regulatory processes and HTA has allowed for the agreement of “managed access” programmes for new medicines and technologies. This is also sometimes referred to as conditional approval. The process essentially

allows a medicine to be approved based on less developed clinical trial results/data under the condition that further evidence is collected by the manufacturer (or health system) to support its use in the real-world setting. This is complex to implement given the difficulties associated with collecting robust clinical data outside of a trial, however it is likely to be a growing concept in the field of HTA and reimbursement given the potential benefits it offers for earlier access to new treatments.

## HOW CAN PATIENT ORGANISATIONS INFLUENCE HTA DECISION-MAKING?

Decisions that HTA bodies make can have a substantial impact on the availability of new drugs and technologies. As patients and carers are the ultimate “customers” of this process, it is important that HTA decisions reflect their needs and preferences. There is no benefit to developing or approving new medicines that patients and carers do not need or value. There is growing consensus amongst all stakeholders that patients and carers should be routinely engaged throughout the process of drug development and market access, however this is still far from routine.

Some HTA bodies have developed routine practices for capturing the patient and carer voice at set points in their decision-making, and patient or public representatives may be on the HTA appraisal committees. The process for involving patients is transparent and is usually clearly outlined by an HTA body on their website and in their assessment methods and guidelines. HTA bodies may also proactively contact patient and carer organisations to engage them in HTA processes. The patient and carer voice is usually captured through written requests for information and/or through participation in a face-to-face committee meeting or consultation. This information is then considered as part of the deliberations, although it is often not clear what impact this has on the final outcome.

When developing submissions to HTA, it is important for patient and carer organisations to explain what the care needs and quality of life benefits of the drug or technology are. The submission needs to give the health economic and clinical information being considered in an appraisal its “human” aspects. You can focus on issues such as the impact the administration of the drug will have on the life of both patient and carer. Another issue to consider might be the impact it will have on time spent with family and his or her carer and what it means for a patient’s ability to complete or participate in normal daily activities. It is also important to keep in mind that not all new drugs or technologies can or should be made available. Be honest about both the positive and negative impacts an intervention may have.

To inform HTA submissions, it is important to have a mixture of qualitative (descriptive quotes from case studies to place information in context) and representative quantitative (statistical) information from patients and carers captured. You can use the following approaches to do this:

- Online and paper surveys. You can ask questions about how having the disease affects patients, their families and carers and what patients and carers think the benefits or negative features of existing treatment and a new drug or technology might be
- Focus groups
- Telephone interviews
- Literature reviews of academic papers, reports



and surveys on patient and carer opinion

- Speaking to other patient organisations across Europe about their experiences

MPE can help patient organisations with the above ideas and to develop a strategy to inform a response. Alternatively, if you think your HTA body does not adequately take into account patient and carer opinion, we are also happy to discuss policy approaches and ideas to influence this. Please email Policy and Public Affairs Manager Kate Morgan at [morgan@mp europe.org](mailto:morgan@mp europe.org) if you have any questions or would like some advice.

## IS THERE A EUROPE-WIDE SYSTEM OF HTA?

HTA is generally undertaken at a national level. This is because healthcare budgets are largely controlled by national governments. There is therefore no Europe-wide HTA body. Two important HTA networks are in place that aim to spread information, experiences and best practices. These are as follows:

- The European Network for Health Technology Assessment (EUNetHTA), which is funded by the European Union to support collaboration across European HTA bodies and good practice in decision-making. You can read more about this here: <https://www.eunetha.eu/>
- Health Technology International (HTAi), which is a global scientific and professional society for those who produce, use, or encounter HTA. You can read more about this here: <https://www.htai.org/htai/about-htai/>

## WHAT FUTURE TRENDS MIGHT IMPACT ON HTA?

Regulatory and scientific developments are taking place globally that are very important for HTA bodies to anticipate and prepare for. Some of the key challenges are:

- Advancements in personalised medicine that will have an impact on the nature of clinical trials. Instead of the traditional model of clinical development of a new medication with submissions to regulatory and HTA bodies based on large Phase III randomised placebo controlled trials, clinical trials are likely to be done in smaller and specific groups of patients. This will have an impact on the amount of information obtained and the level of certainty that HTA bodies can have to base their decisions on.
- Newer technologies that make use of a patient's immune system (immunotherapies such as CAR-T) and are different to the conventional idea of disease therapy. HTA bodies have less experience in assessing this type of innovation.
- Adaptive pathways and accelerated access policies at a European regulatory level that will have an impact on the level of data available for HTA bodies to base/make their decisions on. Earlier regulatory approval may not mean earlier access nationally unless HTA bodies change their approaches.
- A wide-range of stakeholders are undertaking studies into how to capture patient and carer experiences and values and, once they are captured, how they can be taken into account in formal decision-making processes for access to new drugs and technologies. The results of these studies and pilot projects should start to give a clearer picture as to how regulators and HTA bodies can take account of patient and carer preferences in a meaningful and systematic way.

These are all exciting developments that are important for policy-makers to prepare for. HTA bodies need to evolve to ensure that their methods and processes remain up-to-date in the face of scientific and regulatory advancements and that they are striving to better capture what is valued by the people who use and potentially benefit from the drugs and technologies they assess.

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MPE is a network of European myeloma patient organisations. It supports national patient organisations to improve treatment and access for patients in their countries and helps inform and raise awareness on a European level through its educational programmes. Please note, this information does not replace the information provided by your doctor. If there is anything that is not clear to you, please always ask your clinical team

## WHERE CAN I FIND MORE INFORMATION ON HTA?

MPE run an annual training programme called the Advocacy Development Programme, which covers topics related to and including HTA. You can find more information about the Programme here: <http://www.mpeurope.org/2017/04/05/mpe-advocate-development-programme-adp/>

If you have any questions about the Programme, HTA or the work of MPE in this area, please email [morgan@mpeurope.org](mailto:morgan@mpeurope.org)

EUPATI also run a range of educational programmes for patient advocates, including on HTA. You can find further information here: <https://www.eupati.eu/what-is-eupati/>

Health Technology Assessment International (HTAi) also provide access to resources on HTA. You can access the website here: <https://www.htai.org/interest-groups/patient-and-citizen-involvement.html>

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