The health technology assessment landscape in Greece

Situation analysis and alignment with the European Union Regulation on health technology assessment

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ABSTRACT

This publication reports on a situation analysis and needs assessment on health technology assessment (HTA) in Greece, particularly in relation to the principles and requirements of the European Union Regulation 2021/2282 on health technology assessment (EU HTAR). It draws on a desk review of relevant literature and on consultations with key informants in the Greek health system and other experts. The analysis found that, for all the progress made by Greece since institutionalizing HTA in 2018, several important areas of development remain – among them, strengthening human capacity for HTA, improving data availability, clarifying and strengthening use of economic evidence in decision-making, and ensuring that the links between HTA and reimbursement are fit for purpose. Alignment with the EU HTAR will require clarifications and developments in the governance of the Greek HTA process, legislative updates and capacity strengthening, among others. The EU HTAR provides a golden opportunity to make substantial developments to HTA in Greece and realize its full potential in advancing universal health coverage.

KEYWORDS

Health technology assessment, Universal health coverage, Health systems, Evidence synthesis, Cost–effectiveness

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Abbreviations

COI	conflict of interest
EOPYY	National Organization for the Provision of Health Services
EU	European Union
EU HTAR	Regulation (EU) 2021/2282 on health technology assessment
EUnetHTA	European Network for Health Technology Assessment
HTA	health technology assessment
JCA	joint clinical assessment
JSC	joint scientific consultation
MAH	marketing authorization holder
PICO	population, intervention, comparator, outcome

Executive summary

Introduction

This publication reports on a situation analysis and needs assessment on health technology assessment (HTA) in Greece, conducted by the WHO Regional Office for Europe in collaboration with the WHO Country Office in Greece and the Greek Ministry of Health, with funding from the Technical Support Instrument of the European Commission. It sets out the current HTA processes and capacity in Greece – particularly in relation to the principles and requirements of the European Union (EU) Regulation 2021/2282 on health technology assessment (EU HTAR), which came into force on 12 January 2025.

The report draws on a desk review of relevant literature; in-depth key informant interviews with key stakeholders in the Greek HTA system conducted in October–November 2024; a virtual meeting with the HTA Committee's Scientific Advisory Group where a draft report was discussed (November 2024); and a policy discussion at a stakeholder workshop in Athens where draft results were presented and discussed with all relevant HTA stakeholders in Greece (December 2024).

Selected key messages from the HTA situation analysis

Overall, a limited body of literature was identified on the Greek HTA system. The situation analysis relies predominantly on key informants' inputs and a recent publication that analysed the timelines of processing HTA submissions between 2018 and 2023. Table ES1 sets out the key messages for the main areas considered in the report.

Table ES1. Key messages from the HTA situation analysis

Area	Key messages
Awareness of and support for HTA	Awareness of HTA in Greece has improved since the HTA process for medicinal products was introduced in 2018, but it remains limited to the stakeholders involved in the process. Political support for HTA has been consistent, while at the same time there is a perception that there is further scope for elevating the role of HTA in health-care decision-making.
Legal framework	The legal framework for HTA currently covers only medicines; it does not include other types of health technologies such as medical devices. Moreover, only medicines (under regulatory data protection) that are already reimbursed in 5 out of 11 specific European countries that have an HTA system (the "5/11 rule") are eligible to undergo the national HTA process. Biosimilars and vaccines go through an abridged HTA process according to Law 4512/2018; this sets out a time frame of one month for the assessment, during which data on epidemiology, clinical trials and budget impact are required, but cost–effectiveness information is omitted. The legislation has been the subject of numerous updates since its introduction in 2018. While provisions are generally perceived to be clear, several gaps and contradictions remain – for example, about who considers information on the cost–effectiveness of health technologies and how it is used.
Governance	The HTA Committee, based in the Ministry of Health, and the Drug Price Negotiation Committee, based in the National Organization for the Provision of Health Services but also under the remit of the Ministry of Health, are the key governance structures in the HTA process for medicinal products. These are supported by secretariats (the Negotiation Committee Secretariat only established recently), which are perceived to be understaffed – particularly the HTA Committee Secretariat – and a network of external assessors (currently 82). Key informants noted that the committee-type governance model limits the potential of the HTA process because committees have no budget and cannot employ people, so committee members perform their duties in addition to their day-to-day roles – for example, scheduling HTA meetings in the evenings after they finish their regular day jobs.

Table ES1 contd

Area	Key messages
Capacity	No published capacity assessment for HTA has been identified. Technical capacity includes strong experience with assessing direct comparisons, including meta-analysis of randomized controlled trials. Experience with indirect comparisons (such as network meta-analysis) and with economic evaluation modelling approaches is limited. Human resources capacity includes two full-time equivalent staff supporting the HTA Committee Secretariat, instead of the 10 full-time equivalent staff stipulated by law; key informants noted this understaffing. Data capacity, including access to epidemiological, health service utilization and economic data (such as unit costs of health services), is perceived as difficult, with consequences for the quality of HTA submissions. Decision support capacity is limited: no guidelines for conducting economic evaluations, no official indication of a cost–effectiveness threshold and no Greek health-related quality of life tariff – such as EQ-5D, a standardized measure of health-related quality of life developed by the EuroQol Group – are available, although stakeholders indicated that such analytical work is ongoing. Human capacity for HTA in Greece is perceived to be improving slowly, particularly in the private sector; however, few ongoing academic programmes – such as technical courses and degrees – are dedicated to the topic.
Process	The HTA process is as follows. After price issuance from the National Medicines Organization, marketing authorization holders submit a dossier to the HTA Committee. A clinical assessment is conducted by external assessors and approved by the HTA Committee, which evaluates the submitted information on clinical added value (such as therapeutic benefit and safety), taking into consideration its uncertainty and unmet clinical need, and formulates a preliminary recommendation. If the evaluation is positive, the Negotiation Committee conducts price–volume/price and cap negotiations with the marketing authorization holder. In accordance with the legislative processes, a successful price negotiation – which in practice starts by requesting significant discounts, rebates and paybacks – is determinant for the final recommendation. When negotiations conclude, the submission returns to the HTA Committee for an updated recommendation. Key informants indicated that this system limits the potential of the HTA process – particularly the assessment component – to inform decisions.
Methods	In terms of evaluation methods, the current HTA process relies on and has most experience with direct randomized comparisons, such as evaluating bias in randomized controlled trials. There is comparatively less experience with evaluating non-randomized evidence and indirect comparisons. Health economics is perceived by both the HTA Committee and the Negotiation Committee as the most important candidate area for capacity strengthening.
Stakeholder involvement	There is currently no stakeholder involvement policy. Legislation allows for patient representatives, academics and so on to be invited, but this is rarely the case in practice. The HTA Committee responds to messages it receives. Stakeholders such as patient organizations, health-care professionals and the pharmaceutical industry are not involved in any stage of the evaluation. The only exceptions are the price–volume and other financial negotiations of the Negotiation Committee conducted directly with the marketing authorization holders.
HTA outputs and outcomes	In terms of outputs and outcomes, a redacted summary of the final recommendation is made public. HTA reports and minutes of HTA Committee meetings are not made public. The final decision regarding reimbursement is with the Minister of Health; in practice, this has always aligned with the recommendations of the HTA Committee.
Conflict of interest	The conflict of interest (COI) legislative provisions are perceived as strict and leading to difficulties in identifying assessors.

Priority areas for aligning the Greek HTA system with the EU HTAR

The following broad types of interaction or contact are expected between the Greek HTA system and the EU HTAR.

- As members of the EU Member State Coordination Group on HTA, Greek representatives are expected to articulate preferences on the assessment scope of every joint clinical assessment (JCA) and the possibility of joint scientific consultation (JSC).
- As users of JCAs, Greek HTA structures are expected to interpret, use and report back to the European Commission on the use of JCA outputs in health-care decision-making.
- As contributors to JCAs and JSCs as (co-)assessors, Greek HTA structures are expected to provide experts who can take responsibility for conducting JCA- and JSC-related activities in line with EU HTAR provisions.

Meeting the obligations described by the EU HTAR requires strategic decisions to be made by the Ministry of Health on how to input information into every JCA and how to use JCA outputs in a timely manner. Making these decisions should be a priority, as they will have implications for a wide range of practical aspects, from the content and format of document templates to COI provisions. Some of the changes will require legislative modifications. Beyond this, strengthening the capacity of Greek HTA structures will be essential – in both technical areas (such as indirect comparisons) and programmatic areas (such as stakeholder engagement).

At the same time, alignment with the EU HTAR provides a unique, invaluable opportunity for advancing HTA and pricing and reimbursement in Greece with the aim of achieving universal health coverage. From this perspective, revising the governance arrangements of the HTA system to strengthen autonomy and transparency, and revising the nature of the link between the HTA process and the pricing and reimbursement of health technologies will require particular attention.

The minimum actions that need to be taken by the Greek Government to ensure alignment with the EU HTAR are summarized in Table ES2.

Table ES2. Action required to align with the EU HTAR

Area	Key actions
Strategy	A strategy on the extent to which, and how, Greece will use JCA and JSC outputs for health-care decision-making is needed. Alignment with the EU HTAR can be a golden opportunity to articulate a strengthened vision for the HTA process and its role in decision-making in Greece.
Legal framework	The legal framework should specify how JCA reports will be used in the HTA Committee's deliberations, including which structure will evaluate JCA reports and how its capacity will be aligned with this task. A mechanism for monitoring and reporting to the European Commission how the EU HTAR outputs are used should be introduced. Mechanisms for selecting national assessors, co-assessors and other experts for JCAs and for JSCs, and for their compensation to enable country support in the centralized process to build national capacity are also needed. COI provisions should be aligned with those of the EU HTAR. A population, intervention, comparator, outcome (PICO) exercise should be introduced for JCAs, other submissions and possibly for early access in national legislation. The PICO definition should also define patient and expert involvement. HTA legislation should be revised to amend existing gaps and contradictions, or even rewritten completely to reflect evolving realities rather than making discrete adjustments.
Governance	Which governance structures in the Greek HTA system will conduct activities required for the EU HTAR should be specified, including how (co-)assessors will be remunerated for their work. Options are needed to strengthen the autonomy of HTA structures – particularly by way of attracting and retaining staff dedicated to HTA activities.

Table ES2 contd

Area	Key actions
Capacity	To increase capacity, sufficient staff and resources should be allocated to support EU HTAR activities. Given the difficulty of predicting work burden at this early stage, flexible arrangements could be adopted until workflows become more predictable. A comprehensive HTA capacity assessment in Greece should be conducted. Technical skills in areas requiring imminent interaction with the EU HTAR – including PICO formulation and indirect treatment comparisons – need to be strengthened. Other areas requiring strengthening include capacity for health economics, and process management skills and capabilities among HTA structures. Improvements in the availability and quality of data for HTA – particularly health service use and unit cost information – should be accelerated. Technical and organizational skills for HTA applied to medical devices also need to be developed.
Process	The Greek HTA process should be updated, and document templates for submission and assessment created, based on decisions about how JCAs and JSCs are to be used in Greek health-care decision-making. Alignment of templates with other national types of application not falling under the JCA scope could be considered. A web portal for HTA application submission should be developed, including decisions on which parts may be available to the marketing authorization holder and the public. This could be used to extract the relevant data to report back to the European Commission. Options should be considered for strengthening the relevance of the assessment component in the HTA process relative to price–volume negotiations. The 5/11 rule should be revised, based on a systematic assessment of its impact on the Greek health system.
Methods	No major changes to methods are required but further work on real world evidence and non-randomized evidence as well as indirect and mixed treatment comparisons for EU HTAR implementation. The extent of desirable alignment between value domains in the Greek HTA system and in the EU HTAR should be considered, including revising value domains if any HTA methods are revised. Methodological guidance for economic evaluations should be strengthened – for example, by developing a reference case for economic evaluations and decision support rules for economic evaluation information. Guidance and templates for PICO exercises for both JCA/JSC and early access programmes should also be developed, and the HTA methods guide updated, as needed.
Stakeholder involvement	Stakeholder involvement should be specified, including which stakeholders should be involved, and how, in formulating the Greek PICO request for every JCA. An HTA stakeholder engagement framework and policy should be developed to make clear the purposes, modalities and procedures for engaging with health system stakeholders.
HTA outputs and outcomes	The HTA report structure should be amended to include information on how EU HTAR outputs and outcomes (such as JCA reports) are to be taken into account in the final recommendation. A routine monitoring and evaluation system of HTA recommendations and decisions is also needed.
COI	A legal comparative analysis between the Greek HTA legislation and provisions in the EU HTAR on COI should be conducted to identify areas requiring alignment for the purposes of empanelling expert assessors and committee members.

1 Introduction

The WHO Regional Office for Europe conducted a situation analysis and needs assessment of health technology assessment (HTA) in Greece in collaboration with the WHO Country Office in Greece and the Greek Ministry of Health, with funding from the Technical Support Instrument of the European Commission. The project aimed to describe the current HTA processes and capacity in Greece, particularly in relation to the principles and requirements of the European Union (EU) Regulation 2021/2282 on health technology assessment (EU HTAR), which came into force on 12 January 2025 *(1)*.

This report is based on a desk review of available literature and on key informant interviews. The desk review relied on translated legislation and reports made available by the Ministry of Health and translated into English by the WHO Regional Office for Europe and the European Commission. In addition, academic and further grey literature was identified by searching bibliographic databases Embase Classic + Embase, Medline, Global Health and Health Management Information Consortium using the Ovid platform, and Web of Science, as well as the institutional libraries and repositories of WHO, the World Bank Group, the Organisation for Economic Co-operation and Development, the International Monetary Fund and international HTA professional associations including HTA international, the international HTA database, and the International Society for Pharmacoeconomics and Outcomes Research. Sources were searched in English from January 2018, since the current HTA mechanism in Greece was introduced that year, to the date of collection: 24 September 2024. Further details are provided in Annex 1.

Key informant interviews were conducted online in October and November 2024 with HTA stakeholders suggested by the Ministry of Health. They included representatives of the Ministry of Health's Secretariat-General for Strategic Planning; the HTA Committee and its Secretariat; the Drug Price Negotiation Committee; the Negotiation Committee for the Reimbursement of Health Services, Medical Technology Products and Materials; the National Medicines Organization; patient organizations; and the pharmaceutical industry. In total, eight interviews were conducted with a total of 18 participants. The interview guide (Annex 2) covered the areas awareness of and political support for HTA; the legal framework; governance; capacity; methods; process; outputs and outcomes; stakeholder involvement; and conflict of interest (COI). The interview guide was adapted to the roles and responsibilities of the interviewees. The general interview guide was approved previously by the WHO Research Ethics Review Committee and was contextualized for this country case study.

A draft report integrating information from the literature and the key informant interviews was reviewed by and discussed virtually with the HTA Committee's Scientific Advisory Group in November 2024. Key findings were also presented and discussed during an HTA policy discussion at a stakeholder workshop in Athens on 12–13 December 2024. This final report incorporates feedback and additional information made available on these occasions.

Essential terminology used in this report includes the following.

- **Health technology** refers to an intervention developed to prevent, diagnose or treat medical conditions; promote health; provide rehabilitation; or organize health-care delivery. This can be a test, device, medicine, vaccine, procedure, programme or system *(2)*. Note that "health technology" and "intervention" are used interchangeably in the report.
- **HTA** refers to a multidisciplinary process that uses explicit methods to determine the value of a health technology at different points in its life-cycle. The purpose is to inform decision-making to promote an equitable, efficient and high-quality health system *(3)*. The **process** is formal, systematic and transparent, and uses state-of-the-art methods to consider the best available evidence. The **dimensions of value** for a health technology may be assessed by examining the intended and unintended consequences of using a health technology compared with existing alternatives. These dimensions often include clinical effectiveness; safety, costs and economic implications; ethical, social, cultural and legal issues; and organizational and environmental aspects, as well as wider implications for the patient, relatives, caregivers and the population. The overall value may vary depending on the perspective taken, the stakeholders involved and the decision context.
- The **assessment (or data)** phase of the HTA process is a scientific process used to describe and analyse the properties of a health technology – its safety, efficacy, feasibility and indications for use; cost and cost–effectiveness; and social, economic and ethical consequences *(4)*.
- The **appraisal (or deliberation)** phase of the HTA process is a deliberative, multi-stakeholder process where the assessment is reviewed and interpreted.

- The **recommendation (or decision)** phase of the HTA process is the result of the appraisal process. It is usually linked to the health benefits package and, depending on the legislative framework, it can be recommendatory or mandatory – for example, it can refer to reimbursing the health technology.
- The health **benefits package** refers to the selection of health interventions that is reimbursed from public funds, at defined levels of cost and population coverage.

2
The current HTA landscape in Greece

This chapter gives an overview of the current HTA landscape in Greece, following the areas in the interview guide. Within each section, information is presented from the available literature and the key informant interviews.

Overall, only a small volume of relevant literature on the Greek HTA system was identified; within that, most documents were opinion pieces. Among the literature included, however, was a review of the HTA landscape for medicinal products during 2018–2023, authored by the HTA Committee and its Secretariat *(5)*. This review provides a snapshot of the evolution and maturity of the processes and their timelines over that period. The authors highlighted that a total of 1157 applications were received during the period, and the number of individual recommendations increased for the individual assessments. The backlogs for decisions on HTA and price negotiations reduced significantly in the same time span, with assessment times being almost halved (see section 2.8 for further details).

As a result of the limited literature, the perceptions of key informants inform the situation analysis to an important extent. The key messages are summarized in Table 1, with further details in the sections that follow.

Table 1. Summary of the current HTA landscape in Greece based on the literature and key informant interviews

Area	Main messages
Awareness of and support for HTA	Awareness of HTA is perceived as improving slowly, although it is largely limited to those directly involved in the current HTA process. Perceptions among interviewed stakeholders on the level of political support for HTA were mixed. There is a sense that government support and commitment to HTA could be higher, but at the same time it is acknowledged that many areas in the Greek health system require attention.
Legal framework	HTA currently applies only to medicines. The legal framework is generally perceived as clear and comprehensive, with some gaps and contradictions noted – such as a lack of clarity on how cost–effectiveness information is to be used and assessed.
Governance	The HTA Committee and the Negotiation Committee, with their respective secretariats and the network of external assessors (82 currently), are the key governance structures. Key informants noted that the committee-type governance model limits the potential of the HTA process because committees cannot use budgets from fees and cannot employ people. Committee members perform their duties in addition to their employed roles. This arrangement leads, for example, to HTA Committee meetings taking place in the evenings after committee members finish their day jobs, and to external assessors being paid on average about two years after they complete the assessment work.
Capacity	No published capacity assessment for HTA has been identified. Technical capacity currently includes strong experience in assessing direct comparisons, including meta-analysis of randomized controlled trials. Experience with indirect comparisons (such as network meta-analysis) and with economic evaluation modelling approaches is limited, however. In terms of human resources, the HTA Committee Secretariat operates with two full-time equivalent staff instead of the 10 full-time equivalent staff stipulated by law; key informants noted the understaffing. Access to epidemiological, health service utilization and economic data (such as unit costs of health services) is perceived as difficult, with consequences for the quality of HTA submissions. Decision support capacity is limited: no guidelines for conducting economic evaluations, no official indication of a cost–effectiveness threshold and no Greek health-related quality of life tariff such as EQ-5D (a standardized measure of health-related quality of life developed by the EuroQol Group) are available, although stakeholders indicated that such analytical work is ongoing.
Process	Following the clinical assessment conducted by external assessors and approved by the HTA Committee, a preliminary recommendation is formulated. If this is positive, the submission progresses to the Negotiation Committee for price–volume/price and cap negotiations. When negotiations conclude, the submission returns to the HTA Committee for an updated recommendation. A successful price negotiation, which in practice starts by requesting significant discounts, rebates and paybacks, is determinant for the final recommendation. Key informants indicated that this system limits the potential of the HTA process – particularly the assessment component – to inform decisions.

Table 1 contd

Area	Main messages
Methods	Information on clinical benefit (including effectiveness, safety, health-related quality of life and degree of innovation), reliability of clinical data, cost–effectiveness and budget impact is submitted and assessed based on forms included in the Rules of Procedure for the HTA Committee.
Stakeholder involvement	There is currently no stakeholder involvement policy. Legislation allows for patient representatives, academics and so on to be invited, but this is rarely the case in practice. The HTA Committee responds to messages it receives.
Outputs and outcomes	The timelines of processing HTA submissions have reduced greatly over the past five years, to the point that there is currently no backlog of unprocessed submissions. A redacted summary of the final recommendation is made public. HTA reports and minutes of the HTA Committee meetings are not made public. The final decision regarding reimbursement is with the Minister of Health; in practice, this has always aligned with the recommendation of the HTA Committee.
COI	The legislative provisions for COI are perceived as strict and leading to difficulties in identifying assessors.

2.1 Awareness of and support for HTA in Greece

In general, the interviewed stakeholders perceived the level of awareness of HTA within the Greek health system as limited mainly to professionals directly involved in current HTA processes. Among broader health-care stakeholders – including patients (not to be confused with representatives of patient organizations), most health-care professionals (except for clinicians who usually prescribe high-cost drugs, such as oncologists) and politicians – there seems to be a notable lack of awareness and understanding of the HTA framework, its purpose and its role in shaping health-care decisions. There is a perception that more people have heard of HTA since the process was introduced in 2018, but not much evidence exists to support or expand on this.

Views on political support for HTA in Greece are somewhat more nuanced. There are indications of strong commitment from the government. For example:

- the HTA process has been set up and is mandatory for many types of medicines;
- the Ministry of Health acknowledges HTA reform as key to improving the quality of health-care services in the country;
- the Ministry of Health is working to align the Greek HTA system with the new EU HTAR (including as part of this project);
- high-ranking Ministry of Health officials have publicly affirmed support for these reforms as essential for improving health care in Greece; and
- the government has representatives in and collaborates on HTA with European bodies, such as the EU Member State Coordination Group on HTA and the European Commission's Reform and Investment Task Force.

Several key informants also pointed out aspects that may suggest, at least indirectly, that HTA is not prioritized as much as it could be. For example:

- the HTA structures were set up as committees rather than as an established entity (hastily, it could be argued, when HTA was introduced in 2018 as part of broader fiscal adjustment measures) and have remained as such, which brings about financial, administrative and operational limitations;
- the level of support allocated to these structures is low, as evidenced by persistently low staffing levels in the HTA Committee Secretariat; and
- the HTA process is closely linked with a pricing and reimbursement system that makes little use of the capabilities for and results of the assessment of health technologies.

An ongoing study will outline the required actions for shaping a national institutionalized HTA structure in Greece. The final output is expected to be delivered to the Ministry of Health on 31 May 2025. Its main goal is to describe the operating model and structure of the new body, the main processes regarding its role and position in the reimbursement system, and the demands in terms of infrastructure and staffing. This will also shape the future processes for HTA in Greece.

However, some of the interviewed stakeholders – particularly representatives of patient organizations and the pharmaceutical industry – also acknowledged that many interrelated aspects of the Greek health system require attention and reform. On the one hand, HTA could be one of these priorities. On the other hand, HTA cannot achieve its full potential in Greece until improvements happen in other areas – such as addressing health workforce shortages, improving health data availability, monitoring of service utilization and revising reimbursement mechanisms.

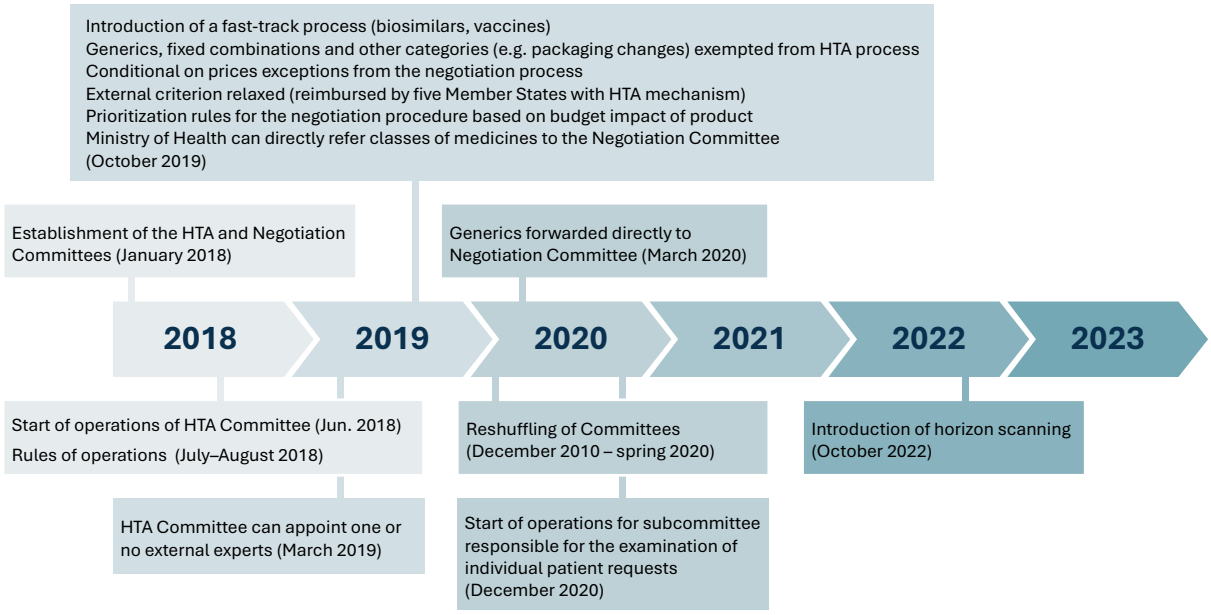
2.2 Legal framework for HTA in Greece

The legal foundation of HTA in Greece was laid in January 2018, when Law 4512/2018 on arrangements for the implementation of the structural reforms of the economic adjustment programmes and other provisions *(6)* established the Committee on the Assessment and Reimbursement of Medicines for Human Use (the HTA Committee). The Committee's main responsibilities are assessing medicinal products (medicines and pharmaceuticals) and formulating recommendations to the Minister of Health on their reimbursement (inclusion or exclusion from the positive list referred to in Article 12 of Law 3816/2010). Law 4512/2018 divided the former Negotiation Committee into the Drug Price Negotiation Committee (the Negotiation Committee), whose main task is to conduct price negotiations on medicinal products, and the Negotiation Committee for the Reimbursement of Health Services, Medical Technology Products and Materials, whose main task is to conduct price negotiations on all other services excluding medicinal products.

The HTA Committee and the Negotiation Committee were not entirely new in 2018. Both existed in slightly different forms prior to Law 4512/2018, under slightly different names (such as the Positive List Committee instead of the HTA Committee), and with similar functions, albeit with less flexibility and decision-making power. As such, Law 4512/2018 expands and clarifies the committees' roles rather than introduces entirely new structures. The Portuguese HTA system was used as a reference in 2018, and inspired the articulation of HTA structures in law; the Portuguese National Authority of Medicines and Health Products provided technical exchange at the time.

The Rules of Procedure for the two committees were issued in July–August 2018. The HTA process started operations in the summer of 2018. The legislation has been revised and updated several times since 2018 (Fig. 1; see Annex 3 for further details). Key informants acknowledged that keeping up with these legislative updates is not a trivial task. Overall, the perception is that HTA legislation is reasonably clear, but that some gaps and contradictions remain, such as which reimbursement sublist (high-cost medicinal products versus retail market; outpatient or inpatient) to recommend inclusion in, and who considers cost–effectiveness information in the evaluation and how it is used.

Fig. 1. Summary of HTA legislative updates in Greece, 2018–2023



Source: adapted from Chantzaras et al. *(5)*.

The scope of the HTA Committee currently covers only medicines. For medical devices, the 11-member Negotiation Committee for the Reimbursement of Health Services, Medical Technology Products and Materials is based within the National Organization for the Provision of Health Services (EOPYY), supported by a department comprising four technical staff. One of its subcommittees (of five members) negotiates prices and terms of service for medical devices already on the market or imported through ad hoc decisions, such as ministerial decrees. It is important to underline that price is an important area of negotiation but not the only one: other factors are also considered by the subcommittee in the negotiation process, such as geographical availability, timelines and so on. This subcommittee only negotiates prices and contractual terms: it does not assess the properties or value of medical devices.

The National Evaluation Centre of Quality and Technology in Health, an independent certification body of quality systems and products supervised by the Ministry of Health, is authorized to evaluate and certify the compliance of medical devices with the requirements of medical device directives. It does not conduct assessments of medical devices in the HTA sense but more for a market access perspective. A pilot study on a medical device assessment could be considered as part of the Strengthening the national framework for the implementation of the EU HTA Regulation 2021/2282: capacity building and harmonization (24EL19) project, in collaboration with WHO and the European Commission's Reform and Investment Task Force, but a medicinal product rather than a medical device may be considered first.

No governance structures are in place to cover the HTA assessment and appraisal of medical procedures, diagnostic tests or population-level health interventions.

Finally, a national horizon scanning project has recently been established in an existing department within EOPYY. This covers products that have high chances of submitting a file to request reimbursement status next year to the HTA and the Negotiation Committee, but its role is still emerging. Key informants representing the pharmaceutical industry indicated that they have contributed to three rounds of data collection conducted by this project, but no resulting output has been shared as this was not planned for in the initial ministerial decision, and the horizon scanning process – especially referring to prioritization – is unclear. Horizon scanning is part of the voluntary collaboration under the EU HTAR, so Greece will be able to participate and gain information through that avenue as well as through the WHO Regional Office for Europe's Novel Medicines Platform project in the coming years.

The Ministry of Health has identified the following areas to address in planned revisions of the HTA legal framework.

- **The HTA process will be streamlined**. There is an ongoing effort to improve the efficiency and quality of the HTA process – particularly in how assessments are conducted and the timelines for decision-making. This also includes clarifying the roles and responsibilities of various stakeholders involved in HTA, COI and confidentiality.
- **Integration with the EU framework** is planned. The anticipated implementation of the common EU HTA framework is expected to lead to an alignment of national processes with EU standards. This will involve adapting current legislation to ensure compliance with new EU regulations and directives. Given that the EU HTA legal framework consists of regulations (EU HTAR and implementing regulations) that have a direct effect on Member States' internal legislation, the implementation needs to focus on adapting the existing legal framework to the new EU procedures. Additionally, old legal texts (for example, those mentioning the European Network for Health Technology Assessment (EUnetHTA)) need to be reconsidered following the end of the initiative.
- **Criteria for reimbursement and assessment** will be revised. Revisions may focus on refining the criteria used for the evaluation and reimbursement of health technologies – particularly in relation to the therapeutic value and economic evaluation of new interventions.
- Plans are in place to enhance **stakeholder engagement** in the HTA process, including increased participation from patient representatives and health-care professionals.

2.3 Governance of HTA in Greece

The bulk of the HTA process in Greece relies currently on two committees – the HTA Committee and the Negotiation Committee – supported by secretariats (the Negotiation Committee Secretariat only established recently) and a network of external assessors. The composition of the committees has been relatively stable over the past few years: the presidents have remained unchanged for at least two years, and only 1–2 members have changed on average each year.

Most key informants indicated that this committee-based structure does not and cannot constitute the basis of "true HTA" given the numerous limitations that come with it, of which those related to (limited) independence and (limited) capacity stand out.

A standalone HTA structure has been suggested as possibly being more appropriate, but stakeholders also acknowledged that setting up a new public entity – in general; not necessarily for health or HTA specifically – is not without political and administrative challenges. An ongoing study aims to provide information to the Ministry of Health on the potential need for a standalone HTA entity.

2.3.1 The HTA Committee

The HTA Committee is based in the National Organization for Medicines and operates under the Ministry of Health's oversight. It has 11 regular members, whose areas of expertise should cover the following, as specified in the legislation (Law 4512/2018, Article 248, paragraph 1):

a. pharmacology

b. clinical pharmacology

c. pharmacoepidemiology

d. evaluation of clinical studies or cost–effectiveness analyses in health technology

e. statistics/biostatistics

f. pharmaceutical legislation

g. preparation of therapeutic protocols or disease registers.

The HTA Committee is also supported by a legal counsellor. The law does not prescribe the number of members with expertise in each area other than stating that "a sufficient proportion shall be ensured between the specialties".

HTA Committee members are assigned by the Minister of Health through ministerial decisions.[1] They are expected to serve a three-year term, which may be extended. They can also be dismissed early by the Minister of Health "for a serious reason linked to the performance of their duties" (Article 248, paragraph 7). Committee members are automatically dismissed if they miss more than six committee meetings in six months, or if they breach the principle of impartiality or the duty of confidentiality.

It was suggested in the literature *(7)* and in the HTA Committee's Scientific Advisory Group review meeting that the principle of having HTA Committee members appointed or dismissed directly by the Minister of Health has the potential of (and can be perceived as) limiting the independence of the Committee. From the key informant interviews it emerged that the composition of the Committee has been relatively stable over the past years, with 1–2 changes every year; no concrete instance of potentially limited independence in the Committee's functioning has been suggested or identified in practice.

It is important to note that the HTA Committee members are not dedicated full-time to HTA activities; they perform the duties related to HTA in addition to their day-to-day roles. In practice, this translates into HTA Committee meetings usually taking place in the afternoon or evening, after members have finished their day jobs, and extending for as long as necessary to cover all agenda items. Their activity as part of the HTA Committee was remunerated from the general state budget, separately from the Ministry of Health budget, until November 2024; the budget law for 2025 will constitute a change of practice by bringing this provision in the Ministry of Health budget.

Kanavos et al. *(7)* argued that the number of members and mix of listed competencies for HTA Committee members are unlikely to be sufficient for managing a reasonable workload volume of HTA submissions, and for undertaking the required range of tasks – including post-decision duties, such as monitoring implementation and updating clinical guidelines.

All key informants recognized that HTA Committee members have put a lot of effort into ensuring that the HTA process is running as smoothly as possible, particularly over the past few years, and this shows in the reduction of the backlog of processing submissions, as also noted in the recent review *(5)*. There is a sense that HTA Committee members have done their best to overcome the operational limitations.

[1] The initial form of this legislative provision included criteria-based selection of Committee members according to a public expression of interest. This approach was rescinded by Law 4633/2019.

2.3.2 HTA Committee Secretariat

The HTA Committee is also supposed to be supported by a Secretariat of 10 members with scientific expertise or professional experience in areas a–g listed in section 2.3.1, working full time and either assigned from the Ministry of Health or recruited specifically for these purposes. At the time of writing, there are two full-time and two part-time Secretariat members. One full-time staff member supports the HTA Committee; one full-time staff member exclusively supports the subcommittee responsible for examination of individual patient requests for reimbursing unlisted medicinal products under the Special Health Package; one part-time staff member supports the Secretariat of the Minister of Health, and sometimes supports the subcommittee responsible for the examination of individual patient requests for reimbursing unlisted medicinal products; the other part-time staff member supports communication between the Ministry of Health's Department of Medicines and the HTA Committee. The Secretariat has no established physical office: its members work in different offices within the Ministry of Health.

The Secretariat staff members dedicated to the HTA process have responsibility for reviewing applications from marketing authorization holders (MAHs); onboarding external assessors; distributing HTA submissions for assessment; facilitating communication with the Negotiation Committee and various stakeholders both within and outside the Ministry of Health; and, occasionally, participating in the assessment of medicines.

It was noted by key informants that the term "secretariat" has a predominantly administrative connotation in the Greek public administration culture. This is important because it creates the expectation that the body is made up of "secretaries", conducting purely administrative tasks. The scientific or technical nature of the secretariat as understood in the HTA institutionalization language is largely unknown, and requires clarification in the Greek context.

All key informants acknowledged that the Secretariat is understaffed relative to the volume of work. Moreover, personnel changes since its establishment have affected continuity of operations, resulting in delayed assessments in the past. In 2021 there were four full-time staff in the Secretariat compared to only two at the time of writing.

However, it was also acknowledged that options for increasing the size of the Secretariat may not be straightforward in the current institutional setup, as they all carry some form of trade-off. Recruiting new civil servants is difficult given salary differences relative to the private sector, and entrance exams must be passed. Further, the HTA Committee does not have a budget, so it cannot employ staff on its own. Transferring staff from other public institutions is possible, but in practice these may be reluctant to let particularly skilled staff leave. Short-term civil service contracts are also possible, and the administrative process is easier than for permanent positions, but they are less attractive as they require periodic renewal. If the HTA Committee is repositioned institutionally – for example, as an independent agency (see section 2.2) – the balance of some of these trade-offs may change.

2.3.3 External assessors

Legislation stipulates that the HTA Committee is assisted in its work by external experts/evaluators, selected from among those registered on a list kept at the National Organization for Medicines or from academic or research institutions. In practice, the list of experts was used as a starting-point in 2018, but it proved to be outdated when taken over from the National Organization for Medicines; moreover, many of the experts on the list did not meet the strict COI requirements of the Greek HTA process, which excludes any relationship with commercial entities and extends to second-degree relatives. Only 10 experts on the original list could join the HTA process because of the COI rules. More experts applied to join the list recently, of which one was accepted (as of 31 January 2025).

Following the revised legislation on expert/evaluator selection, the HTA Committee has built a list of experts over time, based on professional contacts in clinical and academic institutions, who fulfil the criteria and cover areas of expertise required for assessments. At the time of writing, there are 82 experts on the HTA Committee's list of external assessors. Most are doctors or pharmacists, and six have postgraduate degrees in health economics (four at Master's level, one with a PhD and one professor). At least 15 experts are professors in universities.

For each evaluation, up to two external evaluators (in accordance with Law 4790/2021 (a revision of Law 4512/2018), Article 50) are chosen based on their scientific specialization and abilities in relation to the therapeutic category of the evaluated medicinal product. The HTA Committee may also delegate the preliminary recommendation for the evaluation to academic or research bodies (Law 4512/2018, Article 248, paragraph 4), although from the key informant interviews it appears this does not happen in practice. One HTA Committee member and one external assessor are typically assigned to conduct an assessment together. They divide the areas of the assessment relative to their expertise and write the assessment report together (see section 2.8).

The timing of payments for assessments is often inconsistent: remuneration for each assessed application is typically disbursed every two years. As such, external assessors are not paid for their work until a couple of years later. Key informants indicated that this is the case because the total compensation required needs to be agreed periodically between the Minister of Health and Minister of Finance, as the HTA Committee does not have a budget; in the past, there have also been administrative complications related to the fact that payments could not be made for work conducted in the past – only for work to be conducted in the future. In this context, key informants acknowledged that the external assessors' goodwill and commitment to the HTA process are essential for its functioning.

2.3.4 The Negotiation Committee

The Negotiation Committee is based within EOPYY, the sole purchaser of health-care services provided by the publicly funded National Health System. Other than negotiating prices or discounts for medicinal products reimbursed by EOPYY or procured by public hospitals, it can also conclude agreements with MAHs, and can give an opinion to the HTA Committee on the budgetary impact of the reimbursement of medicines.

Note that it is important to distinguish this Committee, which negotiates prices for medicines only, from the Negotiation Committee for the Reimbursement of Health Services, Medical Technology Products and Materials, which negotiates prices and terms of service for health technologies other than medicines. The latter does not conduct HTAs, and has had very limited exposure to HTA so far, although discussions about including medical devices in the HTA process are at a very early stage. Both committees are based within EOPYY.

Law 4633/2019 *(8)* amended Law 4512/2018 by introducing the prioritization in negotiations of "medicinal products or the extension of indications of medicinal products with an effect on the annual budget of more than €3 000 000, or with an annual cost of treatment per patient of more than €12 000". It also gave the Negotiation Committee powers to conclude a wide range of agreements with MAHs, including risk-sharing agreements and results-oriented agreements.

The Negotiation Committee has nine members, of which:

- three are experts or have experience in pharmacoeconomics, the pharmaceutical market or pharmaceutical legislation, appointed by the Minister of Health;
- one is a hospital pharmacist, appointed by the Minister of Health;
- one is a director or deputy director of a health region, appointed by the Minister of Health;
- two are members appointed by EOPYY;
- one is a member appointed by the National Organization for Medicines; and
- one is a member appointed by the Institute of Pharmaceutical Research and Technology.[2]

Members serve a three-year term; this can be renewed once or it can be renewed twice after a ministerial decision.

Committee members' activity was remunerated from the general state budget until November 2024 (see section 2.3.1).

The Negotiation Committee is supported by 1.5 full-time equivalent administrative staff and, since mid-2024, by two scientific secretaries.

Key informants indicated that the law has minimal provisions for interaction between the HTA Committee and the Negotiation Committee. In practice, communication between the two committees takes place over email – usually in cases when the Negotiation Committee requires additional information. Some key informants indicated communication between committees as a potential area of improvement in the current HTA process, particularly to make clearer in what circumstances such communication should take place and how.

[2] A subsidiary of the National Organization for Medicines that produces, imports and distributes medicines deemed to be indispensable for patient treatment and the protection of public health.

2.4 Capacity for HTA in Greece

2.4.1 Human, organizational and institutional capacity

Little factual, systematic and recent information is available on capacity for HTA production and use in Greece. The only analytical piece on HTA capacity that could be identified in the literature review was a conference abstract about the professional profiles of market access executives in Greece *(9)*.

Several sources refer to HTA capacity in passing, however, as being generally low. Extracts from the relevant literature identified on the topic are listed below.

- Mentis *(10)* called for "mapping of the available capacity (government, health system, universities, health professionals, guidelines organizations, patient bodies, etc.)".
- An unpublished report by the WHO Regional Office for Europe following a 2016 visit to Greece to assess HTA capacity noted that "At this point, the culture of evaluation using HTA is not well-developed in Greece. HTA activities are mainly being conducted at the academic level with publications in the academic literature. There is little evidence of the use of the reports generated by decision-makers."
- Tsakalogiannis et al. *(11)* reported in their qualitative study with HTA stakeholders published in December 2019 the interviewees' perceptions that "the related public organizations lack the culture of open communication and cooperation required, and are characterized from the lack of transparency and 'silo' mentality which is present in Greek public administration. Many participants expressed considerations on whether the country has the human resource capacity to implement international best practices and guidelines." In the same study, all interviewees agreed on the need to establish an HTA agency, but opinions differed on whether it should be a standalone body or a part of an existing organization.
- Kanavos et al. *(7)* noted, in reference to government HTA stakeholders, that "previous experience suggests that there is lack of collaboration, coordination failures, and significant bureaucracy, all of which need to be addressed urgently".
- Naoum et al. *(12*) reported that "regarding organizational issues, the participants identified issues in the operation of the committees due to inadequate support on both administrative and scientific levels, which hinder the ability of the committees to meet deadlines".
- Kourouklis and Vozikis *(13)* referred to "operational challenges related to inadequate administrative and scientific support".

Several postgraduate degrees offered by Greek universities include in their curriculum modules related to HTA (see Annex 4 for some examples). A new, entirely HTA-focused Master's degree is currently being evaluated by the Faculty of Medicine at the University of Athens. An application for the programme was submitted in January 2024.

It was suggested in the interviews that civil servants have a distinct incentive to enrol in existing Master's programmes, as this brings about a salary increase. However, the HTA Committee's Scientific Advisory Group review noted that there is also interest in such programmes from professionals in the private sector.

It was also pointed out that professional opportunities in the private sector (pharmaceutical companies and HTA consultancies) are more attractive financially than HTA roles in the public sector, although this is also the case in many other countries in the WHO European Region.

Key informants indicated that technical skills in the HTA Committee and the network of external assessors focus on assessing direct comparisons in randomized controlled trials, as these are the focus of the HTA submission template. Comparatively, expertise and experience are much more limited for nonrandomized designs, indirect comparisons (such as network meta-analysis) and health economics. Health economics was perceived by both the HTA Committee and the Negotiation Committee as the area with the most significant capacity gap. When network meta-analyses are presented as part of the submission, assessors may informally also seek to identify relevant published network meta-analyses.

The perception of key informants involved in the two committees is that HTA capacity in the pharmaceutical industry, reflected in the quality of submissions and direct interactions, has increased over time, although with differences across types of organizations: capacity in large multinational companies was perceived as greater than in smaller companies.

The perception of pharmaceutical industry representatives was similar in the sense that there are more qualified people with broader and deeper skills in the labour market than in the past; attracting them when the need arises was not perceived to be a challenge.

2.4.2 Data for HTA

No assessment of data for HTA in the Greek context was identified. Chantzaras et al. noted that "the availability of local epidemiological and costing data is limited" *(5)*. The Scientific Advisory Group confirmed this assessment, and signalled the importance of mapping data sources and improving data availability for HTA.

All key informants acknowledged that essential data – particularly epidemiological and service utilization data – are generally difficult to obtain, and that this constitutes a significant barrier to the effective production of HTA in Greece. The best available data are believed to come from the electronic prescribing system, and cover outpatient prescription medicines only. Interviewed members of the HTA Committee and the Negotiation Committee provided examples of practical situations during assessments or negotiations when it was difficult to verify data (for example, on health service costs) or to obtain data (for example, on the size of a specific patient population). The Negotiation Committee has established regular communication and data exchange with EOPYY and public hospitals for collecting service utilization data that can inform price negotiations.

The Ministry of Health aims to develop a national framework for enabling secondary use of health data in alignment with the European Health Data Space Regulation. Another ongoing study is exploring the role of a potential national health data access body.

The Committee for the Monitoring of Pharmaceutical Expenditure, Completion of Diagnostic/Treatment Protocols and Creation of Patient Registers was established in 2017 by ministerial decision. It has an advisory role, and among its tasks are monitoring public pharmaceutical expenditure – both outpatient and inpatient, evaluating measures taken to rationalize pharmaceutical expenditure and providing an opinion to the Minister of Health on measures to improve the effectiveness of pharmaceutical expenditure. An ongoing reform aims to establish this Committee by law, granting it all the defined responsibilities while introducing a new confidentiality clause.

The National Organization for Medicines revises the list with official medicine prices once a year. The lists are also made available on the Ministry of Health website.

The structural difficulties of collecting health data in the Greek health system were raised in the interviews. Data entry is defined in Greek legislation as a "medical act" that can only be performed by a doctor. Given health workforce shortages, high workloads and low pay, there are few incentives for doctors in the public health system to do it.

There are very few functional patient registries (such as the National Registry of Cystic Fibrosis and the National Registry for Spinal Muscular Atrophy and similar). The National Cancer Registry was launched and became operational in February 2025 *(14)*.

2.4.3 Available guidelines and decision support

The process and methods for HTA are covered to an extent in Law 4512/2018, with more details in the Rules of Procedure for the HTA Committee and Negotiation Committee. The HTA Rules of Procedure include the detailed steps of the HTA process, with a guide to the methods for assessment and a template for submissions.

Law 4512/2018 *(6)* stipulates that the HTA Committee may consider evaluations and decisions from other European countries, and must take into account assessments conducted within EUnetHTA (Article 249, paragraph 5).

There are no official guidelines for conducting economic evaluations in Greece. The economic evaluation section in the HTA Rules of Procedure is very brief. There is also no officially recognized incremental cost–effectiveness threshold to support decision-making based on this value domain.

No Greek EQ-5D quality of life value set was identified in the literature, although during the policy discussion at the stakeholder workshop in Athens in December 2024 it was mentioned that ongoing research is collecting data for estimating such a value set. Research prior to 2018 focused on the psychometric properties of the EQ-5D instrument in the Greek population, however *(15,16)*, but it did not lead to inclusion in the EuroQol database of EQ-5D value sets.

A recent academic paper by Greek authors *(17)* suggested, using an empirical econometric approach, a base

threshold of €27 117 per quality-adjusted life-year gained, ranging from €23 612 to €36 086 for alternative specifications. Chantzaras et al. argued that these gaps in economic evaluation guidance may be responsible for some variability in the economic evaluations submitted as part of the application dossiers *(5)*.

2.4.4 Access to HTA networks

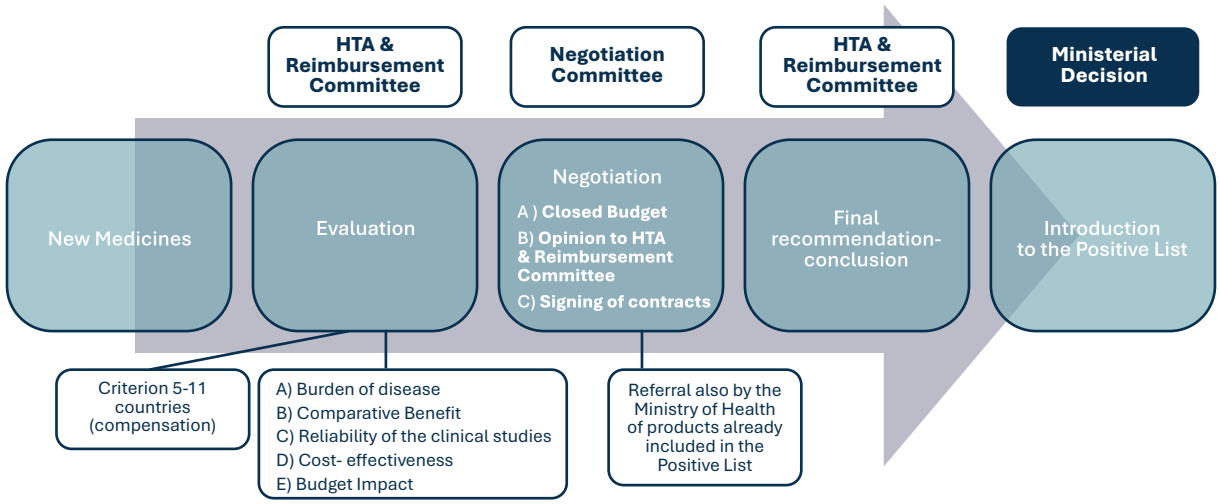
There is a history of Greek representation in EUnetHTA by staff from the Ministry of Health and EOPYY, and academics. The Greek HTA Committee was represented in EUnetHTA21 and in the Heads of HTA Agencies Group. Greece is represented in the EU Member State Coordination Group on HTA and its subgroups, and is also a member of the Heads of HTA Agencies Group.

Participation in meetings and activities of professional associations such as HTA international and the International Society for Pharmacoeconomics and Outcomes Research is reportedly more limited among government stakeholders than among patient and industry representatives.

2.5 An overview of the HTA process

Fig. 2 gives an overview of the HTA process in Greece. Briefly, the MAH submits the application dossier for the medicinal product. If the HTA Committee gives a positive recommendation following an assessment of clinical data, the dossier progresses to the Negotiation Committee for price negotiations with the MAH. If the price negotiation is successful, the dossier returns to the HTA Committee for the final recommendation and submission to the Minister of Health for decision.

Fig. 2. Overview of the HTA process in Greece



Source: Angelis AN. Strengthening the national HTA framework in Greece: unpublished presentation at the Athens Patients' Forum, 20 September 2024.

Before going into the details of the HTA process, several aspects must be acknowledged.

- Interviewed stakeholders agreed that the price negotiation component is the key determinant in the final recommendation of the HTA Committee, as it reflects the government's prioritization of controlling the pharmaceutical budget and the resulting clawback and payback levels. It has been argued that HTA in Greece cannot progress as long as it remains linked to the existing pricing and reimbursement system, and to its emphasis on clawback, discounts and rebates (obligatory paybacks), because the evaluation itself is irrelevant in the absence of a successful price negotiation. Representatives of patient organizations and of the pharmaceutical industry argued in the interviews for economic considerations to be one of the dimensions of interest in determining the value of health technologies, rather than the

determining consideration as it is now. It is clear from the setup of the HTA process that the negotiated price is the overarching consideration for the outcome of the process. While it is a positive that HTA and pricing and reimbursement are linked and not isolated, ideally both processes should be aligned in supporting the broader goal of universal health coverage *(18)*. As such, the nature of the link between HTA and pricing and reimbursement in Greece may need to be revised to support this goal.

- Patients can submit, through their physicians, requests for reimbursement of medicinal products yet to be listed. This is an exceptional form of early access route whose role is not to substitute the main access route, which includes the HTA process. Chantzaras et al. noted that "these requests are typically processed within a week, with approximately 76% receiving approval for reimbursement. Rejections usually stem from medical reasons alone, without economic criteria being considered. Moreover, all products approved through individual requests receive full reimbursement [...] This creates *an economic incentive for some companies to delay HTA application submissions, thus widening the submission time gap*" [emphasis added] *(5)*. Interviewed stakeholders acknowledged that this mechanism plays an important role in ensuring access to medicines for Greek patients, and that the mechanism should be kept in principle. They also agreed, however, that it disincentivizes MAH submissions to the HTA process and that the mechanism itself requires rethinking – particularly with reference to sharpening its aims – for HTA to develop.

The HTA process starts when the MAH submits a dossier in the Ministry of Health-approved standardized format and pays the assessment fee. For a medicinal product to proceed to evaluation, it must have an official price from the National Organization for Medicines. In practice this takes at least four months, and is a leading driver of time to reimbursement (see section 2.8).

The medicinal product must also be reimbursed already (medicinal products with regulatory data protection) in at least 5 of 11 named European countries[3] that have an HTA system (the 5/11 rule), although there are exceptions.[4] Key informants representing patient organizations and the pharmaceutical industry argued against this criterion on the grounds that it restricts access to medicinal products and weakens the relevance of the HTA process as a whole, as it is highly unlikely – particularly with the lack of Greek-specific data (see section 2.4.2) – that the HTA Committee's evaluation would differ from those of the other five countries, leading to the very high rate of positive HTA recommendations observed in Greece. The HTA Committee's Scientific Advisory Group members and other stakeholders also questioned the relevance of the 5/11 rule in the current context of strengthening the Greek national HTA system, and suggested revising it based on an assessment of its benefits and disadvantages to the Greek health system.

If the medicinal product is already reimbursed, the HTA Committee decides the order of reassessment referred by a ministerial decision, based on public health and budget impact considerations (HTA Rules of Procedure, Article 5, paragraph 1).

The **assessment** phase starts when, upon acknowledging the submission of a valid application following checks for completeness and clarifications (if necessary) within 15 days of submission, the HTA Committee assigns a rapporteur from its members and up to two external experts on the register of assessors. Key informants confirmed that, in practice, assessors are identified in a matter of hours, since the submission is first discussed by the HTA Committee.

External experts then have 30 days to review the information submitted by the MAH and report their recommendations to the rapporteur.

The rapporteur then has 10 days to submit their final recommendation to the HTA Committee, and the evaluation will be included as an item on the HTA Committee's next meeting.

The **appraisal** phase then begins. The HTA Committee has a maximum of three meetings to review the information and evaluate the medicinal product. Up to this point, clinical information is the focus of the evaluation. An absolute majority is required for all decisions; in the case of a tie, the chair of the HTA Committee votes twice. The minimum quorum for a valid meeting of the HTA Committee is seven members, of whom at least three have qualifications in areas a–c and two have qualifications in areas d–f listed in section 2.3.1.

There is no guidance in the HTA Rules of Procedure on how to reach a recommendation based on the assessment

[3] The countries are Austria, Belgium, Denmark, Finland, France, Germany, Italy, Netherlands (Kingdom of the), Portugal, Spain and Sweden.

[4] Exceptions are for orphan medicines, drugs for Mediterranean anaemia, vaccines, blood derivatives, stable combinations of known actives without data protection (if their price is lower), "clones", biosimilars, domestically produced medicines and drugs of well-established use.

other than "the committee shall apply the above criteria cumulatively and in combination with each other" (Article 3, paragraph 1).

Key informants indicated that, in practice, a positive or negative recommendation is reached by the HTA Committee in a single meeting for about 95% of assessment reports. For the remaining 5% of submissions, two or three meetings are needed to arrive at a recommendation.

If the HTA Committee's evaluation is positive, the medicinal product (and all submitted information) is referred to the Negotiation Committee to establish the budget impact. The Negotiation Committee assigns a rapporteur from its members, who informs the MAH and invites them to the first meeting.

A ministerial decision outlines the criteria that the Negotiation Committee considers in negotiations with the MAH:

- the amount of the clawback and the graduated rebate of the medicinal product concerned;
- the volume of its sales to other EU Member States;
- its selling prices in other EU Member States – in particular, if these are below its selling price in Greece and it is a medicinal product subject to protection;
- the end of the period of patent protection in the case of a protected medicinal product;
- the arrangements for concluding the agreements with the MAHs and the HTA Rules of Procedure;
- the method for establishing the reference prices, which are insurance prices for social security bodies and EOPYY; and
- the effect of the agreement on total pharmaceutical expenditure.

However, the legislation also stipulates that considering these criteria "is not binding [on the Negotiation Committee], which should assess them in the context of the negotiation and substantiate its position on the basis thereof, together with other factual elements".

In practice, the Negotiation Committee usually starts negotiations by proposing a significantly reduced price compared to the official price, based on a combination of clawback and discounts. Most negotiations are concluded within two negotiation meetings; overall, more than 90% of negotiations are successful. Two types of agreement can be drawn up: confidential discounts or closed budget agreements (in essence, cost–volume agreements with a fixed number of patients). Length of agreements is 36 months for new active substances and 18–24 months for product categories.

Within seven days of the last meeting with the MAH, the rapporteur draws up and sends their recommendation to the other Negotiation Committee members; this includes the outcome of the negotiation and a proposal on the content of the opinion to the HTA Committee. This opinion may include, at times, restricted indications if the negotiation was only partially successful – for example, for a specific indication, specific line of treatment or population subgroup. The Negotiation Committee votes by absolute majority; in the case of a tie, the chair votes twice.

Once the Negotiation Committee concludes its work, irrespective of whether a successful negotiation has been concluded, legislation stipulates that a recommendation is relayed back to the HTA Committee for their consideration in their final opinion. Negotiation details are not disclosed to the HTA Committee, which receives only a positive or negative opinion. There is a legislative gap on how the HTA Committee can handle a negative opinion. With clinical data evaluated by external assessors and the rapporteur, and budget impact evaluated by the Negotiation Committee, it is unclear when, how and by whom cost–effectiveness information is evaluated; this was also noted by Kanavos et al. *(7)*.

Members of the HTA Committee deliberate and vote to reach the final opinion, "which shall include a specific and detailed reason, including the recommendation" (Rules of Procedure, Article 6, paragraph 14).

If a negative opinion is issued, the MAH may reapply after three months with additional information and a justification for requesting a new evaluation.

As a general point about the timelines of the HTA process, Kanavos et al. *(7)* argued that while clear and transparent, the timelines legislated for the various steps in the HTA process appear to be largely arbitrary, do not correspond to the available implementation capacity, and are not monitored. However, over the past five years, timelines have been monitored regularly by the current HTA Committee and presented by its President to the stakeholders and the scientific community in various HTA meetings and congresses. At the time of writing, interviewed Committee members reported nearly no backlog of unprocessed submissions.

2.6 An overview of HTA methodology in Greece

The assessment phase considers five criteria specified in Law 4512/2018, with further details in the HTA Rules of Procedure.

The first criterion is clinical benefit, which includes severity, effect on mortality and morbidity, health-related quality of life, and safety. The HTA Rules of Procedure provide definitions for "major", "important" and "minor" benefits.

- Assessment of **added therapeutic value** follows an approach similar to that of the German Institut für Qualität and Wirtschaftlichkeit im Gesundheitswesen, comprising four levels: major, significant, marginal and non-quantifiable.
- **Innovation** is rated using the five-level Ahlqvist-Rastad innovation rating system. Official documents do not specify how this information is used in the assessment, a gap also noted by Kanavos et al. *(7)*. Key informant interviews suggested that this information is discussed holistically with all other considerations.

The second criterion is reliability of clinical data. The Grading of Recommendations Assessment, Development, and Evaluation methodology is used and applied for each outcome (including mortality, morbidity and quality of life) so that the final judgement on clinical data quality (high, moderate, low or very low) refers to the set of studies evaluated for each outcome. The quality of randomized controlled trials is considered the highest grade, but this can be reduced if risk of bias in design or conduct, inaccurate data, heterogeneity across included studies, relevance or publication bias are present. The HTA Rules of Procedure contain specific forms that assessors complete for each consideration.

The third criterion is the cost–effectiveness ratio. The MAH is required to provide economic evaluation data as part of the submission; however, it emerged from the key informant interviews that this information is given rather limited consideration, if any. According to the HTA Rules of Procedure, the final recommendation should include only clinical aspects of medicine, and no mention should be made of economic evaluation or the cost of treatment.

The final criterion is budgetary impact. The MAH is required to submit budget impact calculations, which are considered by the Negotiation Committee; however, as outlined in the section 2.5, submitted budget impact calculations are used rather as a starting-point in the price negotiations. Moreover, they cover only the budget impact on pharmaceutical expenditure, without considering potential implications on health service expenditure.

Naoum et al. *(19)* reported, based on their qualitative study with five former and current members of the HTA Committee, that "the institutional framework is considered to be adequate in its clinical parameters, but requires some improvements in the pharmacoeconomic ones".

2.7 Stakeholder involvement in the HTA process

Other than representatives of government bodies (the Ministry of Health, National Organization for Medicines, EOPYY and the Institute of Pharmaceutical Research and Technology), legislation mentions that patients and scientific associations have the option to be invited or to request participation in HTA Committee meetings to share their views. The literature noted that such participation is infrequent in practice *(5)*, and key informants confirmed this.

A 2019 report by the WHO Regional Office for Europe *(20)* outlined concerns raised by patient representatives regarding their lack of permanent representation in the HTA Committee or meaningful participation in the process. This was also documented in the literature, but from the presentation of findings by Souliotis et al. *(21)* from an online survey of patient association members, there seems to be a need for patient readiness support to ensure more participation in health decision-making generally and in the HTA process in particular. Another study by Naoum et al. *(19)* reported patient representatives' inclination towards expressing their views through inclusion in the HTA process.

Key informant interviews confirmed that no guidance or procedures are in place for stakeholder engagement, and acknowledged that it is uncommon for other stakeholders to be invited to HTA Committee meetings. Interaction between the HTA Committee and professional societies takes place in the form of the HTA Committee responding to email messages it receives.

Interviewed representatives of the pharmaceutical industry reported that formal interaction with the HTA process is limited to meetings with the Negotiation Committee and communication of the final decision.

Interviewed representatives of patient organizations reported that they have no formal interaction with the HTA process, which appears from the outside as a "black box". They expressed a strong preference for formal involvement of expert patients (as opposed to "naive" patients) in future developments of the HTA process, including in developments related to the EU HTAR.

2.8 HTA outputs and outcomes

2.8.1 HTA submissions

Chantzaras et al. *(5)* analysed in detail the timelines of all HTA submissions since 2018, after a previous analysis by Beletsi et al. *(22)* had examined overall duration between marketing authorization and ministerial decision. Overall, the time taken to process HTA submissions has improved: in January 2020, 89 applications were awaiting clinical data assessment and 106 were awaiting price negotiations for reimbursement; by February 2023, the backlog had reduced to 8 awaiting clinical data assessment and 44 awaiting price negotiations.

Table 2 outlines the median number of days for each stage in the HTA process. The time between marketing authorization and ministerial decision on reimbursement is longer than 1.5 years for new active substances, but most of it is accumulated before initiating the HTA process, in the pricing stage. This finding is aligned with the overall perception of key informants, as outlined above, that timelines and productivity have improved to the point that currently there is nearly no backlog of unprocessed submissions.

Table 2. Median number of days by type of product and step in the HTA process

Products/stage	All new active substances	New active substances excluding orphan medicines	Orphan medicines	Known active substances/ well-established uses/hybrids	Biosimilars/vaccines	Fixed-dose combinations	Generics
Number of products in the positive list of February 2023	53	40	13	10	4	4	43
	Median number of days						
From marketing authorization to pricing	243	237	248	153	196	169	140
From pricing to HTA submission	145	145	150	19	102	24	81
From submission to clinical data assessment	155	114	203	176	53	121	–
From clinical data assessment to Negotiation Committee opinion	69	60	170	40	127	328	–
From Negotiation Committee opinion to HTA Committee recommendation	14	14	14	14	11	8	–
From HTA Committee recommendation to ministerial decision	11	11	11	8	3	9	13
From ministerial decision to inclusion in the positive list	17	17	17	17	10	14	45
Total from marketing authorization to inclusion in the positive list	816	666	1032	435	685	796	326

Note: Generics do not undergo clinical data assessment; therefore, data are not reported in some cells in the final column.
Source: Chantzaras et al. *(5)*.

2.8.2 The HTA report

The result of the assessment is formalized in an HTA report, which is discussed by the HTA Committee. The report has a fixed structure, which is not available in the public domain. It includes the following categories:

- description of the medicinal product;
- disease and therapeutic guidelines – including population, intervention, comparator, outcome (PICO) data;
- data on clinical effectiveness and safety;
- financial data (price, cost per patient, budget impact, cost–effectiveness information and reimbursement in other countries);
- other data (such as off-label administration or other clinical trials under development);
- literature; and
- assessment of added therapeutic value based on criteria in the legislation.

HTA Committee members indicated that other criteria such as equity or social aspects are usually also discussed and considered.

2.8.3 Recommendations of the HTA Committee

Table 3 summarizes the recommendations of the HTA Committee between July 2018 and February 2023 *(5)*. Across all new active substances, 66% of recommendations were positive, 24% were positive with restrictions (usually on population subgroups or dosage) and 10% were negative. Key informants suggested that the majority of "positive with restrictions" recommendations tend to stem from HTA Committee deliberations rather than from failed price negotiations with the Negotiation Committee; however, a detailed analysis is not available.

Table 3. Summary of HTA Committee recommendations for new medicine/new indication applications by type of medicinal product (July 2018 to February 2023)

	Type of medicinal product application					
	New active substances (excluding orphan drugs)	Orphan drugs	Biosimilars/ vaccines	Known active substances/well-established uses/ hybrids	Fixed-dose combinations	Generics
	New medicine/new indication application					
Total number of applications	176	43	50	117	40	482
	Recommendation for reimbursement					
Negative	10.2%	8.6%	4.0%	14.7%	10.5%	2.5%
Positive with restrictions	22.9%	28.6%	22.0%	24.8%	34.2%	2.3%
Positive	66.9%	62.9%	74.0%	60.6%	55.3%	95.2%

Note: Despite varying in function and therapeutic characteristics, biosimilars are grouped with vaccines, and known active substances with well-established use and hybrid products. This grouping is due to their uniform processing under the Greek HTA system, where they adhere to identical regulatory procedures.

Source: adapted from Chantzaras et al. *(5)* – data from supplementary tables S1 (number of applications) and S2 (recommendations).

2.8.4 The Minister's decision

For the final decision, the Minister of Health may decide differently from the opinion of the HTA Committee, with a specific justification. In practice, key informants confirmed that the Minister's decision has always been aligned with the HTA Committee's recommendation.

The Minister's decision may be revised, but not earlier than one year after its entry into force (Law 4512/2018, Article 249, paragraph 3).

The Minister's decision may be appealed in court, although it is not clear whether this has happened to date.

There appear to be no explicit mechanisms for monitoring the implementation of decisions; key informants indicated that EOPYY and the Ministry of Health monitor trends in pharmaceutical sales, but it is unclear how this information is used.

Following the ministerial decision, which incorporates any restrictions set by the HTA Committee (see section 2.8.3), mandatory prescription protocols are issued and integrated into the electronic prescribing system for reimbursement – the Department of Medicines in the Ministry of Health updates the positive drug list. The Department of Therapeutic Protocols and Patients' Registries in the Ministry of Health updates the therapeutic protocol, if needed *(23)*. The Government Centre for Social Security makes the updates (including any prescribing restrictions) in the electronic prescription system.

For medicines prescribed in the outpatient system, it is worth noting that not all prescribing indications may be enforceable – for example, if they refer to biological parameters such as below/above a certain blood sugar level. This is because, at the time of writing, such information is not integrated online at the point where the physician issues the prescription, and the dispensing pharmacist has no means of verifying this with the patient in front of them. An ongoing digital reform aims to link diagnostic information with the electronic prescription system, which would facilitate the enforcement of such prescribing restrictions.

For medicines prescribed in hospitals, at the time of writing there is no electronic system that enforces the application of therapeutic protocols. Stakeholders indicated that the electronic prescription digital platform in hospitals is scheduled for launch in Q4 2025.

After the Minister of Health issues their decision, a summary of the opinions of the HTA Committee – including the reasons underpinning the opinion – are made available on the National Organization for Medicines website "after information relating to trade secrets and personal data has been deleted" (HTA Rules of Procedure, Article 13). The HTA report and underlying data are not made public.

Written minutes of HTA Committee meetings are taken and kept with the Secretariat. These are not made public, and there is no provision in legislation that they may be made public on request.

2.9 COI

The members of both the HTA Committee and the Negotiation Committee are required to declare in writing, immediately after their appointment and during their term, any interests of any kind of themselves or their relatives up to the second degree of consanguinity or affinity that may be related to the pharmaceutical industry. Similar provisions apply to the external assessors.

Key informants are aligned in perceiving the COI regulations as overly strict because they prohibit any association with commercial entities up to second-degree relatives, with practical implications for the HTA process – including difficulty in identifying external assessors without conflicts.

Stakeholders also noted that Greek COI legislation is more stringent than the EU HTAR implementing regulation on COI *(24)*; in practice, this makes it very difficult for the HTA Committee to include relevant experts. If the national and the EU COI rules were aligned, appropriate experts without relevant COI could be actively involved in the HTA process. Otherwise, a problematic situation will arise where an expert or Committee member may be in a position of COI from the perspective of Greek legislation while at the same time free from COI from the perspective of the EU HTAR, and could therefore participate in the joint central EU processes but not be considered fit for participation in the national process.

3
Alignment with the EU HTAR

This chapter starts with a summary of the EU HTAR *(1)* and then discusses areas that require attention for aligning the current Greek HTA system with the requirements of the EU HTAR. It is important to acknowledge that, in line with the scope of this report, it focuses only on this issue of alignment with the EU HTAR. As the previous chapter showed, based on the literature and the perceptions of interviewed key informants, there is no shortage of recognized areas for improvement in the Greek HTA system and corresponding potential solutions. The areas discussed below should be viewed as an absolute minimum for achieving alignment with the EU HTAR, and not as an exhaustive, transformative plan for HTA in Greece. Moreover, this section focuses on identifying the areas essential for alignment with the EU HTAR but does not go into the detail of exactly what to change or do, or how. This level of detail relies on numerous contextual factors, which should be considered and ultimately decided upon by the Ministry of Health.

That said, alignment with the EU HTAR provides a unique and substantial opportunity to develop the Greek HTA system, bringing it considerably closer to where stakeholders want it to be. The HTA Committee's Scientific Advisory Group in particular emphasized that alignment with the EU HTAR should be viewed as a "golden opportunity" for advancing HTA in Greece.

3.1 A brief overview of the EU HTAR

The EU HTAR entered into force on 11 January 2022 and applies from 12 January 2025. It establishes a common framework and procedures for cooperation of EU Member States on health technologies, as well as common rules and methodologies for assessing health technologies. The EU HTAR explicitly aims to reduce duplication, so that "information, data, analysis and other evidence" for joint clinical assessment are submitted by health technology developers only once at the EU level (Article 1(1), point (b)). It also reaffirms Member States' exclusive competence on the "management and delivery of health services or medical care or the allocation of resources assigned to them", including "to take decisions on the use of a health technology in their specific national health context" (Article 1(2)).

The EU HTAR identifies four areas of joint work.

- **Joint clinical assessment** (JCA) is defined in the EU HTAR as "the scientific compilation and the description of a comparative analysis of the available clinical evidence on a health technology in comparison with one or more other health technologies or existing procedures, in accordance with an assessment scope agreed pursuant to this Regulation, and based on the scientific aspects of the clinical domains of HTA". The assessment scope refers to the "patient population, intervention, comparators and health outcomes requested jointly by Member States" (Article 2).
- **Joint scientific consultations** (JSCs) are conducted "to exchange information with health technology developers on their development plans for a given health technology. Those consultations shall facilitate the generation of evidence that meets the likely evidence requirements of a subsequent joint clinical assessment on that health technology" (Article 16(1)).
- One area of focus is identification of **emerging health technologies**, particularly to address "the estimated clinical impact and the potential organisational and financial consequences of emerging health technologies for national healthcare systems" (Article 22(1)).
- **Voluntary cooperation on HTA** refers to cooperation and exchange of scientific information among Member States on, among others, non-clinical assessments, collaborative assessments on medical devices and in vitro diagnostic medical devices, and HTAs on other types of health technologies than those within the scope of the EU HTAR (Article 23).

The EU Member State Coordination Group on HTA is responsible for carrying joint work within the scope of the EU HTAR, including adopting methodological guidance and procedural steps, and ensuring appropriate involvement of stakeholder organizations and experts in its work. It is composed of Member State representatives – in particular, those from HTA authorities and bodies, who can be appointed on an ad hoc or permanent basis (Article 3(2)). Currently, the president and vice-president of the Greek HTA Committee represent Greece in the Coordination Group.

The EU HTAR also establishes a stakeholder network to support the Coordination Group and an electronic platform, comprising a webpage and secure systems for the exchange of information within the Coordination Group and its subgroups, and with external stakeholders.

3.1.1 JCAs

JCAs will provide evidence on the four clinical domains of an HTA only: problem identification and current technology; technical characteristics of the technology; relative safety; and relative effectiveness. Non-clinical domains are also identified by the EU HTAR but remain outside its scope: cost and economic evaluation, and ethical, organizational, social and legal aspects of the technology.

It is essential to stress that the JCA report and accompanying summary report will only describe the relative effects of the health technology, and the degree of uncertainty of the relative effects (Article 9(1)). The reports will not contain any value judgement or conclusions on the overall clinical added value of the health technology.

JCAs will cover, as a matter of principle, medicinal products, medical devices and in vitro diagnostic medical devices. They will be conducted for medicinal products for which the application for a marketing authorization is submitted after the following dates:[5]

- 12 January 2025 for new active substances with therapeutic indication the treatment of cancer and medicinal products regulated as advanced therapy medicinal products;
- 13 January 2028 for medicinal products designated as orphan medicinal products; and
- 13 January 2030 for all other medicinal products, including medical devices and in vitro diagnostic tests (Article 7).

The EU HTAR outlines the principles and essential steps in conducting and using JCAs. An implementing act – Commission Implementing Regulation (EU) 2024/1381 *(25)* – lays down detailed procedural rules for JCAs, including the format and templates for dossiers with information, data, analyses and other evidence to be provided by health technology developers for JCAs, and the format and templates for JCA reports and summary JCA reports.

In essence, conducting a JCA comprises four steps, outlined as follows in the EU HTAR.

- **Initiation** (Article 8): the EU Member State Coordination Group on HTA's subgroup on JCAs appoints from among its members an assessor and a co-assessor, taking into account the scientific expertise required for the assessment. The subgroup initiates a scoping process to identify the parameters for the assessment scope – PICO data – so that the assessment scope is inclusive and reflects Member States' needs.
- **Dossier submission** (Article 9 and 10): the health technology developer submits a dossier with "complete and up-to-date information, data, analyses and other evidence [...] to assess the parameters included in the assessment scope". The content of the dossier is covered in annexes to the EU HTAR (Annex I for medicinal products and Annex II for medical devices) and in the implementing act *(26)*.
- **Assessment** (Article 11): based on the submitted dossier, the assessor – with the assistance of the co-assessor – prepares the draft JCA and summary reports. The Coordination Group then endorses the draft reports. For medicinal products, this takes place no later than 30 days following the adoption of a European Commission decision granting a marketing authorization; for medical devices, this takes place according to procedural steps adopted by the Coordination Group. Comments on the draft report are received from the JCA subgroup members, patients, clinical experts and other relevant experts; the health technology developer can only signal "any purely technical or factual inaccuracies", but may not provide comments. Then, the assessor and co-assessor prepare revised draft reports and submit them to the Coordination Group.
- **Finalization** (Article 12): the Coordination Group reviews the revised reports and aims to endorse them by consensus.

Member States have the following **obligations** in relation to JCA (Article 13):

- to "give due consideration" to the published JCA reports – this does not affect Member States' competence to draw conclusions on the overall clinical added value of a health technology in their context;
- to annex the dossier submitted by the health technology developer to the national HTA documentation;

[5] However, products may be subject to JCAs at an earlier date, provided that the technology has the potential to address an unmet medical need or a public health emergency, or has a significant impact on health-care systems.

- not to request at the national level any information or evidence that has been already submitted at the EU level, although the EU HTAR allows for requesting of clarifications from the health technology developer on submitted evidence;
- to "immediately share" with the Coordination Group any information or evidence they receive from the health technology developer at the national level as part of the JCA; and
- to provide information to the Coordination Group on the national HTA in respect of a health technology which has been subject to a JCA, within 30 days of its completion, particularly on how the JCA report has been considered in the national-level HTA.

3.1.2 JSCs

The EU HTAR states that JSCs will facilitate the process of JCAs, but guidance offered as part of a JSC is not binding on the technology developers or on HTA authorities and bodies.

Conducting a JSC comprises three essential steps, set out as follows in the EU HTAR.

- **Request** (Article 17): the health technology developer submits a request for JSC to the Coordination Group. Requests are selected by the Coordination Group within 15 working days after the end of each request period, based on criteria which include "unmet medical needs", "first in class" and "major Union-wide added value".
- **Preparation** of the JSC outcome document (Article 18): a designated subgroup will be identified from which an assessor and co-assessor from different Member States to conduct the JSC. The health technology developer submits the documentation in line with procedural guidelines. The assessor and co-assessor prepare the draft outcome document. Comments and/or inputs are received from subgroup members, the health technology developer, patients, clinical experts and other relevant experts. The final draft outcome document, including any recommendations specific to individual Member States, is submitted to the Coordination Group.
- **Approval** of the JSC outcome document (Article 19): the Coordination Group approves the finalized draft of the outcome document and sends it to the health technology developer within 10 working days.

3.2 Alignment of the Greek HTA system with the EU HTAR

Building on the summary of the EU HTAR in section 3.1, several broad types of interaction, or contact, are expected between the Greek HTA system and the EU HTAR.

- As members of the EU Member State Coordination Group on HTA, Greek representatives are expected to articulate preferences on the assessment scope of every JCA – essentially, outlining the PICO data requested by Greece to be considered in the JCA.
- As users of JCAs, Greek HTA structures are expected to interpret, use and report back to the European Commission on the use of JCA outputs in health-care decision-making.
- As contributors to JCAs and JSCs as (co-)assessors, Greek HTA structures are expected to provide experts who can take responsibility for conducting JCA- and JSC-related activities in line with EU HTAR provisions.

This is also the chronological order in which interactions are expected to develop from January 2025. Keeping in mind these three types of interaction, the following sections discuss alignment between the current Greek HTA system and the requirements of the EU HTAR, following the same structure as the HTA landscape in Chapter 2. Importantly, they focus on "demand-side" considerations emerging from the application of the EU HTAR, and assume that everything else stays the same in the Greek HTA context.

Table 4 summarizes the minimum interventions required for alignment with the EU HTAR, as well as proposed considerations for developing the HTA system in Greece. The latter rely on findings from the situation analysis but remain indicative and do not amount to an exhaustive, transformative plan for HTA in Greece. The essential point is that alignment with the EU HTAR provides a unique opportunity for the Greek Government to strengthen considerably the capacity, impact and relevance of its HTA system.

Table 4. Proposed actions for developing the Greek HTA system and aligning with the EU HTAR

Area	Minimum intervention required for alignment with EU HTAR	Additional considerations
Overall strategy	Deciding on the extent to which, and how, Greece will use JCA and JSC outputs for health-care decision-making	Using alignment with the EU HTAR as a golden opportunity to articulate a strengthened vision for the HTA process and its role in decision-making in Greece
Legal framework	Specifying how JCA reports will be used in the HTA Committee's deliberations Introducing a mechanism for monitoring and reporting to the European Commission how EU HTAR outputs are used Introducing a mechanism for selecting national assessors, co-assessors and other experts for JCAs and for JSCs, and a direct mechanism for their compensation to enable country support in the centralized process and building up of national capacity Specifying which structure will evaluate JCA reports and how its capacity will be aligned with this task Aligning COI provisions with EU HTAR COI provisions Introducing the PICO exercise for JCA, other submissions and possibly for early access in national legislation Defining patient and expert involvement in PICO definition	Considering revising value domains in the HTA framework if HTA methods are revised (see the Methods section below) Revising HTA legislation to amend existing gaps and contradictions, including considering rewriting completely to reflect evolving realities rather than making discrete adjustments
Governance	Specifying which structure(s) in the Greek HTA system will conduct activities required for the EU HTAR – providing inputs into JCAs and JSCs, acting as (co-)assessors, reporting on EU HTAR implementation Also specifying how (co-)assessors will be remunerated for their work	Identifying options for strengthening the autonomy of HTA structures, particularly by way of attracting and retaining sufficient staff entirely dedicated to HTA activities
Capacity	Allocating sufficient staff and resources to the Greek HTA structures to support EU HTAR activities Given the difficulty of predicting work burden at this early stage of EU HTAR implementation, considering adopting flexible arrangements until workflows become more predictable Strengthening technical skills in areas requiring imminent interaction with the EU HTAR: PICO formulation, indirect treatment comparisons	Conducting a comprehensive HTA capacity assessment in Greece Strengthening capacity for health economics among Greek HTA structures Strengthening process management skills and capabilities among HTA structures Accelerating improvements in the availability and quality of data for HTA – particularly health service use and unit cost information Developing technical and organizational skills for HTA applied to medical devices
Process	Updating the Greek HTA process, and corresponding document templates for submission and assessment, based on decisions in how JCAs and JSCs are used in Greek health-care decision-making (see the Strategy section above) Considering alignment of templates with other national types of application not falling under the JCA scope Developing a web portal for HTA application submission, and deciding which parts may be made available to the MAH and the public Enabling the relevant data to be extracted to report back to the European Commission through this database	Considering options for strengthening the relevance of the assessment component in the HTA process relative to the price–volume negotiations Revising the 5/11 rule based on a systematic assessment of its impact on the Greek health system and its potential relevance, in the new context of a strengthened national HTA Greek system as well as a centralized EU process

Table 4 contd

Area	Minimum intervention required for alignment with EU HTAR	Additional considerations
Methods	No changes required for EU HTAR implementation	Considering the extent of desirable alignment between value domains in the Greek HTA system and value domains in the EU HTAR Strengthening methodological guidance for economic evaluations – for example, developing a reference case for economic evaluations and decision support rules for economic evaluation information Developing guidance and templates for PICO exercises both for JCA/JSC and early access programmes Updating the HTA methods guide based on the above, as needed
Stakeholder involvement	Specifying which types of stakeholders are involved, and how, in formulating the Greek PICO request for every JCA	Developing an HTA stakeholder engagement framework and policy that makes clear the purposes, modalities and procedures for engaging with health system stakeholders
Outputs and outcomes	Amending the HTA report structure to include information on how EU HTAR outputs (such as JCA reports) have been incorporated in the final recommendation	Developing a routine monitoring and evaluation system of HTA recommendations and decisions
COI	Conducting a legal comparative analysis between the Greek legislation on COI for HTA and provisions in the EU HTAR implementing act on COI to identify areas requiring alignment for the purposes of empanelling expert assessors and committee members	Not applicable

3.2.1 Legal framework for HTA

The current HTA system in Greece is heavily coded in Greek legislation, so it is expected that alignment with the EU HTAR will also need to be coded into Greek legislation. However, as shown in Chapter 2, key informant interviews indicated the perception that the current HTA legislation (while detailed in some areas) has some gaps, and is difficult to follow given the numerous revisions and updates. Further, it was noted that in some areas its practicality could be improved.

Revising the legal framework provides an opportunity for a fresh, ample rewriting of legislative provisions for HTA in Greece with a view to addressing these areas coherently while also achieving alignment with the EU HTAR. By contrast, a piecemeal approach of operating the minimum number of discrete, specific changes to existing legislation may be more expedient but may also result in more legislative contradictions and misalignments. This matter of a strategic approach to legislative revisions is ultimately for consideration and decision by the Ministry of Health.

The expected legal changes relative to the expected types of interactions with the EU HTAR are summarized in Table 5. Further details are provided in the sections below.

Table 5. Expected legislative impacts on Greek HTA legislation

Type of interaction with the EU HTAR	Legislative provisions to be introduced	Updates to existing legislative provisions
Inputting into the assessment scope of every JCA	Specifying a mechanism and structure responsible for gathering, synthesizing and submitting information for both the JCA scope – particularly PICO data – and endorsing a JCA report	–
Interpreting and using JCA outputs for health-care decision-making	Specifying how JCA reports will be used in the HTA Committee's deliberations Introducing a mechanism for monitoring and reporting to the European Commission how the EU HTAR has been used	Specifying which structure will incorporate JCA reports and how its capacity will be aligned with this task Revising value domains in the Greek HTA framework, including assessment criteria Revising dossier submission templates Revising assessment templates Aligning COI provisions with EU HTAR COI provisions
Contributing to producing JCAs or JSCs	Introducing a mechanism for selecting national assessors, co-assessors and other experts for JCAs and for JSCs, and a direct mechanism for their compensation to enable country support in the centralized process and building up of national capacity	–

3.2.2 Governance of HTA

The EU HTAR introduces a new stakeholder into national HTA systems: the EU Member State Coordination Group on HTA. Member States will have regular interaction with the Coordination Group. Specifically, the EU HTAR outlines responsibilities for designated representatives in the Coordination Group including:

- providing inputs to defining the scope of the assessment – particularly PICO data – with the aim that the JCA addresses Member States' needs (as far as possible);
- sharing national assessment reports on a health technology not referred to in Article 7 of the EU HTAR – in particular, on health technologies for which the report on emerging health technologies referred to in Article 22 has concluded that they are expected to have a major impact on patients, public health or health-care systems (Article 23(5));
- providing national assessment reports on health technologies evaluated as part of the JCA within 30 days after its completion (Article 24).

Several aspects related to the relationship with the Coordination Group require attention. It is important to **ensure continuous representation in the Coordination Group**. Currently, the president and vice-president of the HTA Committee represent Greece in the Coordination Group, but there is no formal, predictable link between the Greek HTA process and representation in the Coordination Group and its subgroups (such as for medical devices). In the interest of ease and predictability, there may be value in establishing such a formal link – for example, that the president and vice-president of the HTA Committee automatically become the Greek representatives in the Coordination Group, to ensure continuous representation and minimize bureaucratic burden.

Establishing functional and continuous communication with the Coordination Group is vital. The intensity of communication between Greek HTA structures and the Coordination Group is expected to increase substantially from January 2025, given the responsibilities mentioned above, and is very likely to exceed the individual capacity of the two designated representatives. There is value in considering which Greek HTA structure will take over this communication function. It would be most straightforward to use an existing structure like the HTA Committee Secretariat rather than introducing a new structure; in any case, the corresponding responsibilities would have to be made clear and allocated sufficient resources – particularly staffing (see section 3.2.3).

Meeting the responsibilities ascribed by the EU HTAR requires consideration of the following aspects, all amounting to new roles and responsibilities for Greek HTA structures.

- A Greek process and timeline for providing inputs into each JCA needs to be established. This entails identifying the administrative structure, process and methods that will determine both the PICO data that Greece will request in every JCA and how Greek representative will be mandated to endorse JCA reports. Both should reflect Greece's context and policy interest relative to the health technology in question. Notionally, the process may be as simple as the two Greek representatives in the Coordination Group formulating scientific opinions, but there is ample room for a more comprehensive, participative and legitimate process than this. The HTA Committee can doubtless have a central role, but it is very likely that more stakeholder perspectives may also have to be sought, such as those of patients and health-care professionals.
- How JCAs will be used in the Greek HTA process should be specified. This is a matter of strategic decision for the Ministry of Health: at its simplest, a JCA report can be just an additional piece of evidence, but the Ministry may wish to make more use of it. The clinical domains of the HTA value framework in Greece will have to be adjusted (Article 249, paragraph 1 of Law 4512/2018 *(6)*) so that health technologies submitted through both routes (national and EU HTAR) are evaluated in a consistent manner on clinical domains. This will also have implications for practical aspects of the HTA process, such as the content of the submission dossier and of the HTA report, given that the JCA report must be annexed to the national HTA report and sent to the Coordination Group.
- The process of identifying, enrolling and remunerating (co-)assessors for (co-)producing JCAs or JSCs should be set up. This entails making clear how the Greek experts contributing to the JCA or JSCs will be identified and compensated for their work when Greece is asked to participate. One aspect to consider is whether the existing pool of expert assessors (see section 2.5) is sufficient or needs to be expanded – particularly with a view to assessing nonrandomized evidence in oncology (see section 3.2.3) and COI. The EU HTAR *(1)* specifies that JCA reports are expected to be endorsed by the Coordination Group within 30 days following the adoption of a Commission decision granting a marketing authorization (Article 11(1), point (a)); the level of effort is expected to be six months' full-time equivalent work for assessor and co-assessor. As such, it will be essential for a quick and effective process to be in place to identify suitably qualified assessors.

3.2.3 Capacity for HTA

Before discussing the EU HTAR's implications for capacity, it should be reiterated that a formal capacity assessment across the entire Greek HTA system and across all HTA competencies has not been conducted to date. While such an assessment would be invaluable at this point, it is also resource-consuming, and would take several months.

Capacity in the context of HTA can be approached from several perspectives. A narrow, technical perspective refers to the skills required for conducting clinical and economic assessments. A comprehensive competency framework was proposed recently by Dixon et al. *(26)*, developed in the context of India. A broader perspective looks at skills for the HTA process as a whole, and distinguishes between "core" and "soft" skills (Fig. 3). A comprehensive perspective refers to what is expected from all types of health system stakeholders in relation to the HTA process – including high-level decision-makers, users of evidence (such as patients, the public and judiciary courts), producers of evidence (such as researchers) and knowledge brokers (such as priority-setting institutions and the media) – see Annex 5.

Fig. 3. A framework for HTA skills development

Source: adapted from Bidonde et al. *(27)*.

In this context, the considerations below are informed only by the landscape analysis, and should be viewed as an absolute minimum. They also assume no changes in the HTA system unrelated to the EU HTAR. If, for example, the Greek Government decides to prioritize assessment of health technologies with a completed JCA to accelerate access for the Greek population, such a decision would be likely to increase the workload of the Greek HTA structures significantly, with implications for the number of HTA Committee members.

One candidate area for capacity strengthening relates to stakeholder engagement. From the perspective of Greek HTA structures, there will be more stakeholders to manage: the EU Member State Coordination Group on HTA, potentially consulting new stakeholders to inform the Greek PICO data request for the assessment scope of every JCA, and requesting further information from the health technology developers/MAHs if needed. It is unlikely that the HTA Committee Secretariat in its current form can absorb such additional responsibilities. As a result, the administrative component of the secretariat function of the HTA process will require strengthening in staffing and, potentially, skills – notwithstanding potential strengthening of other areas in a revised Greek HTA framework, such as economic, ethical, organizational, social and legal aspects of evaluation.

Technical capacity in existing Greek HTA structures will also require strengthening in several respects. In general terms, they will need to become uniformly familiar with and ready to use the EU HTAR and the Coordination Group's guidance documents. From the perspective of the size and expertise of the HTA Committee (or future structure with a similar function), there is value in considering an increase in the number of Committee members – particularly if the Committee is expected to have a role in formulating PICO data for the JCA assessment scope.

From the perspective of scientific skills, the following categories need to be addressed.

- For inputting data into the assessment scope, the Coordination Group's guidance on outcomes has valuable information on selecting relevant outcomes.
- For using and contributing to JCAs, the most obvious perceived gap in knowledge and experience among the Greek HTA structures relates to interpreting indirect comparisons. By contrast, experience and confidence are much higher for direct comparisons, such as randomized controlled trials. Considering that each JCA will respond to multiple sets of PICO data, as a result of Member States' requests, Greek HTA structures can expect some relevant evidence for their requested data to rely on indirect comparisons. However, the extent of this is difficult to anticipate, and is likely to vary from one JCA to another. In any case, this type of evidence will have to be used; as such, building skills among HTA Committee members and expert assessors to interpret such evidence, building on the Coordination Group's guidance (see section 3.2.5), is a priority. More broadly, competencies in cancer epidemiology and evaluating evidence from nonrandomized studies may also benefit from strengthening in the light of upcoming JCAs.
- From the perspective of data for HTA, strengthening health data collection in Greece – particularly for oncology[6] – is not mandatory under the EU HTAR, but would be extremely beneficial in the Greek context to improve decision-making on the most relevant outcomes for the PICO data as a JCA input, and to improve the overall quality of health-care decision-making.
- Other skills may be relevant – both soft (such as project management and stakeholder engagement) and core (such as decision modelling for economic evaluation, epidemiology, ethics and evidence synthesis).

Anticipating the rollout of JCAs of medical devices from January 2030, and considering the limited awareness of the specifics of HTA for medical devices in Greece currently, building capacity on evaluating medical devices should also start as soon as possible.

[6] Health technologies for oncology will be rolled out first for JCAs.

3.2.4 HTA process

If HTA legislation in Greece remains unchanged – particularly the requirements for HTA submissions such as the 5/11 rule (see section 2.5) – no major changes are expected in the steps of the existing HTA process. It is expected that the MAH would still submit the HTA dossier to the HTA Committee when the legal requirements are met, to be evaluated when its turn comes. However, if such requirements are revised – for example, if the Greek Government decides to prioritize health technologies evaluated through JCAs relative to other health technologies – there will be implications for the HTA process and for the capacity required.

The existing 5/11 rule is a clear candidate for policy intervention by the Ministry of Health, not only given the issues raised by Greek stakeholders (such as delaying access) but also in the context of the EU HTAR *(1)*, whose application is likely to compress reimbursement timelines across EU Member States and make the rule much less relevant than it is today. Revising the HTA methods and processes as part of alignment with the EU HTAR offers a valuable opportunity for a systematic assessment of the benefits and disadvantages of the 5/11 rule in the Greek context and for consideration of all the options for amending it, as needed, going forward. Several aspects would have to change, however, including the following.

- The submission dossier and assessment templates would need to be amended. To avoid duplication of information requests and ensure that all health technologies are evaluated following the same framework, Greece will also have to update its document templates to reflect those used in the JCA, referred to in the EU HTAR under Article 26(1), and adopted by the Coordination Group. Two sets of submission templates would be needed: for health technologies with a completed JCA, the submission dossier would contain only non-clinical information, while for health technologies without a completed JCA it would contain both clinical and non-clinical information. Additionally, templates might be adapted for regulatory protected and unprotected medicinal products (generics, hybrids, fixed combinations, well-established use and biosimilars).
- Legislation would have to be modified to facilitate consideration of JCA reports. At a minimum, Article 249 paragraph 3 of Law 4512/2018 – which states that the HTA Committee may consider assessments in other European countries and EUnetHTA products – will have to be modified to refer to joint work under the EU HTAR, which includes JCAs, and remove mentions of EUnetHTA, which is no longer active. The HTA Rules of Procedure can be amended to develop further what shape this consideration should take in the HTA process.
- The EU HTAR does not exclude the possibility that Member States may ask for clarifications from health technology developers on evidence submitted as part of JCAs. The Greek HTA process will have to consider the specifics of who will request such clarifications, how and under what circumstances.

3.2.5 HTA methods

The EU HTAR *(1)* states that Member States may use methodological guidance following international standards of evidence-based medicine – developed by the EU Member State Coordination Group on HTA – for the purpose of national assessments (Article 23(6)). Moreover, Member States are required to report to the European Commission by 13 January 2027 on whether they have considered this guidance in national assessments (Article 31(2)).

At the time of writing, the Coordination Group has developed guidance on the following topics, listed in the order in which they were published:

- quantitative evidence synthesis: direct and indirect comparisons (methodological guidance *(28)* and practical guidance *(29)*);
- reporting requirements for multiplicity issues and subgroup, sensitivity and post hoc analyses *(30)*;
- outcomes *(31)*; and
- validity of clinical studies *(32)*.

The Ministry of Health and the HTA Committee will need to review available guidance – particularly on quantitative evidence synthesis and validity of clinical studies – and decide on the extent to which they wish to incorporate them in the work of the HTA Committee.

3.2.6 HTA outputs and outcomes

The EU HTAR *(1)* asks Member States to provide, through the designated member of the Coordination Group, a national assessment report on health technologies that have been subject to JCA within 30 days after its completion (Article 24). It may be worth revising the current structure of the HTA report, at the very least by making explicit how the JCA report informed its conclusions (see, for example, Lipska et al. *(33)*). The HTA Committee's Scientific Advisory Group members indicated that transparency in HTA reports is essential for the credibility of the process.

3.2.7 Stakeholder engagement

As noted in section 3.2.3, stakeholder engagement responsibilities will increase for Greek HTA structures under the EU HTAR. The most obvious developments relate to managing the relationship between the HTA Committee and the Coordination Group; and deciding who to involve in formulating the Greek PICO data request for each JCA, and how.

While not a requirement, it would help considerably if an HTA stakeholder engagement policy or guidance document were elaborated to make transparent and clear how HTA structures engage with stakeholders and for what purposes, under both the EU HTAR and the national HTA process.

3.2.8 COI

The EU Member State Coordination Group on HTA adopted general procedural rules in the EU HTAR *(1)* ensuring that experts who take part in JCAs are free from COI (Article 25(1),point (a)). The relevant implementing act *(24)* was adopted by the European Commission on 28 October 2024. There are differences between this act and the current COI legislation in Greece – for example, in the extent to which financial or other interests in health technology developers are allowed and should be reported, and in the scope of conflicts, which extends to first-degree relatives in the implementing act versus second-degree relatives in Greek legislation.

With a view to contributing to JCAs as (co-)assessors, these differences will have to be harmonized to avoid a situation where Greek experts and HTA Committee members are in a COI situation from the JCA perspective but not from the Greek legislation perspective, and vice versa. This harmonization or alignment does not necessarily amount to adopting the full EU HTAR provisions on COI, but alignment would ease practical implementation and problems faced by the HTA Committee. Conducting a comparative legal analysis of the two sets of COI provisions would provide Greek decision-makers with guidance on how best to achieve this alignment.

4
Conclusions

The Greek HTA system was set up in 2018. Despite sustaining modifications over time, at the time of writing its structure and functioning remain very similar to their status at inception. While the HTA framework formally considers evidence on clinical and economic criteria, the governance of the HTA process makes it clear that a successful price negotiation is the determining factor in a positive recommendation for reimbursement.

Several important challenges that arose over time have been overcome – for example, those related to the backlog in processing assessments and conducting negotiations. Other challenges remain, such as those relating to staff shortages – particularly in the HTA Committee Secretariat – and in monitoring the implementation of ministerial decisions.

Aligning the Greek HTA system with the requirements of the EU HTAR offers a golden opportunity to improve HTA in Greece with the aim of achieving universal health coverage. To meet the requirements of the EU HTAR, there is a need for updating governance and legislative arrangements; revising the HTA framework; improving the availability, quality and use of local data for decision-making; and, perhaps most importantly, strengthening capacity for technical assessment, project management and stakeholder engagement.

By way of next steps, the Ministry of Health, in partnership with the HTA Committee's Scientific Advisory Group and other key stakeholders, may consider using the findings and suggestions for action in this report to articulate a fit-for-purpose strategic vision for HTA in Greece, develop technical guidance and take appropriate measures for translating the vision into practice.

References[7]

1. European Union. Regulation (EU) 2021/2282 of the European Parliament and of the Council of 15 December 2021 on health technology assessment and amending Directive 2011/24/EU. Off J Eur Union 2021;L458/1:1–32 (http://data.europa.eu/eli/reg/2021/2282/oj).
2. HTA glossary [website]. Institut national d'excellence en santé et en services sociaux; 2025 (https://htaglossary.net/HomePage).
3. O'Rourke B, Oortwijn W, Schuller T, International Joint Task Group. The new definition of health technology assessment: a milestone in international collaboration. Int J Technol Assess Health Care. 2020; 36(3):187–90 (https://doi.org/10.1017/S0266462320000215).
4. From value for money to value-based health services: a twenty-first century shift: WHO policy brief. Geneva: World Health Organization; 201 (https://iris.who.int/handle/10665/340724). Licence: CC BY-NC-SA 3.0 IGO
5. Chantzaras A, Margetis A, Kani C, Koutsiouris V, Bacopoulou F. Health technology assessment of medicinal products in Greece: a 5-year (2018–2023) review of timelines and productivity. Int J Technol Assess Health Care. 2024;40(1):e40 (https://doi.org/10.1017/S0266462324000485).
6. Ministry of Finance. Αριθμός Νόμου 4512. Ρυθμίσεις για την εφαρμογή των Διαρθρωτικών Μεταρρυθμίσεων του Προγράμματος Οικονομικής Προσαρμογής και άλλες διατάξεις [Law 4512/2018. Arrangements for the implementation of the structural reforms of the economic adjustment programmes and other provisions]. ΦΕΚ (FEK). 2018;5A'/17.1.2018 (https://www.hellenicparliament.gr/en/Nomothetiko-Ergo/Anazitisi-Nomothetikou-Ergou?law_id=0367fb46-e175-4848-842e-a86301587f1c).
7. Kanavos P, Tzouma V, Fontrier AM, Souliotis K. Implementing health technology assessment (HTA) in Greece: myths, reality and cautionary tales. Arch Hell Med. 2019; 36(4):444–51 (https://www.mednet.gr/archives/2019-4/pdf/444.pdf).
8. Ministry of Health. Νόμος 4633/2019. Σύσταση Εθνικού Οργανισμού Δημόσιας Υγείας (ΕΟΔΥ), ρυθμίσεις για τα προϊόντα καπνού, άλλα ζητήματα του Υπουργείου Υγείας και λοιπές διατάξεις [Law 4633/2019. Establishment of a National Public Health Organization (EODY), regulations on tobacco products, other issues of the Ministry of Health and other provisions]. ΦΕΚ (FEK). 2019; 161A'/16.10.2019 (https://www.hellenicparliament.gr/Nomothetiko-Ergo/Anazitisi-Nomothetikou-Ergou?law_id=6db2f937-0346-4aef-99de-aadc0151c5aa) (in Greek).
9. Vozikis A, Liakopoulos V, Sidiropoulos S, Emmanouil-Kalos A, Briola K (2023) Mapping pharma market access executives in Greece. Value Health. 26(12, Suppl):S444–5 (https://dx.doi.org/10.1016/j.jval.2023.09.2426).
10. Mentis I. The introduction of Health Technology Assessment (HTA) in Greece and comparison with the European experience. Arch Hell Med. 2022;39(3):313–21 (http://www.mednet.gr/archives/2022-3/pdf/313.pdf).
11. Tsakalogiannis C, Karampli E, Athanasakis K, Kyriopoulos J. The role of health technology assessment in pharmaceutical policy decision-making in Greece. Findings from a qualitative study. J Pharm Health Serv Res. 2019;10(4):439–41 (https://doi.org/10.1111/jphs.12319).
12. Naoum P, Karampli E, Athanasakis K. HTA191 Health technology assessment in Greece: evaluation of current status and prospects. Value Health. 2022;25(2):S334 (https://doi.org/10.1016/j.jval.2022.09.1649).
13. Kourouklis D, Vozikis A. Around the world in HTAs: Greece – late but with an optimistic future. London: Office for Health Economics; 2023 (https://www.ohe.org/insight/around-the-word-in-htas-greece).
14. Έναρξη Λειτουργίας του Εθνικού Μητρώου Νεοπλασματικών Ασθενειών [Start of operation of the National Registry of Neoplastic Diseases] [news release]. Ministry of Health; 25 February 2025 (https://www.moh.gov.gr/articles/ministry/grafeio-typoy/press-releases/13163-enarksh-leitoyrgias-toy-ethnikoy-mhtrwoy-neoplasmatikwn-astheneiwn) (in Greek).

[7] All references were accessed on 24–26 June 2025.

15. Kontodimopoulos N, Pappa E, Niakas D, Yfantopoulos J, Dimitrakaki C, Tountas Y. Validity of the EuroQoL (EQ-5D) instrument in a Greek general population. Value Health. 2008;11(7):1162–9 (https://doi.org/10.1111/j.1524-4733.2008.00356.x).

16. Yfantopoulos JN, Chantzaras AE. Validation and comparison of the psychometric properties of the EQ-5D-3L and EQ-5D-5L instruments in Greece. Eur J Health Econ. 2017;18:519–31 (https://doi.org/10.1007/s10198-016-0807-0).

17. Athanasakis K, Agorastos G and Kyriopoulos I (2024) Estimating a cost-effectiveness threshold for healthcare decision-making in the Greek NHS. Health Policy and Technology, 13: 100882. (https://doi.org/10.1016/j.hlpt.2024.100882)

18. Health intervention and technology assessment in support of universal health coverage. Geneva: World Health Organization; 2014 (WHA67.23; https://iris.who.int/handle/10665/162870).

19. Naoum V, Naoum P, Karampli E, Athanasakis K, Kyriopoulois J, Pavi E. PNS224 Should the patient voice have an active role in HTA decision-making? A PAG consensus analysis in Greece. Value Health. 2019;22(Suppl 3):S799 (https://dx.doi.org/10.1016/j.jval.2019.09.2124).

20. Monitoring and documenting systemic and health effects of health reforms in Greece: assessment report. Copenhagen: WHO Regional Office for Europe; 2019 (https://iris.who.int/handle/10665/346262).

21. Souliotis K, Golna C, Maragou F, Golnas P, Dedes N. PCR109 Patient associations' members' perceptions of level and importance of participation in health technology assessment in Greece. Value Health. 2023;26(12, Suppl):S469–70 (https://dx.doi.org/10.1016/j.jval.2023.09.2548).

22. Beletsi A, Stefanou G, Kourlaba G. Time from marketing authorization to reimbursement of medicines in Greece after the introduction of the health technology assessment process from July 2018 to April 2022. Value Health Reg Issues. 2023;36:58–65 (https://dx.doi.org/10.1016/j.vhri.2023.03.001).

23. Συγκρότηση και αρμοδιότητες Επιτροπής [Composition and responsibilities of the Committee] [website]. Ministry of Health; 2018 (https://www.moh.gov.gr/articles/health/domes-kai-draseis-gia-thn-ygeia/kwdikopoihseis/therapeytika-prwtokolla-syntagografhshs/epitroph-gia-thn-parakoloythhsh-ths-farmakeytikhs-dapanhs-thn-oloklhrwsh-twn-diagnwstikwn-therapeytikwn-prwtokollwn-kai-th-dhmioyrgia-mhtrwwn-asthenwn/5242-sygkrothsh-kai-armodiothtes-epitrophs) (in Greek).

24. European Union. Commission Implementing Regulation (EU) 2024/2745 of 25 October 2024 laying down rules for the application of Regulation (EU) 2021/2282 of the European Parliament and of the Council as regards the management of conflicts of interest in the joint work of the Member State Coordination Group on Health Technology Assessment and its subgroups. Off J Eur Union. 2024;L 2024/2745, 28.10.2024 (http://data.europa.eu/eli/reg_impl/2024/2745/oj).

25. European Union. Commission Implementing Regulation (EU) 2024/1381 of 23 May 2024 laying down, pursuant to Regulation (EU) 2021/2282 on health technology assessment, procedural rules for the interaction during, exchange of information on, and participation in, the preparation and update of joint clinical assessments of medicinal products for human use at Union level, as well as templates for those joint clinical assessments. Off J Eur Union. 2024; L 2024/1381, 24.5.2024 (http://data.europa.eu/eli/reg_impl/2024/1381/oj).

26. Dixon S, Tyagi K, Singh M, Kar SS, Bagepally BS, Prinja S et al. Development of a competency framework for health technology assessment in India. BMJ Evid Based Med. 2024:bmjebm-2023-112488 [online ahead of print] (https://doi.org/10.1136/bmjebm-2023-112488).

27. Bidonde J, Meneses-Echavez JF, Asare B, Chola L, Gad M, Heupink LF et al. Developing a tool to assess the skills to perform a health technology assessment. BMC Med Res Methodol. 2022;22(1):78 (https://doi.org/10.1186/s12874-022-01562-4).

28. Methodological guideline for quantitative evidence synthesis: direct and indirect comparisons. Brussels: European Commission; 2024 (https://health.ec.europa.eu/publications/methodological-guideline-quantitative-evidence-synthesis-direct-and-indirect-comparisons_en).

29. Practical guideline for quantitative evidence synthesis: direct and indirect comparisons. Brussels: European Commission; 2024 (https://health.ec.europa.eu/publications/practical-guideline-quantitative-evidence-synthesis-direct-and-indirect-comparisons_en).

30. Guidance on reporting requirements for multiplicity issues and subgroup, sensitivity and post hoc analyses in joint clinical assessments. Brussels: European Commission; 2024 (https://health.ec.europa.eu/publications/guidance-reporting-requirements-multiplicity-issues-and-subgroup-sensitivity-and-post-hoc-analyses_en).

31. Guidance on outcomes for joint clinical assessments. Brussels: European Commission; 2024 (https://health.ec.europa.eu/publications/guidance-outcomes-joint-clinical-assessments_en).

32. Guidance on the validity of clinical studies for joint clinical assessments. Brussels: European Commission; 2024 (https://health.ec.europa.eu/publications/guidance-validity-clinical-studies-joint-clinical-assessments_en).

33. Lipska I, Meyer F, Canonico PL, Altman H, Solà-Morales O. What is needed to successfully implement the EU HTA Regulation enabling broad patient access in Europe. Glob Reg Health Technol Assess. 2025;12:7–8 (https://doi.org/10.33393/grhta.2025.3354).

Annexes

Annex 1
Literature search strategy

Academic literature

The project team searched bibliographic databases Embase Classic + Embase, Medline, Global Health and Health Management Information Consortium using the Ovid platform, and Web of Science for relevant publications on 24 September 2024. Tables A1.1–A1.5 set out the search strategy for each of the databases searched.

Table A1.1. Embase Classic + Embase

Stage	Search term	Number of hits
1	health technology assessment.mp. or exp Technology Assessment, Biomedical/	23 273
2	exp resource allocation/ or exp health care planning/ or exp health care policy/ or priority setting.mp. or exp decision making/	743 980
3	1 or 2	762 546
4	exp Greece/ or Greek*.mp or Hellas.mp or Hellenic.mp	48 370
5	3 and 4	1 309
6	limit 5 to yr=”2018–Current”	470

Table A1.2. Medline

Stage	Search term	Number of hits
1	health technology assessment.mp. or exp biomedical technology assessment/	16 726
2	exp resource allocation/ or exp health care planning/ or exp health care policy/ or priority setting.mp. or exp decision making/	389 948
3	1 or 2	404 073
4	exp Greece/ or Greek*.mp or Hellas.mp or Hellenic.mp	30 646
5	3 and 4	501
6	limit 5 to yr=”2018–Current”	106

Table A1.3. Global Health

Stage	Search term	Number of hits
1	health technology assessment.mp. or exp biomedical technology assessment/	615
2	exp resource allocation/ or exp health care planning/ or exp health care policy/ or priority setting.mp. or exp decision making/	18 140
3	1 or 2	18 622
4	exp Greece/ or Greek*.mp or Hellas.mp or Hellenic.mp	14 906
5	3 and 4	62
6	limit 5 to yr=”2018–Current”	33

Table A1.4. Health Management Information Consortium

Stage	Search term	Number of hits
1	health technology assessment.mp. or exp biomedical technology assessment/	849
2	exp resource allocation/ or exp health care planning/ or exp health care policy/ or priority setting.mp. or exp decision making/	10 451
3	1 or 2	11 139
4	exp Greece/ or Greek*.mp or Hellas.mp or Hellenic.mp	369
5	3 and 4	6
6	limit 5 to yr="2018–Current"	0

Table A1.5. Web of Science

Stage	Search term[a]	Number of hits
1	"health technology assessment"	9 372
2	"priority-setting" or "priority setting"	5 813
3	"resource allocation"	152 305
4	"decision-making" or "decision making"	979 554
5	1 or 2 or 3 or 4	1 130 727
6	health	9 534 911
7	5 and 6	269 910
8	Greece or Greek or Hellas or Hellenic	210 389
9	7 and 8	545
10	Results for #9 and 2024 or 2023 or 2022 or 2021 or 2020 or 2019 or 2018 (Publication Years)	262

Note: [a] All terms were searched with "Topic".

Grey literature

The project team searched the following libraries and repositories for relevant grey literature on 24 September 2024.

The International Monetary Fund eLibrary *(1)* was searched for "Greece" and "technology assessment". One relevant record was identified *(2)*.

The WHO Institutional Repository for Information Sharing *(3)* was searched for "health technology assessment" and "Greece". One relevant record was identified *(4)*.

The World Bank Documents & Reports repository *(5)* was searched with "health technology assessment", "technology assessment" and "HTA" as keywords, "Greece" as country, and 1 January 2018 as the start date. No relevant records were identified.

The OECD Publications iLibrary *(6)* was searched for "health technology assessment", "technology assessment", "HTA" and "Greece". No relevant records were identified.

The international HTA database *(7)* was searched for documents published between 2018 and 2024. No relevant record on Greece was identified.

The HTA international website *(8)* was searched. No relevant record was identified.

The International Society for Pharmacoeconomics and Outcomes Research website was searched *(9)*. The "Pharmacoeconomic Guidelines Around the World" section *(10)* did not feature any guidelines for Greece. The Society's newsletters were also searched. No relevant records were identified.

References[8]

1. IMF eLibrary. International Monetary Fund; 2025 (https://www.elibrary.imf.org/).
2. Kalavrezou N, Jin H. Healthcare reform in Greece: progress and reform priorities. IMF Working Papers. 2021;189:WP/21/189 (https://www.elibrary.imf.org/view/journals/001/2021/189/article-A001-en.xml?rskey=wVV3ms&result=11).
3. WHO Institutional Repository for Information Sharing [database]. World Health Organization; 2025 (https://iris.who.int/).
4. Monitoring and documenting systemic and health effects of health reforms in Greece: assessment report. Copenhagen: WHO Regional Office for Europe; 2019 (https://iris.who.int/handle/10665/346262).
5. Documents & Reports [database]. World Bank Group; 2025 (https://documents.worldbank.org//en/publication/documents-reports).
6. Publications [database]. Organisation for Economic Co-operation and Development; 2025 (https://www.oecd.org/en/publications.html).
7. International HTA database [database]. Edmonton: International Network of Agencies for Health Technology Assessment Secretariat; 2025 (https://database.inahta.org/).
8. HTAi [website]. Health Technology Assessment international; 2025 (https://htai.org/).
9. ISPOR [website]. International Society for Pharmacoeconomics and Outcomes Research; 2025 (https://www.ispor.org/).
10. Pharmacoeconomic Guidelines Around the World. In: ISPOR [website]. International Society for Pharmacoeconomics and Outcomes Research; 2025 (https://www.ispor.org/heor-resources/more-heor-resources/pharmacoeconomic-guidelines).

[8] All references were accessed on 27 June 2025.

Annex 2
Interview guide

Introduction

The WHO Regional Office for Europe is conducting a situation analysis and needs assessment of health technology assessment (HTA) in Greece, in collaboration with the WHO Country Office in Greece and the Greek Ministry of Health, with funding from the Technical Support Instrument of the European Commission. The project aims to describe the current HTA processes and capacity in Greece, particularly in relation to the principles and requirements of the European Union (EU) Regulation 2021/2282 on Health Technology Assessment *(1)*. It consists of a desk review of relevant literature and in-depth interviews with key stakeholders in the Greek HTA system, for which this is a guide.

The following key terms are used in the interview guide.

- **Health technology** refers to an intervention developed to prevent, diagnose or treat medical conditions; promote health; provide rehabilitation; or organize health-care delivery. This can be a test, device, medicine, vaccine, procedure, programme or system *(2)*. Note that "health technology" and "intervention" are used interchangeably in this interview guide.
- **HTA** refers to a multidisciplinary process that uses explicit methods to determine the value of a health technology at different points in its life-cycle. The purpose is to inform decision-making to promote an equitable, efficient and high-quality health system *(3)*. The **process** is formal, systematic and transparent, and uses state-of-the-art methods to consider the best available evidence. The **dimensions of value** for a health technology may be assessed by examining the intended and unintended consequences of using a health technology compared with existing alternatives. These dimensions often include clinical effectiveness; safety, costs and economic implications; ethical, social, cultural and legal issues; and organizational and environmental aspects, as well as wider implications for the patient, relatives, caregivers and the population. The overall value may vary depending on the perspective taken, the stakeholders involved and the decision context.
- The **assessment (or data)** phase of the HTA process is a scientific process used to describe and analyse the properties of a health technology – its safety, efficacy, feasibility and indications for use, cost and cost–effectiveness; and social, economic and ethical consequences.
- The **appraisal (or deliberation)** phase of the HTA process is a deliberative, multi-stakeholder process where the assessment is reviewed and interpreted.
- The **recommendation (or decision)** phase of the HTA process is the result of the appraisal process. It is usually linked to the health benefit package and, depending on the legislative framework, it can be recommendatory or mandatory – for example, it can refer to reimbursing the health technology.
- The **health benefits package** refers to the selection of health interventions that is being reimbursed from public funds, at defined levels of cost and population coverage.

The following interview guide is comprehensive and generic. It is not expected that all key informants will cover all questions. The guide will be adapted in relation to the background, roles and responsibilities of the key informants.

Respondent information

1. What is your current affiliation and role?

a. How long have you been in this role?

2. What is your area of expertise and/or disciplinary training?

Demand and support for HTA

3. How do you perceive the level of awareness about HTA in the Greek health system?

4. How do you perceive the level of political support for HTA in Greece?

Governance and institutional arrangements

5. Does the existing governance structure of the HTA process cover all the functions of identifying health technologies, assessing evidence, appraising evidence and making recommendations for each category of health technology – i.e. are there responsible organizations or entities for each of the following categories?

- pharmaceuticals/medicines
- medical procedures
- medical devices
- diagnostic tests
- population-level health interventions

6. For health technologies not yet covered by the HTA process, are there ongoing plans to cover them?

7. Are decisions around the health benefits package in Greece linked to a formal HTA process?

8. To what extent are the roles of HTA stakeholders clear and comprehensive, without gaps or overlapping responsibilities?

Legal framework

9. What are the main pieces of legislation relevant to the HTA process in Greece?

a. What is their scope – i.e. what areas do they cover, and to what level of detail?

b. Have these been revised or updated since they were first issued? If so, how often? What types of changes have been made?

c. Is HTA legislation supported by other official documents, such as ministerial decisions, rules or manuals? If so, what areas do such documents cover?

10. Is there a legislative and/or regulatory requirement to consider the results of HTA when making coverage decisions or inclusion of an intervention in the health benefits package? If so, are the results of the HTA or decision-making process considered binding by law?

11. Are revisions of the legal framework for HTA planned? If so, for which areas, and what are the indicative timelines?

Technical skills and capacity

12. What is the estimated number of professional staff involved in the HTA structures (calculated as full-time equivalents)?

a. How has this number evolved over the past three years?

b. What are the staff members' roles, professional backgrounds and main responsibilities?

13. What are the available administrative options for staff changes in the Greek HTA structures – for example, for increasing staff numbers or changing staff composition?

14. How are the experts conducting the HTA assessment engaged in the HTA process, including selection, contracting, communication and payment processes?

15. What types of academic or training programmes are currently in place in Greece that can support HTA and related health decision-making processes?

16. What HTA networking opportunities are available with organizations in and outside Greece – for example, are any Greek HTA stakeholders members of any international HTA organizations like the EU's Member State Coordination Group on HTA, HTA international or the international HTA database? What are the perceived benefits of such networking opportunities?

17. What are the technical approaches used to assess health technology properties for each value domain? For example, assessing clinical effectiveness is based on systematic literature review and meta-analysis; assessing economic value is based on cost–effectiveness analysis.

18. What levels of knowledge and practical experience with the technical skills in Table A2.1 are available? Note that the table is a guide for structuring the discussion: key informants are not expected to fill in the table with quantitative ratings of knowledge and experience.

Table A2.1. Availability and level of technical skills among Greek stakeholders

Technical skill	In-house with the HTA Committee or its Secretariat	In the Ministry of Health/ National Organization for Medicines network of expert assessors	Outside current HTA structures
Study design			
Observational studies			
Randomized controlled trials			
Quasi-experimental designs			
Statistics			
Descriptive statistics			
Statistical tests (e.g. one-sample, two-sample)			
Linear regression (e.g. ordinary least squares)			
Survival analysis (e.g. Kaplan-Meier estimation)			
Evidence synthesis			
Formulating review questions for population, intervention, comparator, outcome (PICO) data			
Literature search strategies			
Critical appraisal of the literature			
Meta-analysis (direct treatment comparison)			
Network meta-analysis (indirect treatment comparison)			
Bayesian methods for evidence synthesis			
Health economics			
Measuring health service costs			
Measuring health-related quality of life			
Economic model review and appraisal			

Table A2.1 contd

Technical skill	In-house with the HTA Committee or its Secretariat	In the Ministry of Health/ National Organization for Medicines network of expert assessors	Outside current HTA structures
Cohort models (e.g. decision-tree, Markov chain)			
Systems dynamic models			
Discrete event simulation			
Individual patient simulation			
Ethics and values in policy decision-making			
Evidence to policy translation			

19. To what extent would you say decision-makers have the training and skills to interpret HTA data?

Data availability and quality

20. Is data availability a main barrier to the production of HTA in Greece? If so:

a. for what types of data are there barriers – for example, epidemiological, service utilization, clinical, economic or health-related quality of life?

b. what types of barriers are in place for each type of data – for example, lack of access to international bibliographic databases?

21. For which functions is HTA used in Greece (functions may include clinical practice guidelines, planning and budgeting, pricing/pricing negotiations of medical technologies, indicators of quality of care, determination of objectives for pay-for-performance schemes, design of health benefits packages, public procurement of medicines, protocols for public health programmes, and so on)?

22. Are you aware of collaboration between HTA structures and other organizations to share or obtain data to support the HTA or decision-making process?

a. If so, with/between what types of organization?

23. Are there mechanisms for translation and/or contextualization of evidence for HTA from other settings?

24. Does Greece have a public and updated database of health technology costs or prices?

25. Are there mechanisms, procedures and/or standards in place for quality assurance of data for HTA?

Funding availability and sustainability

26. Does the HTA or decision-making body/bodies in your setting have an allocated budget from the public sector?

a. How has this budget evolved over the past three years?

27. Do any resources for the HTA process come from private sources?

28. To what extent would you say that budget availability is a barrier to the production of HTA in Greece?

Established processes

29. Is there a standard methodology or process guideline for conducting HTA?

a. What areas does it/do they cover, and to what level of detail?

b. Who is responsible for monitoring its/their application?

30. Are national guidelines in place for the preparation of economic evaluations?

31. What type of support is available for making recommendations and decisions? For example, is there an official cost–effectiveness threshold to inform decisions?

32. Are other relevant guidelines in place for preparation of evidence for the appraisal process?

33. Are any provisions in place for rapidly assessing evidence, appraising evidence and making decisions in a non-emergency context?

34. Are any provisions in place for rapidly assessing evidence, appraising evidence and making decisions in the case of a disaster or emergency – such as the coronavirus disease (COVID-19) pandemic?

Stakeholder participation

35. Which stakeholders are represented in the HTA structure responsible for appraisal?

a. For each category of health intervention, which stakeholders are represented?

b. Who appoints the members of each appraisal commission/committee, and based on what considerations?

c. What is the usual length of term for a committee member?

d. Are stakeholders who are not represented invited to react/comment during the whole process?

36. If a separate committee or entity is responsible for the recommendation (or decision) after the appraisal process has been conducted, is a broad range of stakeholders represented in the body that provides the final decision?

a. For each category of health intervention, which stakeholders are represented?

b. Who appoints the members of each commission/committee?

c. Do all the stakeholders represented in these bodies have equal voice in the process (such as by vote, allocated time or other mode of input)?

Transparency and accountability

37. Are processes in place for managing conflict of interest throughout the HTA or decision-making process?

38. Is there an opportunity to appeal against the final decision?

39. Are the following published and readily available?

- minutes of the meetings
- assessment reports
- recommendations (or decisions where relevant)
- rationale for the decision
- other

Production and quality of HTA reports

40. How long does the assessment process take, on average, for any given health intervention or technology?

41. In the last 12 months, approximately how many assessments were performed?

42. Are processes or guidance in place for assuring the quality of HTA reports?

Monitoring and evaluation

43. Does your HTA or decision-making body include indicators to assess the impact of its own products?

Revision of decisions

44. Are there any provisions for revising decisions about health technologies and interventions once they are made?

45. Are there periodic revisions to the contents of the health benefits package?

a. What are the time intervals of those revisions?

b. What are the common forms of revisions of the health benefits package?

Close

Is there anything else not yet discussed that you would like to share?

Do you have any questions?

Thank you for your time.

References[9]

1. European Union. Regulation (EU) 2021/2282 of the European Parliament and of the Council of 15 December 2021 on health technology assessment and amending Directive 2011/24/EU. Off J Eur Union 2021;L458/1:1–32 (http://data.europa.eu/eli/reg/2021/2282/oj).
2. HTA glossary [website]. Institut national d'excellence en santé et en services sociaux; 2025 (https://htaglossary.net/HomePage).
3. O'Rourke B, Oortwijn W, Schuller T, International Joint Task Group. The new definition of health technology assessment: a milestone in international collaboration. Int J Technol Assess Health Care. 2020; 36(3):187–90 (https://doi.org/10.1017/S0266462320000215).

[9] All references were accessed on 27 June 2025.

Annex 3
Overview of HTA legislation in Greece[10]

The main pieces of legislation relevant to the HTA process in Greece are as follows.

Ministry of Finance. Αριθμός Νόμου 4512. Ρυθμίσεις για την εφαρμογή των Διαρθρωτικών Μεταρρυθμίσεων του Προγράμματος Οικονομικής Προσαρμογής και άλλες διατάξεις [Law 4512/2018. Arrangements for the implementation of the structural reforms of the economic adjustment programmes and other provisions]. ΦΕΚ (FEK). 2018;5A'/17.1.2018 (https://www.hellenicparliament.gr/en/Nomothetiko-Ergo/Anazitisi-Nomothetikou-Ergou?law_id=0367fb46-e175-4848-842e-a86301587f1c).

This law laid the initial groundwork for the establishment of the HTA Committee, and set forth the legal framework for evaluating and appraising new health technologies in Greece.

Ministry of Health. Υπ. Απόφαση 52029/2018. Έγκριση του εσωτερικού κανονισμού λειτουργίας της επιτροπής αξιολόγησης και αποζημίωσης φαρμάκων ανθρώπινης χρήσης του ν. 4512/ 2018 (Α΄ 5) [Ministerial Decision No. 52029/2018. Approval of the internal regulations of the Committee for the Evaluation and Reimbursement of Medicines for Human Use of Law 4512/2018]. ΦΕΚ (FEK). 2018;B'/2768/11.07.2018 (https://www.kodiko.gr/nomothesia/document/687733/yp.-apofasi-52029-2018) (in Greek).

This piece of legislation includes articles related to the following issues:

- the work of the assessment committee;
- external experts – assessors;
- criteria and methodology for assessment;
- initiation of assessment process upon request of the applicant;
- initiation of assessment process for medicines already included in the list of reimbursable medicines;
- assessment activities;
- convening of the assessment committee and agenda;
- location of meetings;
- discussion of agenda items;
- voting – decision-making – content of decisions;
- minutes – recording of meetings;
- publication of assessment committee opinions;
- special declaration of interests; and
- confidentiality statement.

Ministry of Health. Υπ. Απόφαση 63025/2018. Έγκριση του Εσωτερικού Κανονισμού Λειτουργίας της Επιτροπής Διαπραγμάτευσης Τιμών Φαρμάκων [Ministerial Decision No. 63025/2018. Approval of the Internal Regulations of the Pharmaceutical Price Negotiation Committee]. ΦΕΚ (FEK). 2018; B'/3585/23.08.2018 (https://www.kodiko.gr/nomothesia/document/688325/yp.-apofasi-63025-2018) (in Greek).

This piece of legislation outlines:

- the work of the pharmaceutical price negotiation committee
- the negotiation process
- convening of the committee and agenda

[10] All references were accessed on 27 June 2025.

- quorum
- discussion of agenda items
- voting – decision-making – content of decisions
- the contracting agreement
- minutes – recording of meetings
- special declaration of interests
- the confidentiality statement.

Ministry of Health. Νόμος 4633/2019. Σύσταση Εθνικού Οργανισμού Δημόσιας Υγείας (ΕΟΔΥ), ρυθμίσεις για τα προϊόντα καπνού, άλλα ζητήματα του Υπουργείου Υγείας και λοιπές διατάξεις [Law 4633/2019. Establishment of a National Public Health Organization (EODY), regulations on tobacco products, other issues of the Ministry of Health and other provisions]. ΦΕΚ (FEK). 2019;161A'/16.10.2019 (https://www.hellenicparliament.gr/Nomothetiko-Ergo/Anazitisi-Nomothetikou-Ergou?law_id=6db2f937-0346-4aef-99de-aadc0151c5aa) (in Greek).

This law provided updates related to the Regulations of the Committee for the Assessment and Reimbursement of Human Use Medicines – composition of the Committee, the criteria and methodology for assessment, the assessment process, the review and preparation of the List of Reimbursable Medicines, and the Pharmaceutical Price Negotiation Committee.

Ministry of Health. Τεύχος Υπαλλήλων Ειδικών Θέσεων και Οργάνων Διοίκησης Φορέων του Δημοσίου και Ευρύτερου Δημοσίου Τομέα [Issue of employees of special positions and administrative bodies of public and wider public sector bodies]. ΦΕΚ (FEK). 2020;Υ.Ο.Δ.Δ. No. 990/25.11.2020 (https://eopyy.gov.gr/Files/ΦΕΚ_Ορισμός_μελών_Επιτροπή_Αποζημίωσης.pdf) (in Greek).

This document provides information regarding the formation and appointment of members to the Price and Reimbursement Negotiation Committee for Medical Technologies of the National Organization for the Provision of Health Services.

Ministry of Health. Αριθμ. Δ3(α) 19688 (2) Τροποποίηση της υπό στοιχεία Δ3(α)15796/18-3-2022 απόφασης «Καθορισμός κριτηρίων διαπραγμάτευσης των τιμών των φαρμάκων» [No. D3(a) 19688 (2) Amendment of the decision under D3(a)15796/18-3-2022 "Determination of criteria for negotiating the prices of medicines"]. ΦΕΚ (FEK). 2022;B'1756/11.04.2022 (https://nomotelia.gr/photos/File/1756b-22.pdf) (in Greek).

This document outlines that the Drug Price Negotiation Committee considers the following criteria during the negotiation process:

- the amount of automatic clawback and the tiered rebate percentage for each drug;
- the sales volume of the drug in other EU countries;
- the selling prices of the drug in other EU countries, especially when they are lower than the selling price in Greece – particularly for drugs under patent protection;
- the expiration date of the protection period, if the drug is under patent protection;
- the manner of entering into agreements with the negotiating authorities and the Committee's Operating Regulation;
- the method of defining reference prices that serve as reimbursement prices for Social Security Funds and the National Organization for the Provision of Health Services;
- the therapeutic value of the product and the necessity of treatment, as determined by the evaluation of the HTA; and
- the impact of each agreement on overall pharmaceutical expenditure.

Government Gazette ΦΕΚ (FEK). 2023;Υ.Ο.Δ.Δ. No. 1284/27.11.2023

This document provides updates related to the formation and appointment of members to the Special Subcommittee for the Assessment of Exceptionally Granted Medicines, as per Paragraph 1d of Article 265 of Law 4512/2018.

Minister of Health. Τροποποίηση της υπό στοιχεία Δ3(α)15796/ 18-3-2022 απόφασης του Υπουργού Υγείας «Καθορισμός κριτηρίων διαπραγμάτευσης των τιμών των φαρμάκων» (Β' 1300), όπως έχει τροποποιηθεί με την υπό στοιχεία Δ3(α) 19688/08-04-2022 (Β' 1756) όμοια απόφαση [Amendment of the decision of the Minister of Health under item D3(a)15796/ 18-3-2022 "Determination of criteria for negotiating the prices of medicines" (B' 1300), as amended by the similar decision under item D3(a) 19688/08-04-2022 (B' 1756)]. ΦΕΚ (FEK). 2024;Β'7630/31.12.2024 (https://www.e-nomothesia.gr/kat-ygeia/farmakeia/ya-d3a50245-2024.html) (in Greek).

This document modifies the criteria used for negotiating drug prices, mainly by clarifying which products fall under the scope of the Central Procurement Unit (which is mostly responsible for the hospital market) and which fall under the scope of the Negotiation Committee for Pharmaceuticals.

Annex 4
Examples of educational programmes in Greece with content relevant to HTA

The following examples were suggested by several key informants or Scientific Advisory Group members. It is not an exhaustive list.

Programme	Institution	Modules
MSc Clinical Trials: Design and Conduct	**National and Kapodistrian University of Athens, Medical School**	▪ General principles of clinical studies (15 European Credit Transfer and Accumulation System (ECTS) credits) ▪ Good clinical practice and regulations of authorities (15 ECTS credits) ▪ Research methodology I (15 ECTS credits) – principles of statistical research and application to clinical studies, and critique and evaluation of results of published clinical trials and systematic reviews ▪ Research methodology II (15 ECTS credits) – designing clinical trials: from idea to implementation, systematic reviews and meta-analyses, and analysis and publication of results ▪ Internship – diploma thesis (30 ECTS credits)
MSc Health Economics and Management	**University of Piraeus, Department of Economics**	▪ Introduction to health economics ▪ Introduction to public health and preventive medicine ▪ Health systems and insurance organizations ▪ Principles of epidemiology ▪ Economic evaluation and clinical trials ▪ Leadership and organizational behaviour in health-care organizations ▪ Organization and management of primary health care services ▪ Pharmaceutical economics and policy ▪ Laboratory courses ▪ Clinical data analysis using STATA software, and Markov models in clinical decision making ▪ Other elective courses ▪ Diploma thesis
Postgraduate Diploma in Health Economics, Management and Policy	**University of Peloponnese, School of Social and Political Sciences**	▪ Health economics (6 ECTS credits) ▪ Health policy and strategic planning (6 ECTS credits) ▪ International institutions of health policies (6 ECTS credits) ▪ Health services research methodology (6 ECTS credits) ▪ Bioethics and health law (6 ECTS credits) ▪ Organization and management of health services (6 ECTS credits) ▪ Public health policies (6 ECTS credits) ▪ Health technology assessment and decision-making (6 ECTS credits) ▪ Analysis of health policies and reforms (6 ECTS credits) ▪ Financial management of health services (6 ECTS credits) ▪ Diploma thesis (30 ECTS credits)

Programme	Institution	Modules
MSc in Health Statistics and Data Analytics	**Aristotle University of Thessaloniki, Medical School**	▪ Introduction to data analytics (7.5 ECTS credits) ▪ Basic principles of statistics (7.5 ECTS credits) ▪ Basic principles of medical research (7.5 ECTS credits) ▪ Linear models (7.5 ECTS credits) ▪ Big data analytics (7.5 ECTS credits) ▪ Meta-research (7.5 ECTS credits) ▪ Special topics in data analytics I (7.5 ECTS credits) ▪ Special topics in data analytics II (7.5 ECTS credits) ▪ Thesis (30 ECTS credits)
MBA in Healthcare Management	**National and Kapodistrian University of Athens**	▪ Management and leadership ▪ Business analytics ▪ Business economics ▪ Financial reporting and analysis ▪ Strategic management ▪ Marketing management ▪ Finance and accounting ▪ Human resource management ▪ For the health-care management component, in the third semester students choose four out of the following seven courses: ▪ health economics and health-care management ▪ health technology assessment ▪ pharmaceutical business, acquisitions and strategic alliances ▪ pharmacoeconomics ▪ health-care risk management ▪ health-care evaluation ▪ management accounting ▪ cost accounting.
MSc Leadership, Innovation and Value Policies in Health	**University of West Attica**	▪ This includes two specializations: decision-making and health policy design; and research and evaluation of innovation and health policies. ▪ Selected modules across the two specializations include (full details in weblink): ▪ health economics ▪ financial analysis and management of health services ▪ analysis and decision-making in health services ▪ public health policies ▪ epidemiological methods and health service ▪ economic evaluation in health ▪ health technology assessment

Note: Among six faculties of medicine in Greece (Alexandroupolis, Thessaloniki, Larissa, Athens, Patras, Heraklion) and three faculties of pharmacy (Athens, Patras, Thessaloniki) in Greece, one undergraduate pharmacoeconomics module was identified at the University of Patras, School of Pharmacy [weblink].

Annex 5
Priority-setting capacities across a rage of stakeholders

Stakeholder group	Capacities required
Environment	
Health system	• To support the capacities required at the different INNE levels by institutionalising evidence-informed priority-setting agencies at provincial, national and regional levels (as deemed appropriate). This perhaps can be seen as one of the goals for the capacity-building activities. Other activities or interventions at the health system level may help or hinder the development and uptake of evidence.
Networks	
Funders and development partners	• To commission, receive, interpret and use (as they judge to be appropriate) the methods and outcomes of HTA/ priority-setting research to inform decisions about both investment choices in global health and single technology or program choices at a national level, including investments to support effective priority-setting and health system strengthening. • To have common understanding, for instance through a common theory of change, of the outcomes, preconditions, underlying assumptions of investments to support priority-setting and health system strengthening; and to support knowledge translation efforts towards those outcomes.
Nodes (organisations) and Individuals	
Consumers of evidence	
Policy and professional decision-makers	• To commission, receive, interpret and use (as they appropriate) the methods and outcomes of HTA and priority-setting research • To disseminate the outcomes of HTA research, and follow-up/monitor impact.
Health service managers	• To understand implications of competing spending options and to manage resources accordingly • To create and manage local capacity for communications, knowledge translation and setting clinical standards.
Courts and the judiciary	• To understand the rationale for priority setting, and the tools and processes for evidence-informed priority-setting • To respect and rely on the government's healthcare coverage choices where these have been made through evidence-informed priority-setting mechanisms in a procedurally legitimate manner as set out in law, while maintaining appropriate independence • To hold decision-makers accountable in the priority-setting process, for example through engaging in judicial review
Patients and the public	• To understand the implications of policy and clinical decisions, identify the extent to which they are evidence-informed and represent efficient and ethical use of public monies • To understand that unavoidable trade-offs have to be made in priority-setting and the associated ethical implications • To participate in the process of decision-making, recognising the need that decisions have to be made, and highlighting the extent to which they reflect societal values
Producers of evidence	
Academic institutions, researchers and research managers	• To understand policy and professionals decision-makers' needs, • To identify those needs that can be satisfied by HTA research • To conduct and manage the required research without partisan advocacy and to the required standards • To communicate research effectively to meet the needs of decision-makers.
Knowledge brokers	
Knowledge brokers, including priority-setting institutions	• To understand the cultures of both research and decision-making environments • To assess and communicate research evidence and policy needs • To identify the 'right' stakeholders from both sides and to convene, facilitate and mediate between them such that there is meaningful knowledge transfer between researchers and decision makers (and between government agencies to local hospitals, professional organisations and community workers, and so on).
Media organisations and journalists	• To report in an objective and impartial manner stories linked to priority-setting in health and to institutions set up by governments to make such decisions • To encourage public debate in a positive way, and improve policymaking through holding decision makers accountable to the general public

HTA = health technology assessment; INNE = Individual, Node, Network, Environment

Source: Li R, Ruiz F, Culyer AJ, Chalkidou K, Hofman KJ. Evidence-informed capacity building for setting health priorities in low- and middle-income countries: a framework and recommendations for further research. F1000Res. 2017;6:231 (https://doi.org/10.12688/f1000research.10966.1).

The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

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