



Strategic Priorities of Healthcare Policy: Quality, Documentation and Evaluation

The role of Health Technology Assessment

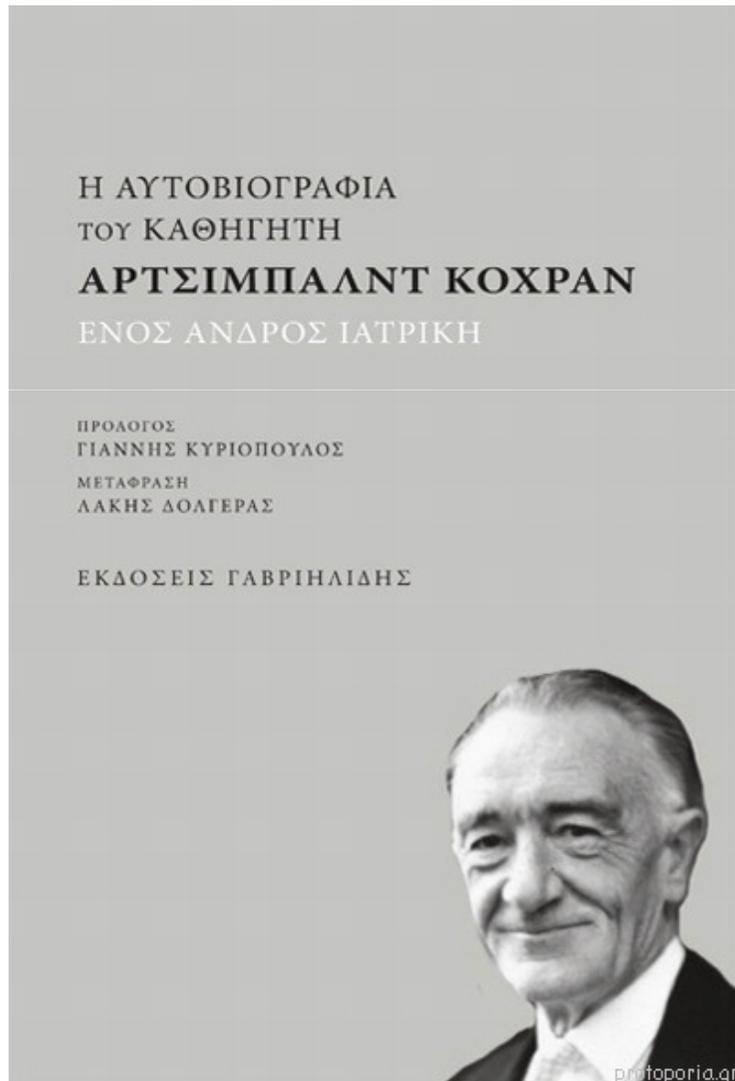
Kostas Athanasakis, PhD

Dept. of Health Policy, UniWA – f.NSPH (ESDY)

Open University of Cyprus

University of Nicosia

Key Values and Priorities of a healthcare system from the health economics perspective



- **Effectiveness** is the extent to which health care services actually improve health
- **Efficiency** is the allocation of scarce resources that maximizes the achievement of aims
- **Equity** is fairness in the sharing of health care resources between people.



Approaching efficiency in pragmatic terms

Health Technology Assessment (HTA)

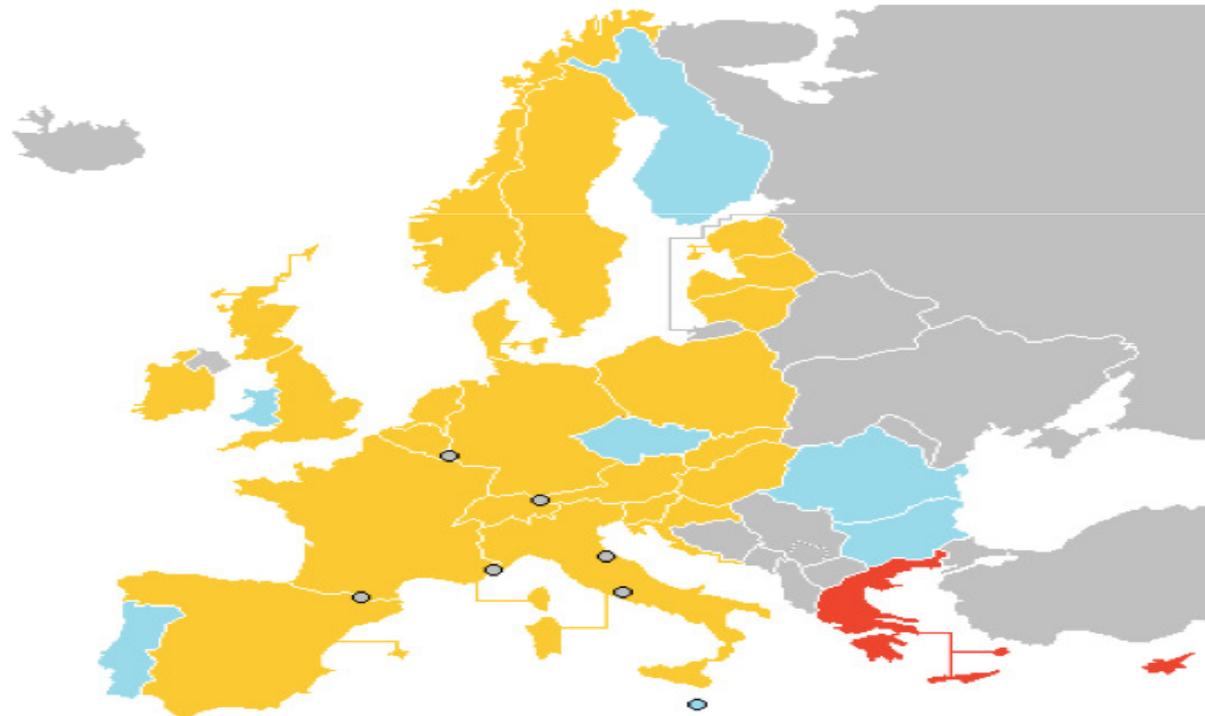
- Major contributor to health expenditure (resources allocated): **biomedical technology**
- Key concept of efficiency: **evaluation**
- Basic **application of evaluation** in biomedical technology
 - Health Technology Assessment

- HTA: *“a multidisciplinary process that summarises information about the medical, social, economic and ethical issues related to the use of a health technology in a systematic, transparent, unbiased, robust manner... .. HTA must always be firmly rooted in research and the scientific method”* (EUnetHTA 2018).

HTA in Europe: where does Greece stand in this evolutionary process?

- Well, here...

Figure 2: Overview of HTA activity



Key: N=31 countries with England, Scotland and Wales counted separately; red = no current HTA procedure; blue = pharmaceuticals only; yellow = both pharmaceuticals and non-pharmaceuticals

HTA in Europe: where does Greece stand in this evolutionary process?

- Briefly, we can distinguish **three phases of the HTA discussion** in Greece:

Up to ~2015: the dormant phase.	A very vivid discussion in Europe. EUnetHTA emerges. Greece is absent , apart from a handful of voices mainly from the academia
2015-today: the talking shop phase.	Greece is a European champion in terms of discussing! But its just discussing . Incomplete efforts to cover the distance take place, with limited chance of success, if left as is
2019 onwards: the doers phase.	Experience suggests that a move forward is not just “nice to have” but necessary in order to resolve the problems that have emerged



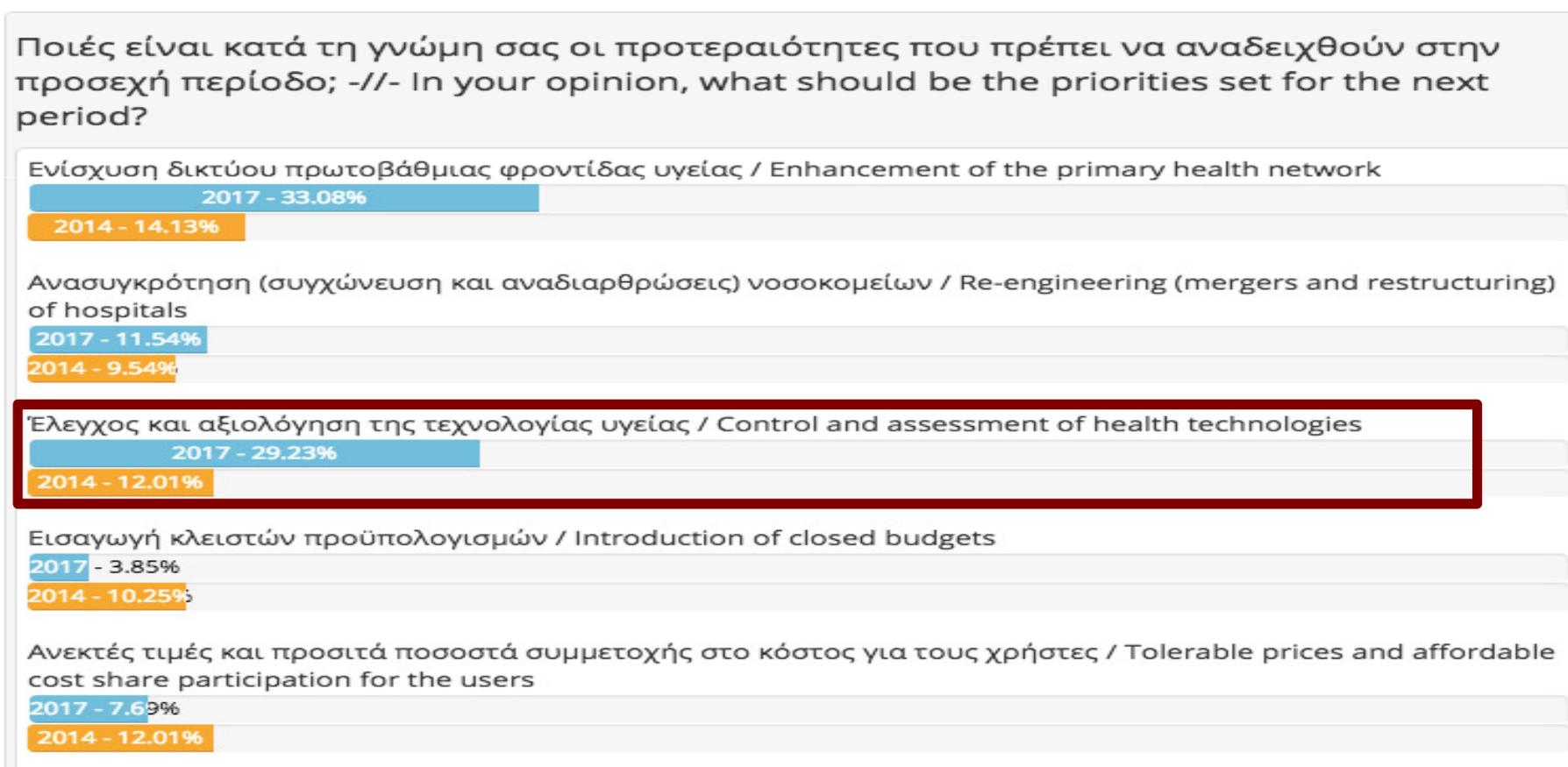
What do stakeholders think about the adoption of HTA processes in Greece?

- Qualitative analysis to investigate stakeholders' beliefs regarding the introduction of HTA in Greece (Tsakalogiannis and Athanasakis, NSPH 2016)
- Key results:
 - The establishment of an **HTA organization** is a demand of wide consensus
 - Concerns on **technical** and legal **prerequisites**
 - Greater **transparency** was also seen as a prerequisite
 - Need for a **HTA process**
 - Stakeholders agreed that the introduction of HTA should be part of a wider system reform, with the purpose to maximize health outcomes within closed budgets



What do stakeholders think about the adoption of HTA processes in Greece?

- Televoting results on the priorities for the Greek health system . Healthworld 2014 vs. 2017



What do stakeholders think about the adoption of HTA processes in Greece?

- A qualitative survey in **pharmacists** for their role and the characteristics of HTA in Greece (NSPH 2019)
 - Respondents highlight **HTA as a top priority**
 - Place special emphasis during the evaluation process on the criteria of efficacy, cost-effectiveness and budget impact



Importance of HTA criteria in the decision-making algorithm
Scale 1-5



What do stakeholders think about the adoption of HTA processes in Greece?

- A qualitative survey in **patients** (PAGs) for their role and the characteristics of HTA in Greece (NSPH 2019)
 - Respondents feel that they **do not have adequate information** on HTA and their role
 - Place special emphasis during the evaluation process on the criteria of efficacy, safety and unmet needs



Importance of HTA criteria in the decision-making algorithm
Scale 1-5



What is the way forward for HTA in Greece?

- Essentially, two building blocks must exist:
 - A **HTA organization**, dedicated to the cause
 - A **HTA process**, that will support evidence-based decision making and ensure transparency and participation
- Basic advantage of Greece as a late adopter:
 - The previous European **experience** is vast
 - Other countries **have made their mistakes already** – no need to repeat them in order to learn!



Implementing HTA in Greece

An initial proposal (NSPH 2015)

Αναπτύσσοντας ένα σύστημα HTA στην Ελλάδα: τα βασικά βήματα (ΕΣΔΥ 2015)

- Κατασκευή, σταδιακά, μιας συστηματικής διαδικασίας λήψης αποφάσεων αξιολόγησης τεχνολογίας υγείας
 - Με τη σύσταση ενός ειδικού για το σκοπό φορέα, από ήδη υπάρχουσες δυνάμεις
 - Με καθορισμένο χρονικό ορίζοντα πλήρους ανάπτυξης
 - Με ρόλο αρχικά, και κατά βάση, συμβουλευτικό και μετέπειτα, ενδεχομένως, ρυθμιστικό
 - Με αρχικά εργαλεία κάποιες απλούστερες προσεγγίσεις (“cost-effectiveness+”) και προοδευτική σύγκλιση με το πρότυπο της MCDA*

* Διαχείριση, έλεγχος και αξιολόγηση της φαρμακευτικής καινοτομίας στην Ελλάδα, Εθνική Σχολή Δημόσιας Υγείας, Τομέας Οικονομικών της Υγείας. 2015

Implementing HTA in Greece

An initial proposal (NSRF 2015)

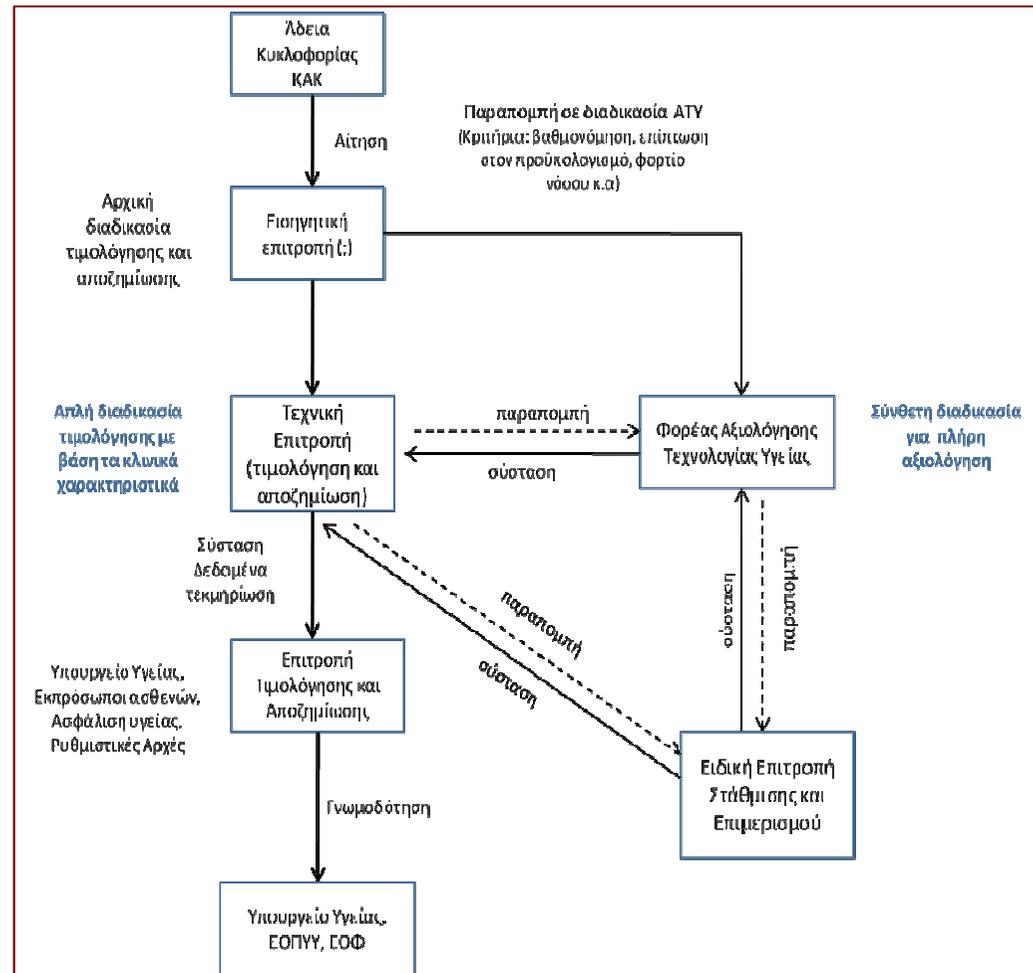


ΔΙΑΧΕΙΡΙΣΗ ΚΑΙ ΑΞΙΟΛΟΓΗΣΗ ΤΗΣ ΦΑΡΜΑΚΕΥΤΙΚΗΣ ΚΑΙΝΟΤΟΜΙΑΣ ΣΤΗΝ ΕΛΛΑΔΑ

ΜΙΑ ΠΡΟΣΕΓΓΙΣΗ ΠΟΛΙΤΙΚΗΣ ΟΙΚΟΝΟΜΙΑΣ ΤΗΣ ΥΓΕΙΑΣ

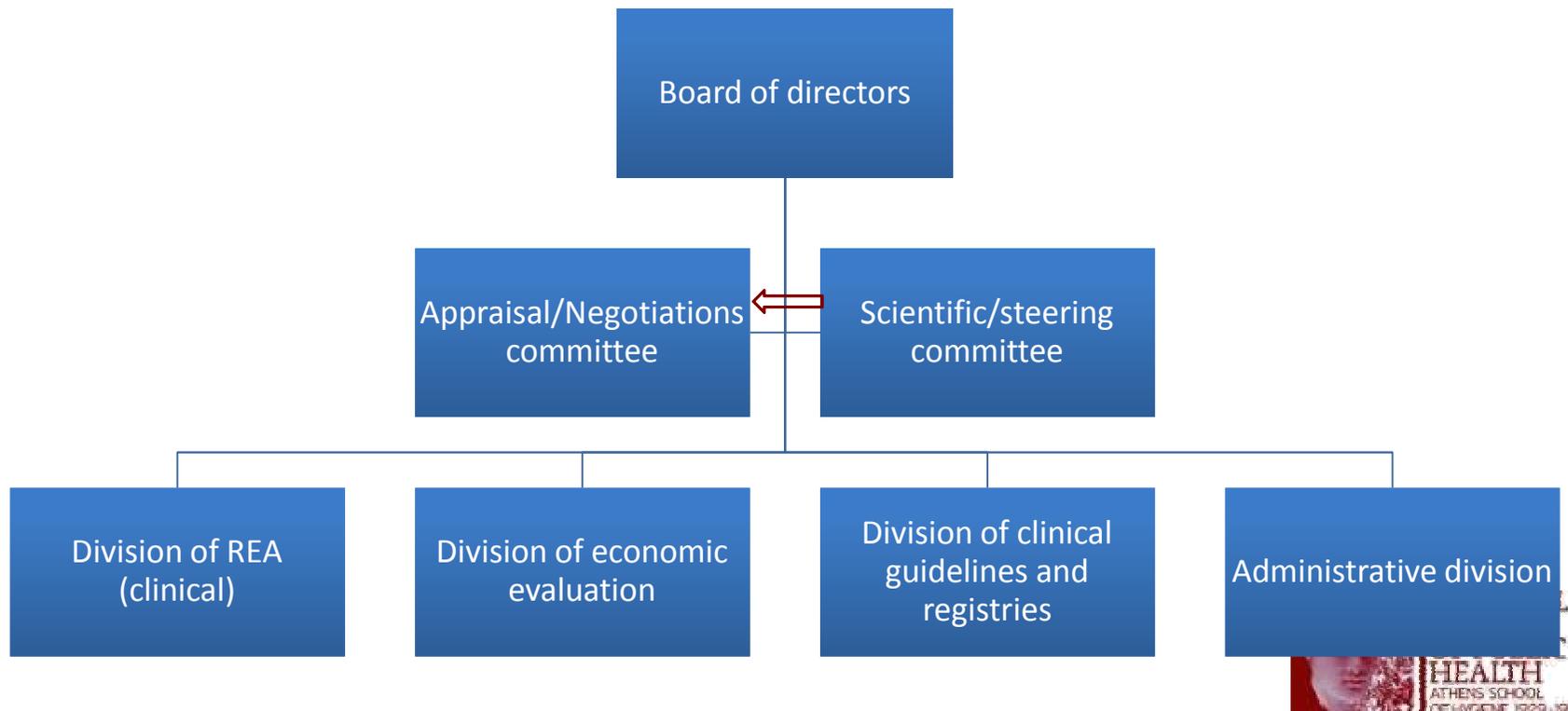
ΚΑΤΕΡΙΝΑ ΜΥΛΩΝΑ
ΕΛΕΥΘΕΡΙΑ ΚΑΡΑΜΠΛΗ
ΝΑΝΤΙΑ ΜΠΟΥΜΠΟΥΧΑΙΡΟΠΟΥΛΟΥ
ΝΙΚΟΣ ΜΑΝΙΑΣ
ΚΩΣΤΑΣ ΑΘΑΝΑΣΑΚΗΣ
ΕΛΠΙΔΑ ΠΑΒΗ
ΓΙΑΝΝΗΣ ΚΥΡΙΟΠΟΥΛΟΣ

ΕΚΔΟΣΕΙΣ ΚΑΣΤΑΝΙΟΤΗ



Updating and planning through learning from the international experience

- **HTA Organization:** a brief outline of a proposed structure
 - Key criteria: small and efficient scheme, but wide enough to include current and future evidence synthesis demands



Updating and planning through learning from the international experience

- **HTA Process:**
 - The key structural element
 - Again, the **analysis of the vast EU experience** can highlight where we are today and where we are going to
- For example: *A comparative analysis of the guidelines for Economic Evaluation within HTA in EU countries* (Zisis and Athanasakis, Open University of Cyprus, 2019)
 - Collection of all available guidance for EE in HTA
 - Content analysis of each guidance
 - Comparative analysis (similarities – differences)



A comparative analysis of the guidelines for EE within HTA in EU countries

(Zisis and Athanasakis, Open University of Cyprus, 2019)

Table 1: Similarities and differences between health economic evaluation guidelines in European Union and Norway

Data	Current clinical practice	Health/ Public care payer perspective	Societal perspective	Long time horizon	CUA/ CEA	EQ-5D	Subgroup analysis	QALY	RCTs	Modeling	Deterministic sensitivity analysis	Probabilistic sensitivity analysis	Endpoints (clinical, surrogate, final)	Data extrapolation	DR at 3%-5% in single analysis	ICER/ ICUR
AT	✓		✓	✓	NS ¹			NS ¹	✓	✓	✓		✓ ^{PR}		✓	✓
BE		✓		✓	✓	✓	✓	✓	✓	✓ ^{NR}	✓	✓	✓	✓	✓ ²	✓
HR	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓			✓	✓
FI	✓			✓	✓			✓	✓	✓		✓			✓	✓
NL	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓ ³	✓
PL	✓	✓		✓	✓ ⁴	✓		✓	✓	✓ ^{NR}	✓	✓			✓	✓
PT	✓		✓	✓ ⁵	✓ ⁶	✓	✓	✓	✓	✓	SA Yes, CI		✓	✓	✓	✓
UK-SCT	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
UK	✓	✓		✓	✓	✓	✓	✓	✓	✓ ^R		✓	✓	✓ ^R	✓	✓ ^{7WTV}
SE	✓		✓	✓ ⁵	✓	✓	✓	✓	✓		SA Yes, but not specified		✓ ^R	✓	✓	✓
LV	✓		✓		✓	✓		✓	✓	✓ ^{NR}	SA Yes, CI				✓	
LT	✓		✓		✓	✓		✓	✓	✓ ^{NR}	SA Yes, CI				✓	
EE	✓		✓		✓	✓		✓	✓	✓ ^{NR}	SA Yes, CI				✓	✓
HU	✓	✓ ^{PR}	✓	✓	✓		✓	✓	✓		✓	✓	✓	✓	✓	✓ ^{WTV}
IE	✓		✓	✓ ⁵	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
DE	All relevant interventions	✓ ^{SI}	✓	✓	✓	NS ⁸	✓	✓	✓	✓ ^{NP}	✓		✓	✓	✓	
FR	✓	Health Insurance and Collective Perspective (all payers)		✓	✓	✓	✓	✓	✓	✓ ^{IL}	✓	✓			✓	✓ ^{WTV}
DK			✓	✓ ⁵	NS ⁹	✓		✓ ⁹	✓	✓	SA Yes, but not specified		✓	✓	✓	✓
NO	✓			✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓

RCTs: Randomised-clinical trials, DMC: Direct medical costs, NDMC: Non-direct medical costs, CI: Confidence Intervals, SA: Sensitivity analysis, R: Requirement, NS: Not specified, NR: No requirement, PR: Primarily, WTV: With threshold value, DR: Discount rate, NP: No preference, SI: Social insurance

¹Choice of method depends on research question, ²Discount rate for costs at 3% and for benefits at 1,5%, ³Discount rate for costs at 4% and for health effects at 1,5%, ⁴CUA and CEA should be performed at the same time, ⁵Time horizon is proposed to cover the whole duration, ⁶Preference firstly on CUA and alternatively on CBA, ⁷Maximum acceptable ICER, ⁸All generic instruments are acceptable, although is not specified any instrument, ⁹All methods are acceptable

A proposal for an HTA process in Greece

- Should take into account EU experience and for the basis for decision making (and for the organizational structure)
- Should be **quick, efficient, participatory, transparent** and evaluate all technologies
- **Steps** of the process (in brief)
 1. **Comparative effectiveness analysis** (full HTA for those with better results, simple P&R rules for those with no significant differences vs. the SOC)
 2. **Economic evaluation** (Basis of efficiency, P&R, negotiations)
 3. **Appraisal** (final recommendation, full range of stakeholders according to EU standards, **provides a written document**)



Thank you very much

kathanasakis@esdy.edu.gr

k.athanasakis@gmail.com

