# Project introduction, overall objectives and relation to existing and national HTA initiatives

***Title:*** *An EU-wide initiative to build a supporting infrastructure to ensure ongoing implementation of the latest and fit-for-purpose HTA methodologies and tools in practice.*

***Acronym:*** *Support Utilisation of Sustainable and TAilored INnovative methods for HTA (SUSTAIN-HTA)*

Funded by the European Union

UK Research and Innovation

The SUSTAIN-HTA project is funded by the European Union's Horizon Europe programme under the grant agreement No 101136318. The UK participant is supported by UKRI grant No 10106859 (National Institute for Health and Care Excellence). Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union, the United Kingdom, HaDEA or UKRI. Neither the European Union, the United Kingdom, nor the granting authorities can be held responsible for them.

# HORIZON-HLTH-2023-IND-06-01 - Supporting the uptake of innovative Health Technology Assessment (HTA) methodology and advancing HTA expertise (call text)

- Identify innovative methods and tools, in particular those developed in EU-funded projects [illegible] HTA bodies' needs
- Identifications of barriers to the uptake of these methods (and [illegible] ciated tools, e.g. open-source software to run cost-effectiveness analyses)
- Use cases (based on the needs i[illegible] HTA bodies) to facilitate the endorsement by HTA bodies of innovative methods
- Deve[illegible] implementation plan including supporting tools and training modules
- Recommendations for broader dissemination

**Identify the methodological needs of HTA bodies at EU and national level!**

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# Organisation

- Funder: European Health and Digital Executive Agency on behalf of EC
- Coordinated Support Action
  - contributing to the objectives of Horizon Europe (i.e. dissemination, awareness-raising and communication, networking, coordination, etc.),
  - excluding R&I activities (except when undertaken under the component "Widening participation and spreading excellence" of the Work Programme "Widening participation and strengthening the European Research Area").

- 1 January 2024 – 31 December 2027 (4 years), with the intention of a sustainable system into 2028 and beyond.
- Coordinator: Utrecht University (UU)

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# Some initial considerations

- Many investments in HTA methodologies through EU projects for more than ten years
- Developments in how HTA bodies work; from systematic reviews and large indications to submission-based work for small and targeted populations.
- However, developments in HTA methodologies currently may often not match to the needs of HTA bodies
- Can we better align HTA needs to academic HTA methods development?
- Can we learn from some national interactions between HTA bodies and academics?

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# Main takeaways of SUSTAIN-HTA (1)

- Our position
  - To be a trusted, neutral platform that provides high-quality expertise on new HTA methods that meet the needs of HTA bodies

- Our mission
  - We want to map already existing tools, identify new methodological developments that match the HTA methodological needs and make them easily findable and accessible

- Our vision
  - To support the pan-European HTA workforce and align HTA expertise via a robust education and training framework that can encourage the uptake of novel, high-quality, needs-based HTA methodologies

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# Main takeaways of SUSTAIN-HTA (2)

- Scope
  - HTA methods for different health technologies
  - initial focus on health technologies that are perceived to be complex and/or may be part of initial EU HTAR assessments
  - Starting with relative effectiveness and cost-effectiveness and may focus later on other elements of HTA such as budget impact, ethical aspects and other domains of the HTA Core Model®

- Seeking to support national and regional HTA bodies but also processes as part of EU HTAR
  - Next to needs that are defined on the national or regional level, also methodological needs defined by the HTAR CG and its subgroups are of substantial importance
  - SUSTAIN-HTA is aiming to support the future HTA system by close interactions with the HTACG and its subgroups according to their expressed needs

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# Consortium composition SUSTAIN-HTA

| Partner # | Partner Name | Short Name | Partner Type | Country |
|---|---|---|---|---|
| 1 - Coordinator | Utrecht University; The Division of Pharmacoepidemiology and Clinical Pharmacology | UU(-PECP) | University | NL |
| 2 | Bocconi University; Centre for Research on Health and social care management | UB(-CERGAS) | University | IT |
| 3 | National Institute for Health & Care Excellence | NICE | HTA Body | UK |
| 4 | Erasmus Universitair Medisch Centrum Rotterdam | EMC | University | NL |
| 5 | Zorginstituut Nederland | ZIN | HTA Body | NL |
| 6 | Stichting Radboud Universitair Medisch Centrum | RUMC | University | NL |
| 7 | Syreon Kutato Intezet Korlatolt Felelossegu Tarsasag | SRI | SME | HU |
| 8 | Fundacion Vasca de Innovacion e Investigacion Sanitarias | OSTEBA | HTA Body | ES |
| 9 | GetReal Institute | GETREAL | NGO | NL |
| 10 | Synapse Research Management Partners S.L. | SYNAPSE | SME | ES |
| 11 | Nemzeti Népegészségügyi és Gyógyszerészeti Központ | NCPHP | HTA Body | HU |
| 12 | Agenzia Nazionale per i Servizi Sanitari Regionali | AGENAS | HTA Body | IT |
| 13 (Affiliated) | Universita Cattolica del Sacro Cuore (Affiliated entity of 12. AGENAS) | UCSC | University | IT |
| | | | | |
| 14 | Agencia de Qualitat i Avaluacio Sanitaries de Catalunya | AQUAS | HTA Body | ES |
| 15 | Direktoratet for medisinske produkter | NOMA | HTA Body | NO |

**7 HTA Bodies** **5 Universities** **2 SME's** **1 NGO**

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SUSTAIN HTA

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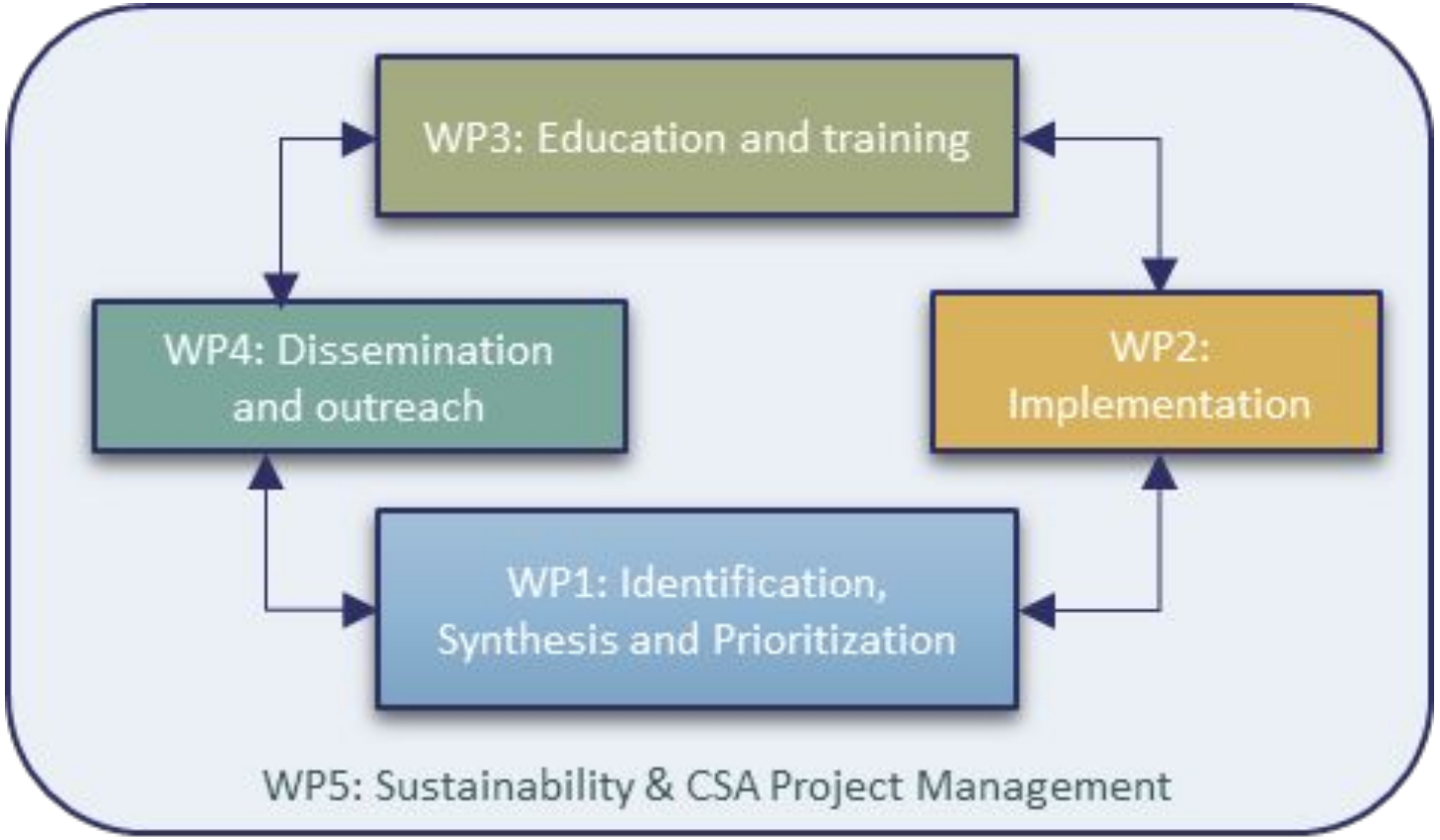
# Work Packages

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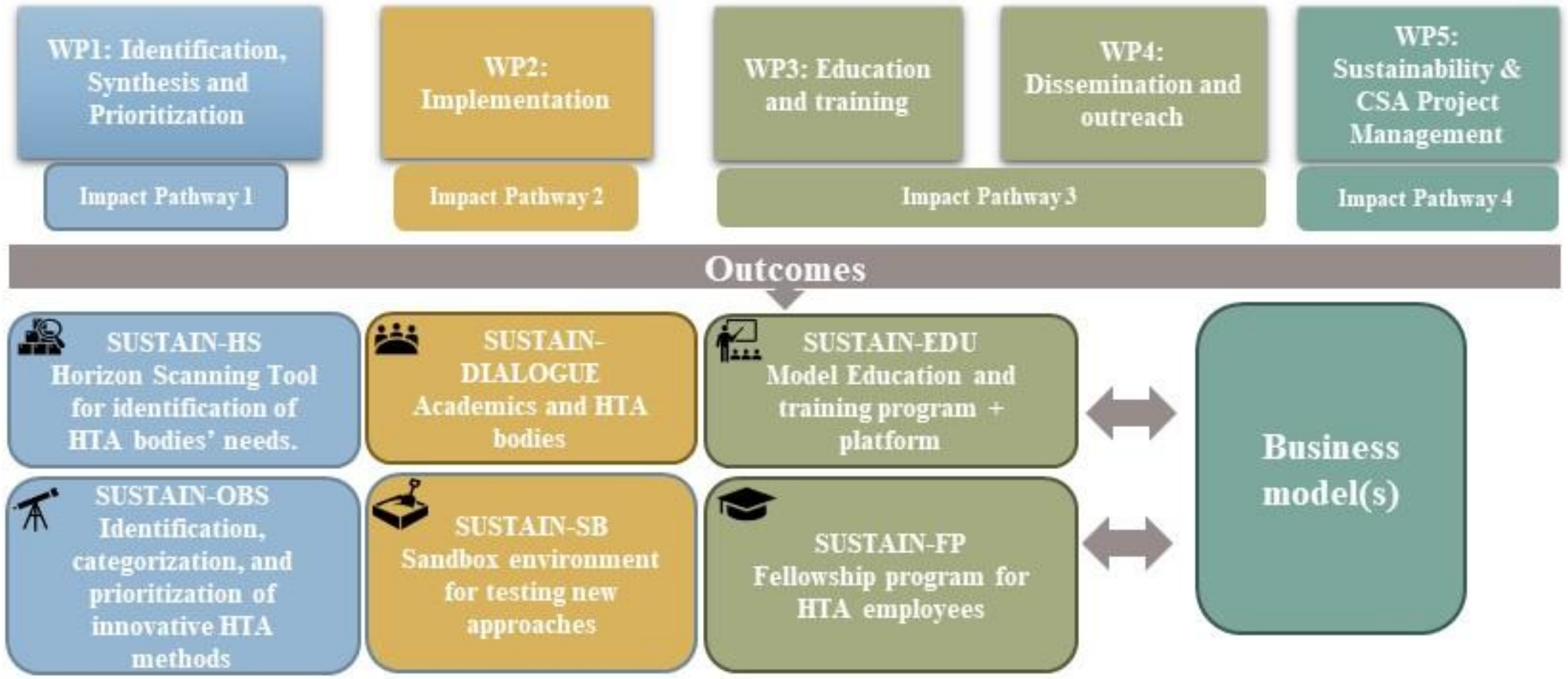
# Building blocks and outcomes of the project

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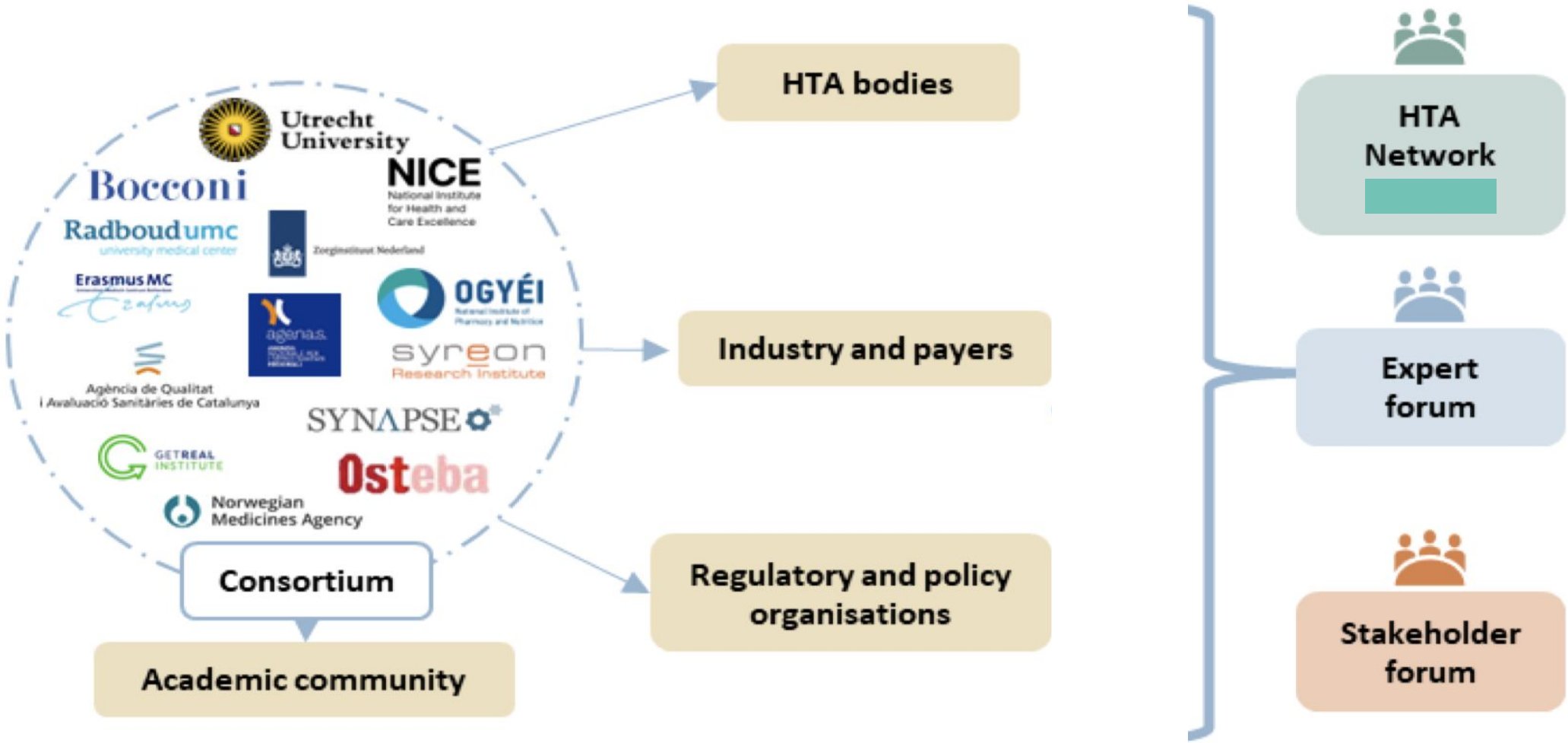


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# Participation in HTA Network

- HTA bodies in consortium
  - AGENAS (IT), AQUAS (ES), NCPHP (HU), NICE (UK), NOMA (NO), OSTEBA (ES), ZIN (NL)
- Inner circle (in Europe)
  - HTA Commission (GR), NIHO (SK), HTA Department (UKR), TLV (SE), KCE (BE), AIHTA (AT), Ministry of Health (SI), INFARMED (PT), additional partners to be confirmed
- Outer circle (outside Europe)
  - Additional partners to be confirmed

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# R&I projects with direct links to SUSTAIN-HTA partners

| Project | Partners involved | Relevant methods |
|---|---|---|
| H2020 HTx (www.htx-h2020.eu) | UU-PECP (coordinator), NICE, SRI, ZIN, SYNAPSE (partners) | Evidence synthesis (RCT&RWD), prediction modelling, personalised treatments, cost-effectiveness |
| H2020 IMPACT-HTA (www.impact-hta.eu) | UB-CERGAS (co-lead), NICE (partner) | Combining RCT & RWD, health care & social costs, MCDA, HTA for OMPs |
| H2020 COMED (www.comedh2020.eu) | UB-CERGAS (Coordinator), SRI (partner) | Economic evaluation of medtech |
| IMI EHDEN (www.ehden.eu) | EMC (coordinator), NICE, Synapse (partners), AQuAS (data partner via CatSalut) | Standardised health data but also research with these standardised data (RWD) |
| IMI GETREAL (now Institute) (www.getreal-institute.org) | GetReal (coordinator), UU-PECP, ZIN, NICE (partners), | RWD & RWE methods and use cases |
| IMI EUPATI (https://eupati.eu/projects/imi-efoeupati/) | Karen Facey (UU-PECP) (partner) | Patient involvement in and patient education on HTA |
| MedTech HTA (https://www.medtechta.eu/) | UB-CERGAS (coordinator) | HTA methods for medical devices |
| VALIDATE (building on INTEGRATE-HTA); (www.validatehta.eu) | RUMC (coordinator), OSTEBA (partner) | Methods development for Integrated HTA of complex health technologies |

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Next Generation Health Technology Assessment

**Health Policy Analysis**

# Reported Challenges in Health Technology Assessment of Complex Health Technologies

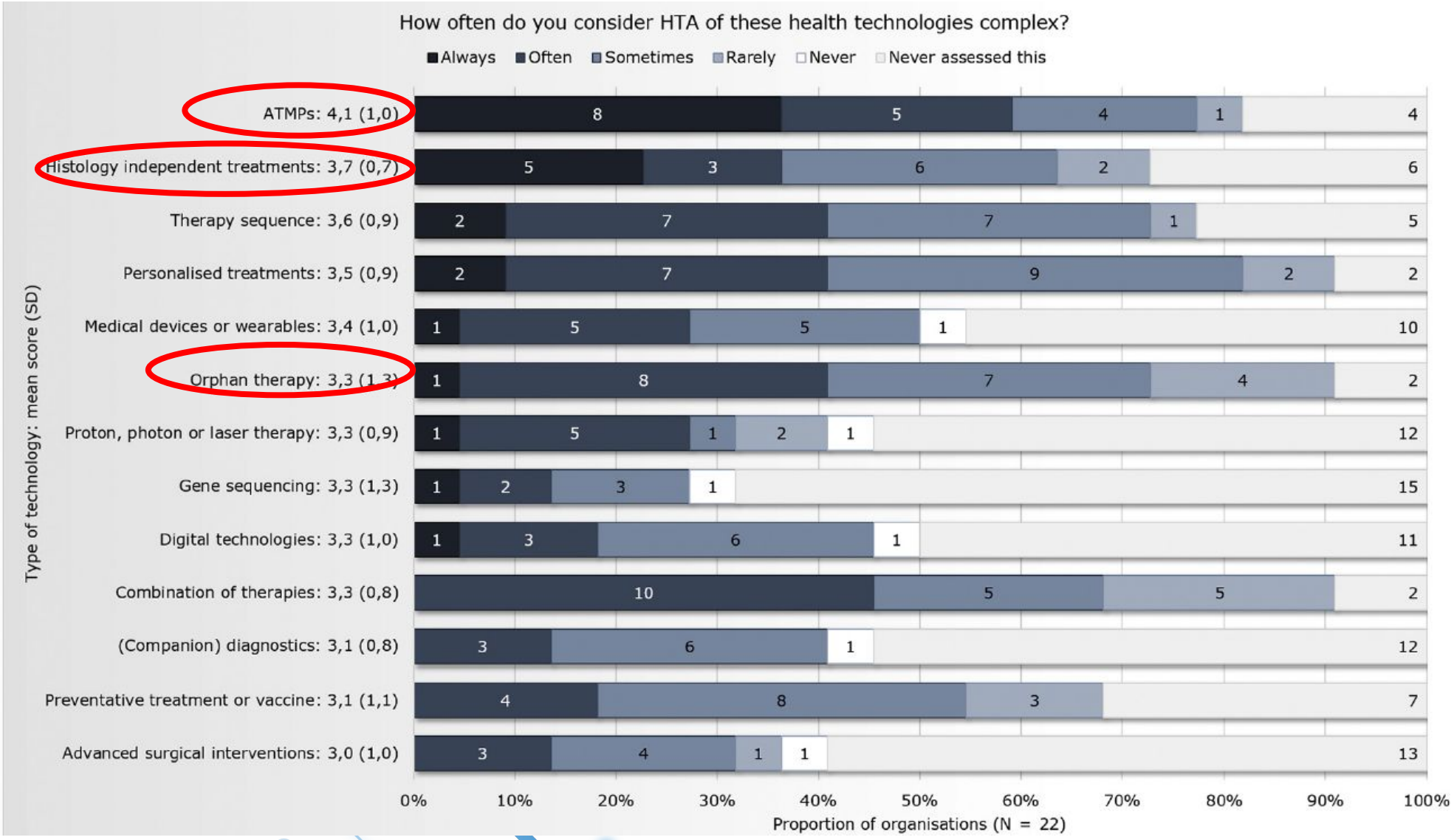
Milou A. Hogervorst, PharmD, Rick A. Vreman, PhD, Aukje K. Mantel-Teeuwisse, PhD, Wim G. Goettsch, PhD

## ABSTRACT

*Objectives:* With complex health technologies entering the market, methods for health technology assessment (HTA) may require changes. This study aimed to identify challenges in HTA of complex health technologies.

*Methods:* A survey was sent to European HTA organizations participating in European Network for HTA (EUnetHTA). The survey contained open questions and used predefined potentially complex health technologies and 7 case studies to identify types of complex health technologies and challenges faced during HTA. The survey was validated, tested for reliability by an expert panel, and pilot tested before dissemination.

*Results:* A total of 22 HTA organizations completed the survey (67%). Advanced therapeutic medicinal products (ATMPs) and histology-independent therapies were considered most challenging based on the predefined complex health technologies and case studies. For the case studies, more than half of the reported challenges were "methodological," equal in relative effectiveness assessments as in cost-effectiveness assessments. Through the open questions, we found that most of these challenges actually rooted in data unavailability. Data were reported as "absent," "insufficient," "immature," or "low quality" by 18 of 20 organizations (90%), in particular data on quality of life. Policy and organizational challenges and challenges because of societal or political pressure were reported by 8 (40%) and 4 organizations (20%), respectively. Modeling issues were reported least often (n = 2, 4%).




# Issues perceived

Open access Original research

BMJ Open

# Tools for assessing quality of studies investigating health interventions using real-world data: a literature review and content analysis

Li Jiu ,[1] Michiel Hartog,[1] Junfeng Wang,[1] Rick A Vreman,[1] Olaf H Klungel,[1] Aukje K Mantel-Teeuwisse ,[1] Wim G Goettsch[1,2]

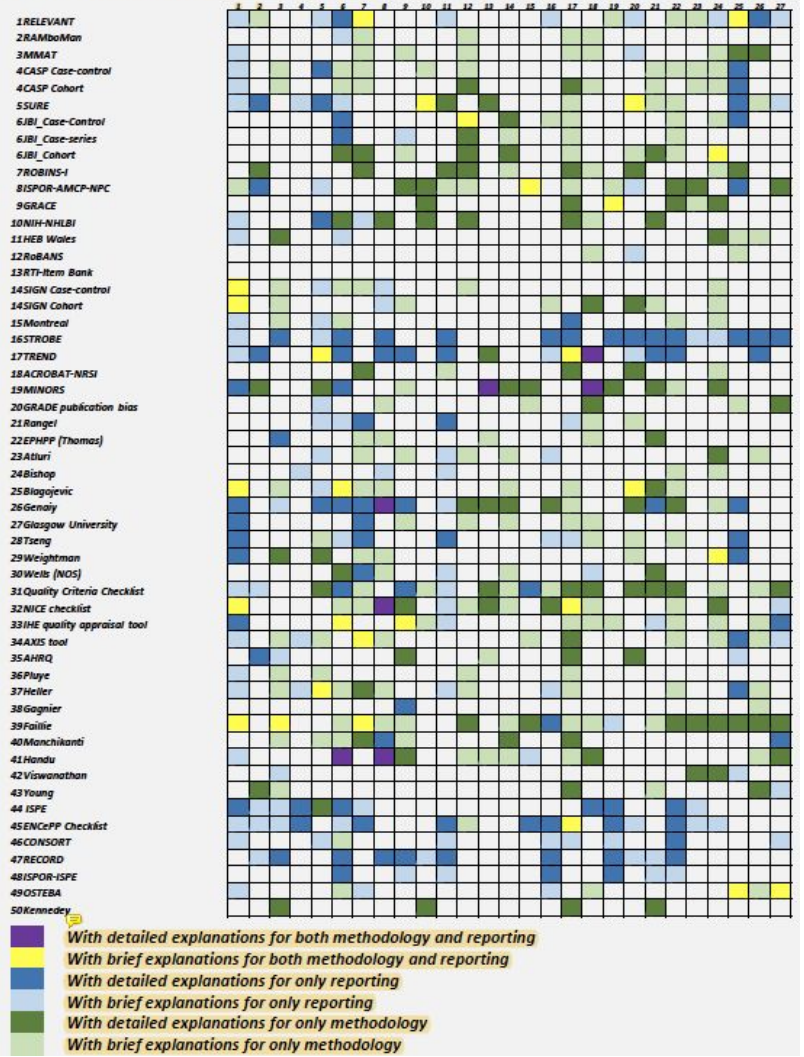
Next Generation Health Technology Assessment

## RESULTS

Table 1. List of items (1-27)

| | | | |
|---|---|---|---|
| 1 | Study objective | 14 | Length of follow-up (intervention) |
| 2 | Protocol | 15 | Outcome selection (outcome) |
| 3 | Study design | 16 | Definition (Outcome) |
| 4 | Ethical approval | 17 | Measurement (Outcome) |
| 5 | Sample size calculation/Power | 18 | Blinding (Outcome) |
| 6 | Eligibility criteria | 19 | Data source (Data collection) |
| 7 | Patients | 20 | Missing data (Data collection) |
| 8 | Participation rate | 21 | Loss to follow-up (Data collection) |
| 9 | Baseline characteristics | 22 | Description (Data analysis) |
| 10 | Selection (Intervention) | 23 | Sensitivity (Data analysis) |
| 11 | Definition (Intervention) | 24 | Confounding (Data Analysis) |
| 12 | Measurement (Intervention) | 25 | Are all the results included (results) |
| 13 | Blinding (intervention) | 26 | SPIN (Results) |
| | | 27 | Conflict of interest |

Table 2. How the appraisal tools fill in each item



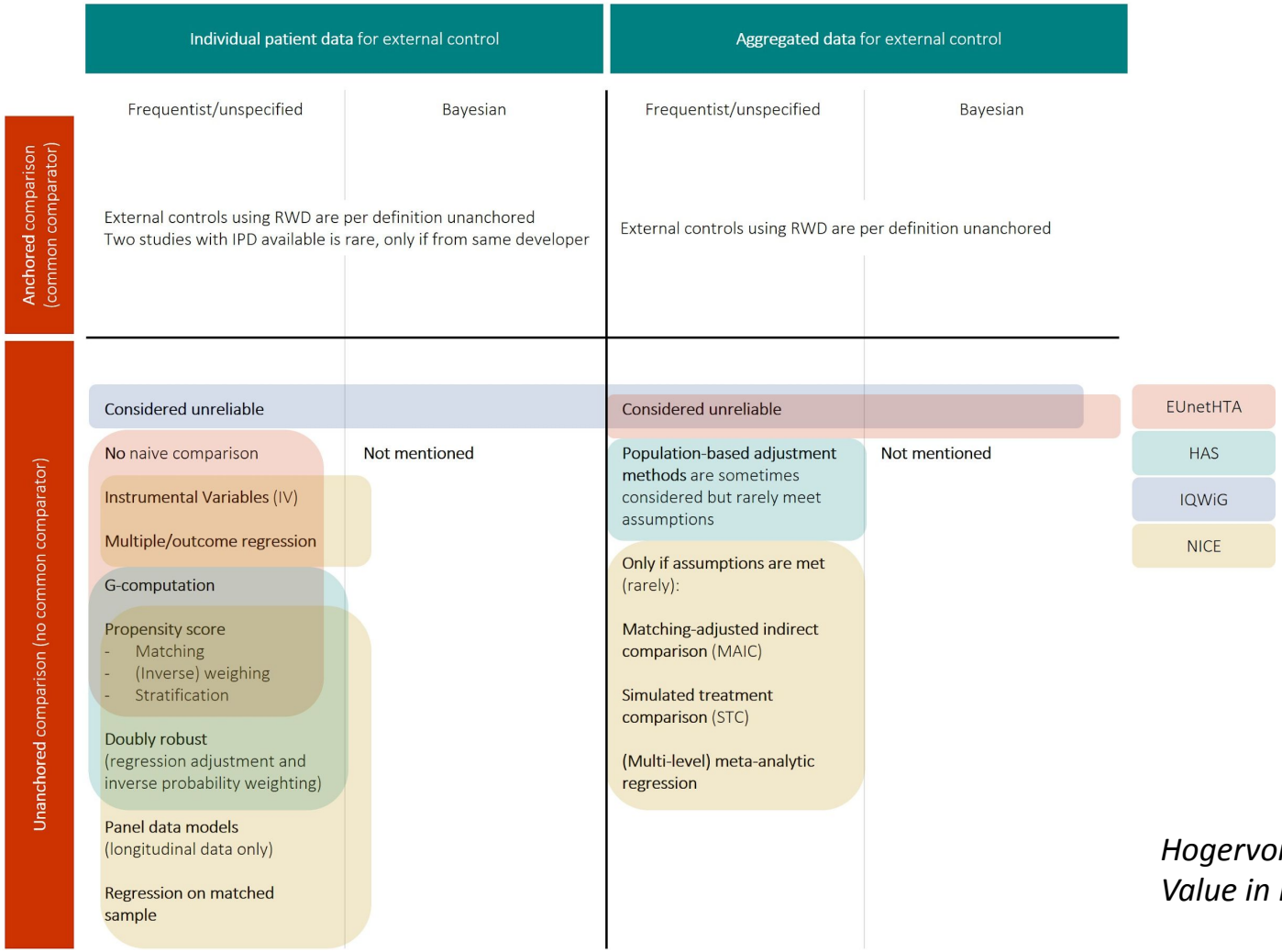

Li Jiu1, Michiel Hartog1, Junfeng Wang1, Rick A Vreman1,2, Aukje K Mantel Teeuwisse1, Wim G Goettsch1,2 ISPOR 2022

 This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement № 825162.

# Analytical Methods for Comparing Uncontrolled Trials with External Controls from Real-World Data: a systematic literature review and comparison to European Regulatory and Health Technology Assessment practice

GETREAL INSTITUTE | PUTTING REAL WORLD EVIDENCE INTO PRACTICE

Methods for indirect treatment comparisons (external controls) using RWD according to method guidelines




*Hogervorst etal,*
*Value in Health 2024 accepted*

IMPACT HTA Improved methods and actionable tools for enhancing HTA

The European Journal of Health Economics (2022) 23:979–991
https://doi.org/10.1007/s10198-021-01414-w

ORIGINAL PAPER


# Costing methodologies in European economic evaluation guidelines: commonalities and divergences

Leticia García-Mochón[1,2,3] · Zuzana Špacírová[1,2,3] · Jaime Espín[1,2,3]

Received: 9 November 2020 / Accepted: 11 November 2021 / Published online: 26 November 2021


## Abstract

From both the methodological point of view and standardization of methodology, little attention has been paid to the estimation of direct costs in evaluation of healthcare technologies. The objective is to revise the recommendations on direct costs provided in European economic evaluation guidelines and to identify the commonalities and divergences among them. To achieve this, a comprehensive search through several online databases was performed resulting in 41 documents from 26 European countries, be they economic evaluation guidelines or costing guidelines. The results show a large disparity in methodologies used in estimation of direct costs to be included in economic evaluations of health technologies recommended by European countries. A lack of standardization of cost estimation methodologies influences arbitrariness in selecting costs of resources included in economic evaluations of medicinal products or any other technologies and, therefore, in decision making process necessary to introduce new technology. In addition, this heterogeneity poses a major challenge for identifying factors that could affect the variability of unit costs across countries.

COMED PUSHING THE BOUNDARIES OF COST AND OUTCOME ANALYSIS OF MEDICAL TECHNOLOGIES

PharmacoEconomics (2020) 38:1055–1070
https://doi.org/10.1007/s40273-020-00935-1

REVIEW ARTICLE

# Surrogate Endpoints in Health Technology Assessment: An International Review of Methodological Guidelines

Bogdan Grigore[1] · Oriana Ciani[1,2] · Florian Dams[3] · Carlo Federici[2] · Saskia de Groot[4] · Meilin Möllenkamp[5] · Stefan Rabbe[5] · Kosta Shatrov[3] · Antal Zemplenyi[6,7] · Rod S. Taylor[1,8]

Published online: 23 June 2020


## Abstract

In the drive towards faster patient access to treatments, health technology assessment (HTA) agencies are increasingly faced with reliance on evidence from surrogate endpoints, leading to increased decision uncertainty. This study undertook an updated survey of methodological guidance for using surrogate endpoints across international HTA agencies. We reviewed HTA and economic evaluation methods guidance from European, Australian and Canadian HTA agencies. We considered how guidelines addressed the methods for handling surrogate endpoints, including (1) level of evidence, (2) methods of validation, and (3) thresholds of acceptability. Across the 73 HTA agencies surveyed, 29 (40%) had methodological guidelines that made

# Relation to other existing and new EU HTA initiatives

- EU HTAR CG and its subgroups for instance on Methodology
  - SUSTAIN-HTA will focus on providing knowledge that for instance may be used by SG on Methodology for updating their guidelines
- Tender to build capacity and knowledge for the implementation of the EU HTAR
  - SUSTAIN-HTA education and training program will focus on new, innovative HTA methods which could be supplementary to education/training planned in the tender that is mostly focused on existing methodology
- Technical Support Instrument on HTA
  - SUSTAIN-HTA might provide additional options for instance through its planned fellowship program for less experienced HTA bodies to gain additional expertise.

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# Final remarks

- SUSTAIN-HTA's mission is to help understanding the needs of HTA bodies and not to introduce an additional burden
  - A clear and well worked-out structural overview of the needs of individual HTA bodies will foster further timely development of HTA methods

- It should provide a fair and well-balanced filter on all the new HTA methods that are developed by academic groups, research initiatives, consultancy groups and private groups

- In time, SUSTAIN-HTA hopes to provide a platform that all EU HTA bodies can join to support the future of HTA methodology

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