



## Next Generation Health Technology Assessment

*Patient-centered, societally oriented, real-time decision-making  
on access to and reimbursement for health technologies  
throughout Europe*



# HTx: Vision for a new generation of HTA



- Imagine an individual patient who visits the doctor for a medical problem. The **doctor knows this patient's clinical history** (including her use of different health technologies, such as medical devices, e-health technologies and drugs), **her preferences and health outcomes**.



- Adequate clinical studies and real-world data analysis have resulted in a **real-time decision support system that the doctor and the patient can use to obtain person-centered information** (in a user-friendly format) about risks, benefits, outcomes and costs associated with a range of possible strategies to manage the patient's ailment.



- The **same information is made available to HTA agencies whose decisions are informed by means of this information**, analysed at the level of individuals and summarised at the subgroup and population level for the benefit of payers' decision-making. **This framework is what we envision as HTx.**



# What is Health Technology Assessment?



## EUnetHTA definition:

Health technology assessment (HTA) is 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.

Its aim is **to inform the formulation of safe, effective, health policies** that are patient focused and seek to achieve best value.

*Source: <https://www.who.int/health-technology-assessment/about/Defining/en/>*



# About the HTx project



- HTx is a **Horizon 2020 project** supported by the **European Union**, kicking-off in **January 2019** and lasting for **5 years**.
- The main aim of HTx is to create a framework for the Next Generation Health Technology Assessment (HTA) to **support patient-centered, societally oriented, real-time decision-making on access to and reimbursement** for health technologies throughout Europe



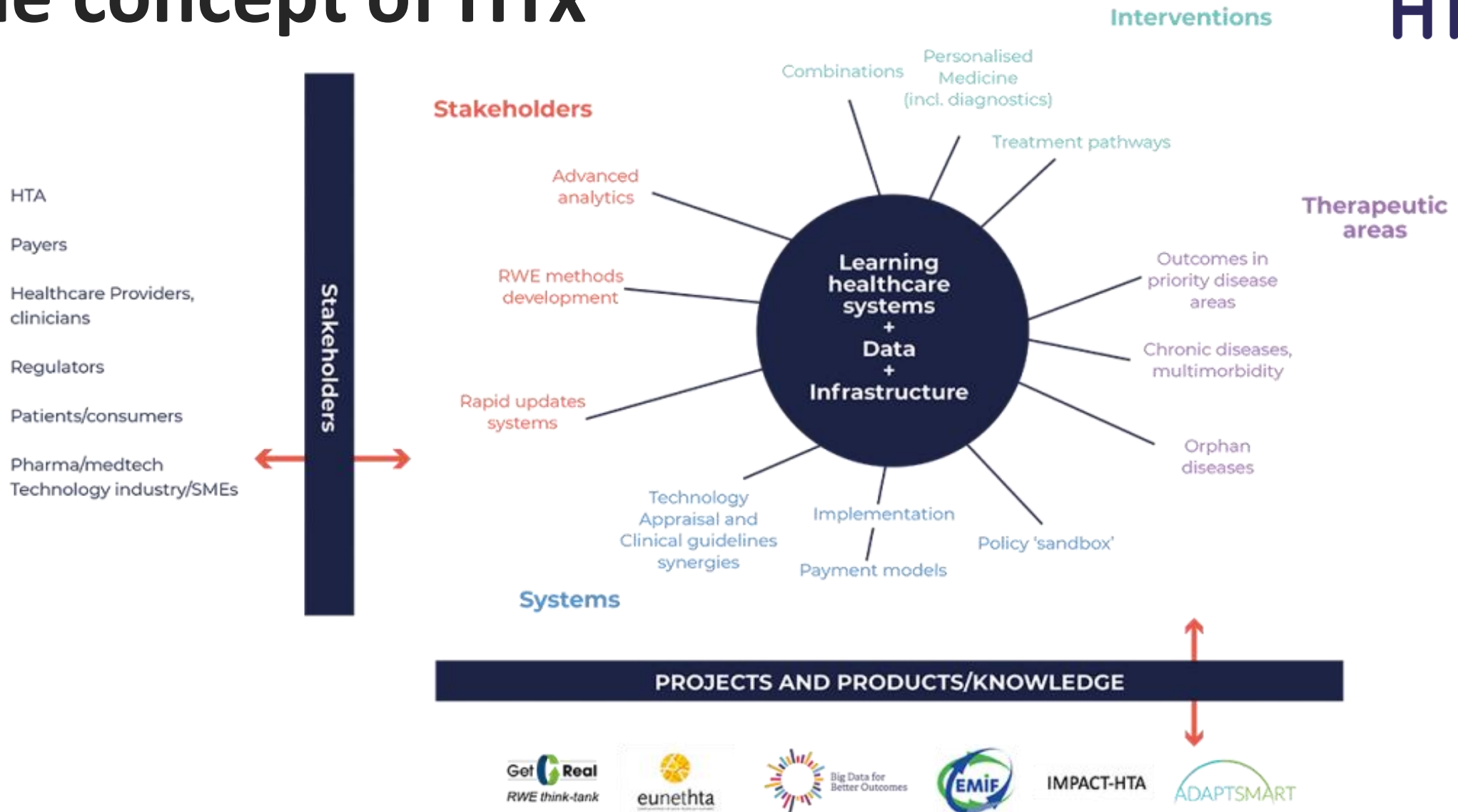
# Objectives



- HTx will facilitate the development of methodologies **to deliver more customized information on the effectiveness and cost-effectiveness of complex and personalised combinations of health technologies.**
- HTx will also provide methods **to support personalised treatment advice** that will be shared with patients and their physicians.
- Finally, HTx will in close collaboration with the European Network for HTA (EUnetHTA) and its stakeholders **pilot the implementation of these methods in Europe.**



# The concept of HTx





# Consortium partners



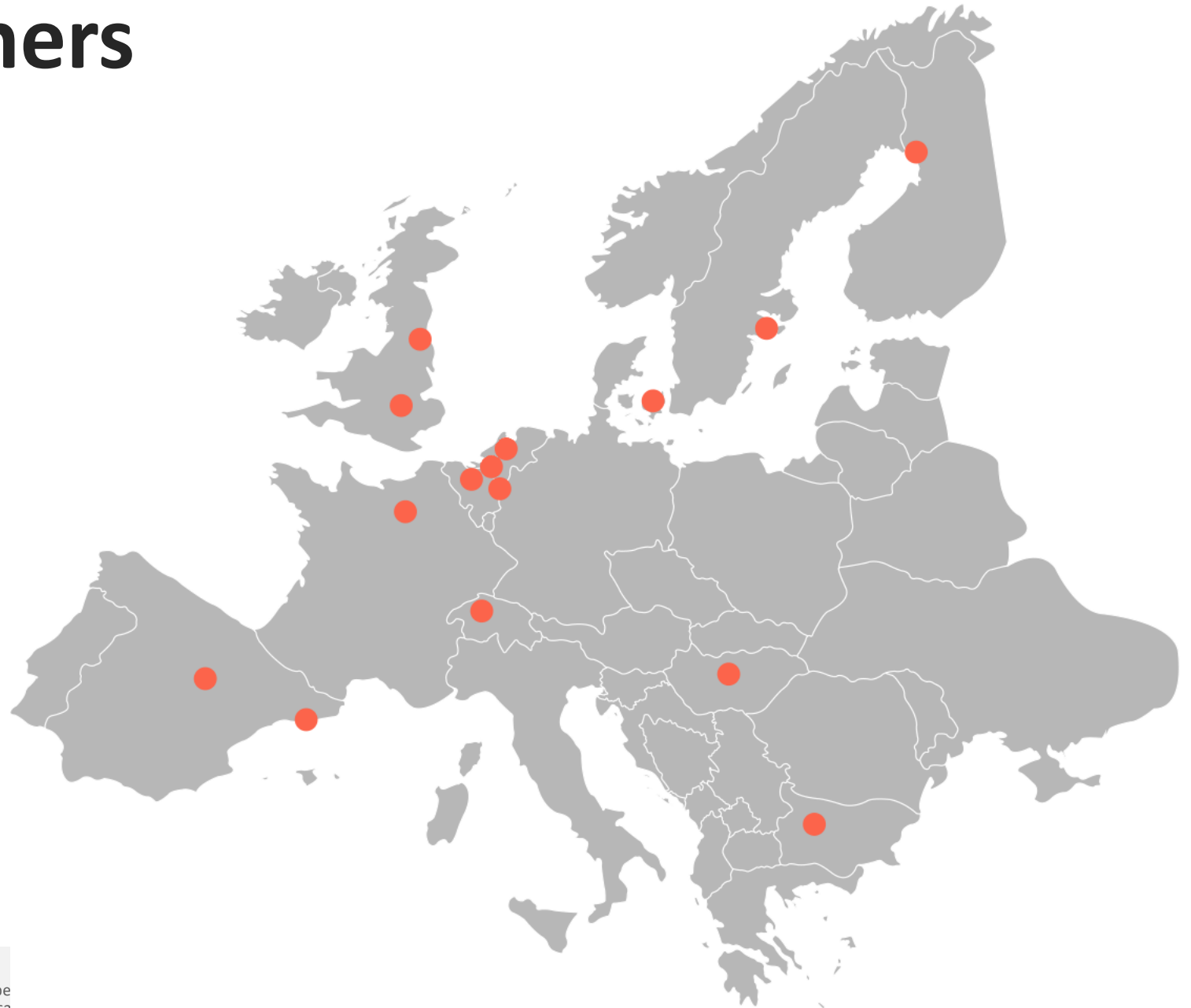
- **Utrecht University (project coordinator) (UU)** Netherlands
- **University of Copenhagen (UoC)**, Denmark
- **University of Oulu (UoO)** Finland
- **University of York (UoY)** UK
- **Medical University of Sofia (MUS)** Bulgaria
- **University of Bern (UBERN)** Switzerland
- **Universidad Politecnica de Madrid (UPM)** Spain
- **European Organisation for Research and Treatment of Cancer (EORTC)** Belgium
- **Dental and Pharmaceutical Benefits Agency (TLV)** Sweden
- **National Health Care Institute (ZIN)** Netherlands
- **National Institute of Health and Care Excellence (NICE)** UK
- **Syreon Research Institute (SRI)** Hungary
- **Synapse research management (SYNAPSE)** Spain
- **EURORDIS Rare Diseases Europe (EURORDIS)** France
- **University of Maastricht (UM)** Netherlands



# Consortium partners



**University of Utrecht**  
Project Coordinator





# Advisory boards – HTx Forum



## Role:

- to discuss the **broader implications of methods and tools** developed in project for society and healthcare systems.

## Participants:

- senior representatives of the most important stakeholder groups, which are **patients and consumers, payers, healthcare providers, technology producers** and also **regulators and HTA bodies**.



# Advisory boards – Expert Forum



## Role:

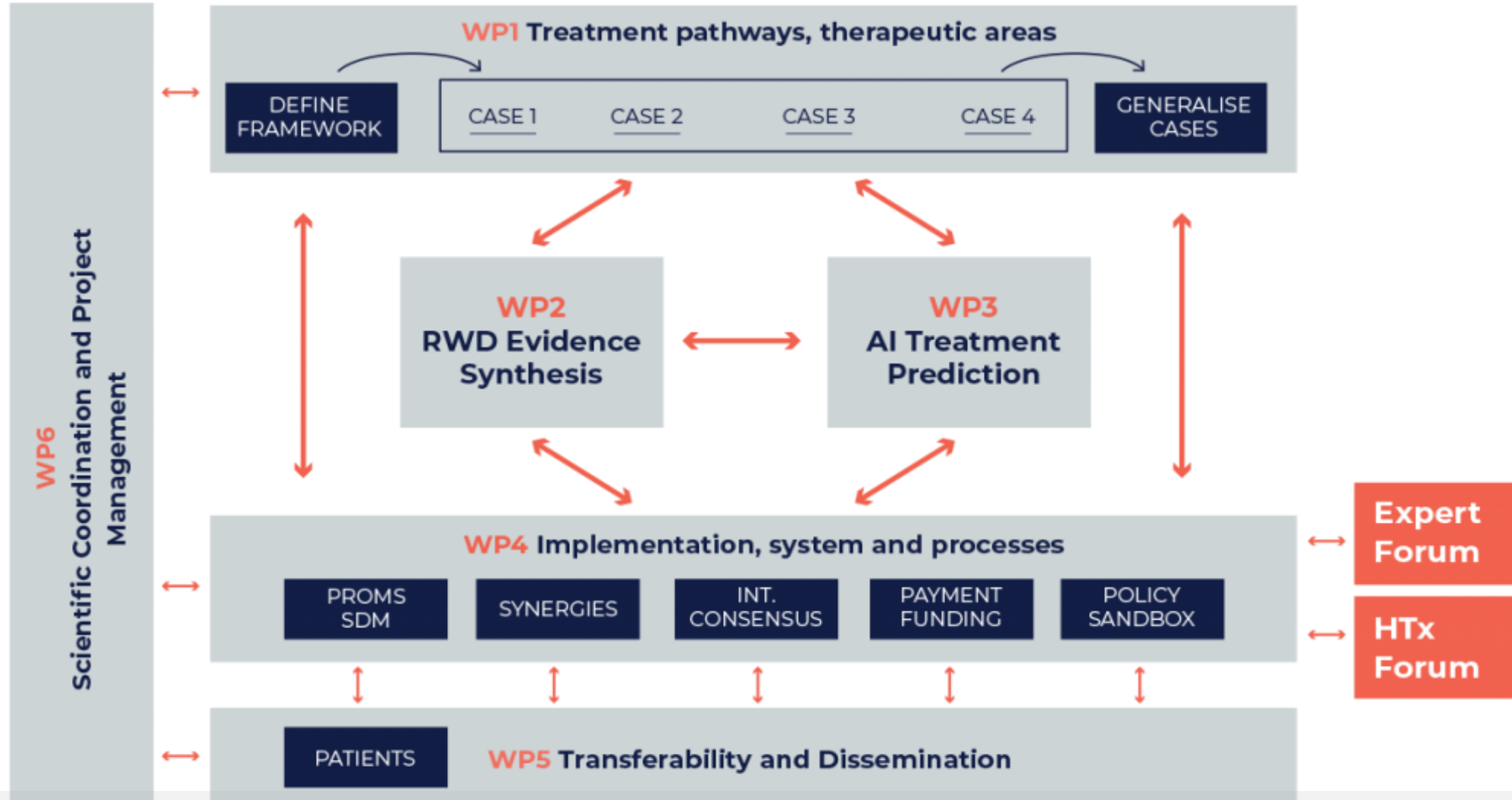
- more of a **scientific advisory board**

## Participants:

- representatives of **relevant H2020 and IMI projects**
- representatives from **other organisations that play an important role in setting tools and methods for guideline development** (e.g. ISPOR, Cochrane/GRADE, HTAi, ISPE)



# HTx Project structure



# Work Packages



- **WP1** Treatment pathways in specific therapeutic areas
- **WP2** Using real world data for evidence synthesis
- **WP3** Using artificial intelligence to forecast individualised treatments
- **WP4** Implementation into systems and processes
- **WP5** Transferability and dissemination
- **WP6** Scientific coordination and project management





# WP1 Treatment pathways in specific therapeutic areas



- The specific objectives of this work package are:
- To assess and determine average and individualised **real-world effectiveness and cost-effectiveness of health technologies and combinations** in the case studies.
- To predict **real-world impact of treatment decisions** in the case studies
- To **explore generalisability of the results** of the case studies to other settings and jurisdictions.





# WP2 Using real world data (RWD) for evidence synthesis



- The objectives of this work package are to **enrich the methodological arsenal related to the use of RWD** in order
- **To facilitate the HTA of different treatment modalities** including health technology combinations and treatment pathways
- To take into account **personalised treatment choices**
- To make **real-world predictions of health outcomes** at the population and individual level.







# WP3 Using artificial intelligence (AI) to forecast individualised treatments



- The overall objective of WP3 is
- to support the further development of **artificial intelligence (AI)/machine learning (ML) systems** that can **analyse data from different sources** in order **to predict individual patient treatment outcomes.**





# WP4 Implementation into systems and processes



- The specific objectives of this work package are:
- **International consensus building on the HTx methods.** That will include building consent between HTA organisations in Europe and between HTA organisations, regulators and guideline developing organisations.
- **To increase patient-centricity in decision-making.**
- To support the **development of flexible funding and reimbursement models for complex health technologies.** This also includes the assessment of the transferability of these models throughout Europe



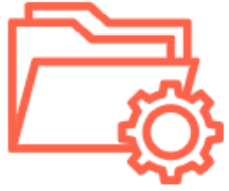


# WP5 Transferability and dissemination



- The specific objectives of this work package are:
- To **evaluate and support the transferability** of knowledge and methods gained from case studies and analyses to **Central and Eastern European countries**;
- To develop and implement an **extensive and targeted dissemination plan**;
- To **empower and engage patient representatives** in HTX implementation





# WP6 Scientific coordination and project management



- The specific objectives of this work package are:
- To ensure the **project management and scientific coordination** of the overall project.
- To act as the **primary contact to the commission** with respect to legal, financial and administrative tasks





**Next Generation Health Technology Assessment**

**Website:** [www.htx-h2020.eu](http://www.htx-h2020.eu)

**E-mail:** [info@htx-h2020.eu](mailto:info@htx-h2020.eu)



@htx\_h2020



[www.linkedin.com/htx\\_h2020](http://www.linkedin.com/htx_h2020)

