

How a value-based approach can bridge the radiotherapy treatment gaps

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Access to radiotherapy remains far from optimal

Radiotherapy is a cornerstone of cancer treatment, but overlooked in policies

- At least **one in four** European cancer patients do **not** receive the **radiotherapy they require**,
- Half of all cancer patients will require radiotherapy, in a curative or palliative setting,
- Focus of cancer **expenditure** is on systemic treatments, only an average **7.8%** of oncology budgets is dedicated to radiotherapy.

Uptake and reimbursement of innovations in RO is often difficult

- There is often an **upfront** need for capital or human **investment**,
- Generating **evidence** in RO can be problematic: translation of innovation into improved outcomes can take **months to years** after treatment, especially for traditional outcomes such as OS.

A radiotherapy specific value-based assessment tool is necessary

'Value' can facilitate access to innovations in RO for patients

- A value-based system can help identify **innovations** that can be implemented with an **alternative approach to evidence generation**, such as real world evidence,
- Value will assist policy makers in **decision making** on a local, national and international scale,
- Current tools do not or not sufficiently account for the **patient's perspective** in selection of outcomes.

Current value-based tools in oncology do not take into account RO specific aspects

- RCT as 'gold standard' of evaluation is not feasible for the **diversity of interventions** in RO, ranging from immobilisation devices over heavy particles to AI contouring,
- Benefit for the patient can be concealed by **operator skills or learning curve**,
- **Non-traditional outcomes**, such as toxicity or functional aspects, are seldom appraised for systemic treatments but highlight RO benefits.

Value-based healthcare in radiotherapy a project by ESTRO-HERO

The Health Economics in Radiation Oncology program of the European Society for Radiotherapy and Oncology (ESTRO-HERO)

has proposed to build a robust **value-based framework for RO interventions**

- ✓ **Literature review, qualitative research** and stakeholder **consensus building** through a Delphi approach will be the main methods. **Stakeholders** (policy, industry, ...) will be involved in every step, with **patient** representatives as crucial partners
- ✓ The project started in October 2021, with a PhD project at Ghent University, tackling the **diversity of innovations in RO**. A systematic literature review identified definitions and classifications of innovation, these will be appraised by the ESTRO-HERO group for suitability in a value-based context
- ✓ Future steps are prioritising what **outcomes** or **level of evidence** is required for each category to justify **implementation or reimbursement**, and ultimately build a value-based framework to facilitate **early access** to innovations that could benefit the patient.