Integrated health technology assessment for the evaluation of complex technologies

INTEGRATE-HTA

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for the INTEGRATE-HTA project team
Aim of INTEGRATE-HTA

To develop concepts and methods for a comprehensive, patient-centred, and integrated (as opposed to side-by-side) assessment of complex technologies that includes and considers

- effectiveness and economic, sociocultural, ethical, and legal issues,
- patient preferences and patient-specific moderators of treatment,
- context and implementation issues.
Starting point: HTA-Definition

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…”

(EUnetHTA n.d.)
### 1) Modulating factors

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## 1) Impact of modulating factors on outcomes

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Observation 1

- For the assessment of complex technologies implementation, context, patient characteristics and interactions matter

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HTA-Definition

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2) Aggregating outcomes

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Integration
Observation 2

- For **complex** technologies decision-makers need assessment-information in an **integrated (not aggregated)** way and integration needs to start from the beginning of the assessment.
Structure of INTEGRATE-HTA

WP6: Integration

WP 3: Assessment issues of complex technologies

WP 4: Patients’ preferences and moderators

WP 5: Context & implementation

WP 7: Case study palliative care

WP 8: Testing on other technologies
The outcome – structured by the INTEGRATE-HTA Process Model
Step 1: Bringing evidence generation into perspective

- Input through Stakeholder Advisory Panels (SAPs): Topics, objectives, patient groups, context and implementation
Step 2: Patient characteristics and Logic Model

- Creating a logic model taking patient characteristics, implementation issues and context into account
- Structuring patient heterogeneity into groups of patients with certain characteristics
Step 3: Assessing the Evidence

- Systematic reviews and other methods with focus on the objective of the HTA
Step 4: Inserting the evidence into the logic model

- Evidence is inserted into the logic model
- HTA-process might end here and feed directly into Step 6: Structured deliberative decision-making
Step 5: Reducing complexity (optional)

- Employing decision support tools (e.g. Multi Criteria Decision Making / MCDA-type) to reduce complexity
Step 6: Structured deliberative decision-making

- Structured process of decision-makers taking uncertainty, unanswered questions, and limitations into account
Products: Guidances and “Demonstration-HTA”


2. Guidance for retrieving and critical appraisal of the literature on **moderators of treatment effects** and for the critical appraisal of articles concerning **patient preferences for treatment outcomes**

3. Guidance for the **assessment of context and implementation** in systematic reviews and health technology assessments of complex interventions and for the **use of logic models** in systematic reviews and health technology assessments of complex interventions

4. Guidance for an **integrated assessment** of complex health technologies

5. **Demonstration HTA** on reinforced models on home based palliative care
Lessons learnt

- (Relationships between) intervention, patient characteristics, implementation, and context **need to be identified and modelled** for the assessment of any complex technology.

- A **defined perspective** is necessary for an integrated assessment.

- **Integration** is a process that **needs to start from the beginning**.

![Diagram showing relationships between patient characteristics, implementation, context, and findings/outcomes.](image-url)
Potential future collaborations

**EU-projects:** Applying the guidances on hospital-based HTA, medical devices, rare diseases

**EUNetHTA:** Expanding the core model for the assessment of complex technologies

**HTA-agencies:** Exchange on using and refining the guidances
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Please join us at the final conference of the INTEGRATE-HTA-Project at 12./13. November in Amsterdam

→ www.integrate-hta.eu

http://www.iamsterdam.com