INTEGRATE-HTA
Towards a comprehensive and integrated assessment of complex health technologies

The INTEGRATE-HTA process model

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Definition of HTA

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.)

Decision-makers need information in an integrated way.
Example for a complex technology: HTA on palliative care

- Interventions not (pre)defined
  - Example: general vs. specialized palliative care
- Many outcome parameters
  - Example: hospitalization, quality of life, „good death“
- Context as part of the mode of action
  - Example: At home? In a hospice?

Interaction between intervention, implementation and context!
Aim of INTEGRATE-HTA

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

- effectiveness and economic, sociocultural, ethical, and legal issues,
- patient preferences and patient-specific moderators of treatment,
- context and implementation issues.
How can we systematically integrate these different aspects in HTA?
The INTEGRATE-HTA Process Model
Step 1: Bringing the evidence generation into perspective

- Selection of theme for assessment by commissioners and HTA experts
- Literature review by HTA experts
- Input through Stakeholder Advisory Panels (SAPs)

Output: Definition of HTA objective and the definition of technologies
Step 2: Patient characteristics and Logic Model

- Creating an a priori logic model taking patient characteristics, implementation issues and context into account
- Review of logic model by SAPs

Output: Specific logic model to start evidence collection
System-based logic model: Case study Palliative Care

Participants: Adults with life-limiting conditions and their families/carers

Intervention and comparison: Models of palliative care

Intervention theory
- Holistic approach to improve quality of life and to enable a good death

Intervention design
Components:
- Services that address:
  - Physical needs
  - Psychological needs
  - Social needs
  - Spiritual needs

Implementation
- Timing and duration:
  - From diagnosis to end of life and bereavement vs. sequence to curative care
  - Concurrency of curative and palliative care vs. transition to palliative care
- Dose and intensity – variable according to patient & family needs

Intervention delivery
- Delivery mechanisms:
  - Face-to-face / distant (telephone, online) / mixed
  - Individual/group patient-carer dyad / mixed

Implementation
- Quality of care strategies
- Financing/Reimbursement strategies
- Public (e.g., taxation; insurance)
- Private/self-funding
- Organisational culture
- Public sector
- Private sector
- Charitable/voluntary sector
- Integration/coordination of services

Context
- Geographical:
  - European Union
  - Urban rural
- Epidemiological:
  - Cancer focused palliative care
  - Other diseases
- Social-cultural:
  - Ethnicity
  - Religion
  - Family and community preferences
  - Individual patient preferences
- Socio-economic:
  - Education
  - Wealth
  - Housing
- Ethical:
  - Autonomy
  - Sanctity of life
  - Beneficence
  - Non-maleficence
  - Justice

Legal:
- Mental capacity act
- Advance directive
- Shared decision-making

Political:
- Current political climate
- Political systems

Non-health outcomes
- Economic costs
- Non-economic costs
- Acceptability of models of care

Outcomes
- Intermediate outcomes
- Process outcomes:
  - Quality of care
  - Hospitalisation
  - Reach
  - Professional caregiver outcomes

Health outcomes
- Patients:
  - Quality of life
  - Physical well-being
  - Psychological well-being
  - Spiritual well-being
  - Good death
  - Mortality

Family Carers/family:
- Psychological health
- Physical health
- Quality of life

Inhouse members who take on the role of caregiving health professionals
Includes shift, medium, and long-term outcomes
Includes some outcomes need not be included

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Outcomes

Intermediate outcomes

Process outcomes:
- Quality of care
- Hospitalisation
- Reach
- Professional caregiver outcomes

Surrogate outcomes (of patients and carers)
- Coping
- Mastery
- Self-efficacy

Health outcomes

Patients:
- Quality of life
- Physical well-being (reduced symptoms)
- Psychological well-being
- Spiritual well-being
- Good death/achieving preferred place of death
- Survival

Family Carers/Family:
- Psychological health
- Physical health
- Quality of life

Non-health outcomes
- Economic costs
- Non-economic costs
- Acceptability of models of care

Intermediate outcomes

Process outcomes:
Surrogate outcomes (of patients and carers)

Health outcomes

Patients

Family Carers/Family

Non-health outcomes
Step 3: Assessing the Evidence

- Specific requirements and evidence needs according to the SAP topics identified and the needs of the logic model
- Systematic reviews and other methods addressing the HTA objective

Output: Evidence reports regarding different HTA aspects
Step 4
Processing the evidence

- Processing information that is captured in evidence reports
- Will form the foundation for a decision-making model.
- Review the assessment results by experts and SAPs

Output: Decision-making model, that portrays relationship that are of relevance for the benefit of an intervention
Step 5: Reducing complexity

- Employing decision support tools (e.g. MDCA-type) to reduce complexity
- Discussion and evaluation with a decision committee representing different stakeholders

Output: Report on the decision analysis to manage the generated complexity
Step 6
Structured deliberative decision-making

- Structured process of decision making taking uncertainty, unanswered questions and limitations of this approach into account

Output: HTA recommendation
Conclusion

• Participation of relevant stakeholder before during and after the HTA is important to obtain relevant results

• Form the very beginning, integration is important to address the interaction between intervention, implementation and context
Please join us at the final conference of the INTEGRATE-HTA-Project at 12/13 November in Amsterdam

www.integrate-hta.eu