

Indicators for the assessment of healthcare innovations

Results from the Inno-HTA project *

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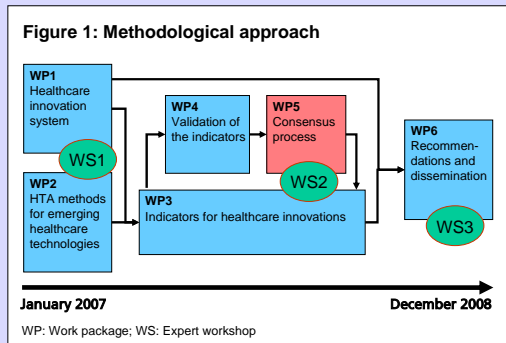
Introduction

In part because of methodological constraints, HTA to date mainly restricts itself to treatments that are already marketed. Regarding emerging health technologies, the assessment criteria commonly used do not support the many decisions that need to be made by researchers, developers, patients, policy-makers etc. in earlier phases of the development. Therefore, advances in treatments or technologies are not sufficiently utilized.

The EU-funded project *HTA-Methodology for Innovative Healthcare Technologies (Inno-HTA)* aims at helping close the gap between the development of new technologies and their application. A **generic set of indicators for the evaluation of health technologies in an early stage of development** is developed.

Methodological Approach

The approach combines input from HTA and from innovation research and integrates the different perspectives in a multi-step consensus process:



- WP1 Adoption of the **innovation system approach** to the healthcare system
- WP2 Overview of approaches to the evaluation of healthcare innovations within "**established**" HTA
- WP3 Elaboration of a **first set of indicators**
- WP4 **Validation of the indicators** in technology-specific case studies
- WP5 Development of a **broad consensus on indicators** for emerging healthcare technologies
- WP6 Discussion of conclusions and **implementation** in HTA and healthcare innovation practice

Online Survey

From the earlier steps, a **draft list of 221 indicators** in 31 domains resulted. The invitation to participate in the online survey was individually sent to $n_0=492$ persons or organisations, as well as the members of the EUnetHTA network (approx. $n=300$) and the mailing list of the German Network for Evidence-based Medicine (approx. $n=700$).

The indicators had to be assessed on the **three criteria** by four-step Likert scales (very low – low – high – very high):

- **Validity:** The indicator (if fed with sufficient data) gives clear evidence on a specific attribute of the diagnostic or treatment method under consideration ("**measures what it is supposed to measure**").
- **Relevance:** The indicator (if fed with sufficient data) is **relevant for important decisions** of stakeholders.
- **Evidence:** Depending on the stage of development of the treatment, non-biased **evidence** on the indicator is usually **available** (whether in the public domain or confidential) **or could be generated** e.g. by the developing company.

Thus, up to 663 assessments could be made. To date, **n=70** persons assessed at least one indicator. More than 50% of the participants completed more than 60% of the possible assessments.

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- Institute of Health Economics and Health Care Management, National Research Center for Environment and Health, Neuherberg, Germany (contact: Jürgen John)
- Institute for Science and Society, University of Nottingham, UK (contact: Paul Martin)
- Ludwig Boltzmann Institute for Health Technology Assessment, Vienna, Austria (contact: Claudia Wild)
- Danish Centre for Evaluation and HTA, National Board of Health, Copenhagen, Denmark (contact: Karla Douw)
- Health Statistics and Medical Technologies State Agency, Riga, Latvia (contact: Kristine Bruvere)

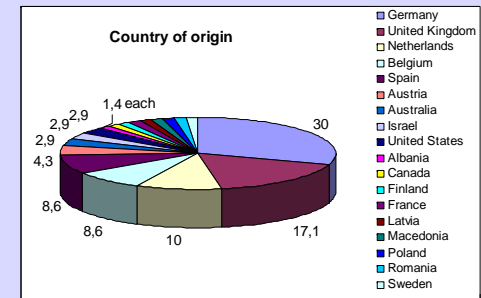
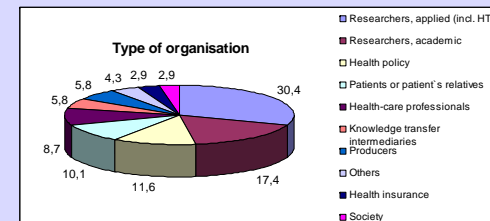
V Annual Meeting of Health Technology Assessment International, Montréal, Canada, 7-9 July, 2008

The online survey is still open for participation at www.inno-hta.eu. We are glad about your support!



Sample of the online survey

The participants come from a broad range of countries with a focus on Western Europe and types of organisations with applied researchers and HTA people as strongest group. 86% work in non-profit organisations.



Results of the online survey – focus on Relevance

Combining the frequencies of values on the relevance criterion with a low rate "cannot answer" responses, the following indicators ranked highest:

Domain	Indicator
effectiveness/efficacy	➤ change in morbidity compared to alternative interventions
clinical utility	➤ improvement in care for patients for which no adequate treatment existed
effectiveness/efficacy	➤ effects on mortality caused by target disease
knowledge base/knowledge transfer	➤ evidence on clinical benefits of the technology available
knowledge base/knowledge transfer; reimbursement; pricing	➤ evidence on costs, benefits, cost-effectiveness etc. available
safety	➤ mortality due to adverse effects/adverse events
	➤ impact of (potential) harms on health outcomes
	➤ risk-benefit-ratio
effectiveness/efficacy	➤ control of disease or symptoms by patient through treatment
knowledge base/knowledge transfer	➤ evidence on risk/benefit of technology available

Most of the higher-ranking indicators are "well-known" HTA indicators, but supplementary indicators as "impact of technology on quality of care" or "budget for provision of treatment available" follow closely.

Conclusions

In order to support the interest groups' decisions around emerging healthcare technologies, a broad set of indicators is necessary. Despite difficulties in data availability, HTA can make valuable contributions to the assessment of healthcare innovations. Validity and relevance of the indicators for the different stakeholder groups still have to be understood more deeply.

The results and conclusions of the project will be discussed at a **public workshop on 4 December 2008** in Copenhagen, Denmark.

Besides "innovation researchers", HTA producers and methodologists, the consortium includes HTA-agencies and has a strong link to the EUnetHTA and EuroScan projects.

Overmore, the approach includes external expertise by an international **Board of Advisors, expert workshops and an open consensus process.**

Internet + Contact: <http://www.inno-hta.eu>

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