Health ICT and HTA: towards synergy

10.P. - Workshop: The cutting edge of Health Technology Assessment: Information and Communication Technologies

P. Doupi, MD, PhD.

European Public Health Conference 2017, Stockholm, Sweden

4 November 2017
The challenge of Health IT

“Information technologies (IT) are often put forward as important instruments to improve quality and efficiency in health care. However, the evidence is lacking of the specific contribution of these technologies to outcome and efficiency improvement. … A major cause for lack of evidence of effectiveness is the methodological difficulties in establishing this evidence. … What is needed in this area is consensus on methods and criteria to be applied in assessment, similar as in e.g. evaluation of drugs or diagnostic devices. This consensus is needed both for the industry, as well as for the IT users, at various levels.”

van Gennip, Talmon, Editors, Assessment and Evaluation of IT’s in Medicine, Studies in Health Technology and Informatics 17 (1995), Amsterdam, IOS Press.

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Guideline for good evaluation practice in health informatics (GEP-HI)

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\textbf{ARTICLE INFO}

\textbf{ABSTRACT}

Objective: Development of: evaluation studies in health
Methods: Issues to be addressed on the evaluation of the guideline were discussed in conferences and by e-mail on the web.
Results: Sixty issues were identified and execution of an article dealing with issues of an evaluation of methods, project plan, risk management and project results are also addressed.
Conclusion: A comprehensive practice in health informatics discussed. Application of potentially leading to a high step towards building strong informatics

STARE-HI—Statement on reporting of evaluation studies in Health Informatics

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\textbf{ARTICLE INFO}

\textbf{ABSTRACT}

Objective: Development of guidelines for publication of evaluation studies of Health Informatics.
Methods: An initial list of issues to be addressed in reports on evaluation studies was drafted based on experiences as editors and reviewers of journals in Health Informatics and as authors of systematic reviews of Health Informatics studies, taking into account guidelines for reporting of medical research. This list has been discussed in several rounds by an
Health IT & HTA: the change

• From a scientific exploration to a policy imperative

• From unilateral methodological adoption to synergy & mutual benefit
Why imperative?

Press release
Dismantling the NHS National Programme for IT

From: Department of Health
Published: 22 September 2011

This was published under the 2010 to 2015 Conservative and Liberal Democrat coalition government

The major finding from reviewing the empirical evidence – which is of variable quality – is that there is **very limited rigorous evidence demonstrating that these technologies actually improve either the quality or safety of healthcare**.
HTA definition & core work in Europe

“The systematic evaluation of the properties and effects of a health technology, addressing the direct and intended effects of this technology, as well as its indirect and unintended consequences, and aimed mainly at informing decision making regarding health technologies.”

• 2016-2020: EUnetHTA Joint Action3
• Enhanced cooperation with a focus on joint HTA work (e.g. joint assessments and uptake)
The MAST model: bringing the HTA approach to telemedicine evaluation

**MAST = Model for ASsessment of Telemedicine**

International Journal of Technology Assessment in Health Care, 28:1 (2012), 44–51

- Product of the **MethoTelemed project** (EC-funded, 2008)
- Based on workshops and using the EUnetHTA Core HTA Model® as a starting point
- A multidisciplinary process that summarizes and evaluates information about the clinical, economic, organizational and socio-ethical issues related to the use of telemedicine, in a systematic, unbiased and robust manner.
- Testing in large scale EU-projects: Renewing Health, United4Health, SmartCare, MasterMind etc. on real-life implementation of telemedicine services uses
More details on background analysis:

Ebook: Evidence-Based Health Informatics
IOS press, 2016

A New Socio-technical Model for Studying Health Information Technology in Complex Adaptive Healthcare Systems

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Abstract

Conceptual models have been developed to address challenges inherent in health information technology (HIT). This manuscript introduces an 8-dimension model designed to address the socio-technical challenges involved in design, implementation, use, and evaluation of HIT within complex adaptive systems. The domains are not independent, sequential, or hierarchical, but rather interrelated concepts similar to compositions of other complex adaptive systems.
TIME-CRITICAL PERFORMANCE

Health IT

- Rapid assessment methodology for clinical information systems (McMullen et al.)
- Implementation science approaches (Glasgow et. al.)
- Mini-HTA for telemedicine

- Representation, collection, analysis of health (social care) data, information & knowledge

HTA

- Rapid effectiveness assessment - ‘Model for Rapid REA’ (pharmaceuticals primarily)
- Mini-HTA methodology & template
  - Hospital based HTA (AdhopHTA)

High quality data – essential to reliable HTA results

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ROLE OF PATIENTS

- eHealth developers and scientists, as well as the HTA community have each in their own ways approached the subject of the patient taking up a different, more defining and determining role in modern healthcare delivery.

  Is there a shared view and vision of the role of the patient between the two communities?

Meeting points

- Safety
- Patient reported/patient relevant outcomes
What Is eHealth (4): A Scoping Exercise to Map the Field
doi:10.2196/jmir.7.1.e9

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Building bridges!

Thank you!
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