

# **Good evaluation practice guidelines for health informatics**

## **- A shared European networked initiative for guidelines development**

### **GEP-HI**

For delivery at MEDINFO workshop "Good evaluation of health informatics applications"

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#### **Motivation for guidelines development**

- Need to have good practice guidance
- No single, global methodology exists
  - variety of approaches, methodologies, mindsets
- Good practice guidelines should serve as:
  - **Framework** to design evaluation studies, to select methodologies, to conduct studies
  - **Support** for health professionals and users to understand evaluation and contribute to evaluation studies

#### **Objectives**

- **Generic practical guidelines** that provide evaluators, users, health professionals with **structured, scientifically justified and grounded, comprehensive and understandable set of rules** for good practice
- To design and carry out evaluation studies in health informatics domain

#### **Objectives – practically**

- Guidelines:
  - Criteria and aspects, both in quantitative and qualitative terms, to consider at each evaluation stage
  - Carry out evaluation of the specific aspect, criteria at specific stage

- Design and manage the evaluation study
- Guidelines from all stakeholders viewpoints: third party evaluators, users, health professionals, managers, decision makers, health economists,...

### **Steps for developing a guideline**

- Identify and refine the subject area
- Convene and run guideline development groups
- Assess the evidence about the question or condition using systematic reviews
- This evidence is translated into a recommendation within a good practice guideline
- External review of the guideline

### **Issues in guidelines development**

**AGREE-criteria** (<http://www.agreecollaboration.org/1/agreeguide>)

#### **– Scope and purpose**

- 1. The overall objective(s) of the guideline should be specifically described
- 2. The question(s) covered by the guideline should be specifically described
- 3. The users to whom the guideline is meant to apply should be specifically described.

#### **– Stakeholder involvement**

- 4. The guideline development group should include individuals from all the relevant professional groups
- 5. The users' views and preferences should be sought
- 6. The target users of the guideline should be clearly defined
- 7. The guideline should be piloted among end users

#### **– Rigour of development**

- 8. Systematic methods should be used to search for evidence
- 9. The criteria for selecting the evidence should be clearly described
- 10. The methods used for formulating the recommendations should be clearly described
- 11. The benefits, side effects and risks should be considered in formulating the recommendations
- 12. There should be an explicit link between the recommendations and the supporting evidence
- 13. The guideline should be externally reviewed by experts prior to publication
- 14. A procedure for updating the guideline should be provided

#### **– Clarity and presentation**

- 15. The recommendations should be specific and unambiguous
- 16. The different options for choices in various situations should be clearly presented
- 17. Key recommendations should be easily identifiable
- 18. The guideline should be supported with tools for application

– **Applicability**

- 19. The potential organisational barriers in applying the recommendations should be discussed
- 20. The potential cost implications of applying the recommendations should be considered
- 21. The guideline should present key review criteria for monitoring and audit purposes

– **Editorial Independence**

- 22. The guideline should be editorially independent from the funding body
- 23. Conflicts of interest of guideline development members should be recorded

**Guidelines development is a serious activity, requires a lot of effort, knowledge, systematic reviews and collaboration**

• **Guidelines should be:**

- structured
  - scientifically justified and grounded
  - comprehensive
  - understandable (representation, use)
  - agreed, validated by external experts
- set of rules for good evaluation practice

**How to develop GEP HI guidelines**

- Follow guidelines development principles
- Groups / Subgroups for systematic review
- Consensus meetings, Delphi technique
- Existing literature and material on evaluation studies, methodologies, reported evaluation experiences, guidelines for good clinical practice, codes of ethics, good implementation practices, critical study and assessment, review
- **External review!**

**GEP HI guidelines**

- Development by multidisciplinary representative group, subgroups
- Systematic review to identify and critically appraise the evidence
- Recommendations have to be linked to the supporting evidence
- **Applicability aspects:** Application, use monitored, guidelines representation formats

**Actions to be taken in GEP-HI**

- A GEP\_HI workplan (prepared and agreed)
- Background material collection (ongoing)

- Based on the existing material, guidelines development principles, available expertise and experience the first GEP\_HI guidelines draft will be prepared
- The draft delivered for comments via EFMI WG EVAL group
- Discussion with EFMI WG EVAL: STARE\_HI activity, preliminary comments collected from some external experts in HI Community
- Guidelines updated, revised based on comment
- Feedback loop for update / improvement established
- External review by experts in HI community
- Guidelines published in a form of a publication, disseminated via HISEVAL-website, through the European network, EFMI, IMIA organisations
- Supporting material produced, feedback collected, application monitored, updating procedures

### **Timetable**

#### **DONE OR ONGOING**

- A GEP\_HI workplan prepared
- Background material collection:ongoing
- Based on the existing material, available expertise and experience the first GEP\_HI guidelines draft are under preparation

#### **FROM NOW ONWARDS...**

- Draft delivered for comments inside the EFMI WG EVAL core and external experts in the HI Community
- Revised version produced based on comments
- Review started in HISEVAL, EFMI, IMIA, HI Community according to agreed procedures. This is an iterative procedure, requires several circles for update and revision
- Finalised in a form of a publication, disseminated via HISEVAL-website, through the European network, EFMI, IMIA,
- Supporting material produced, feedback collected, application monitored, updating procedures defined.