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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Motivationfor 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.