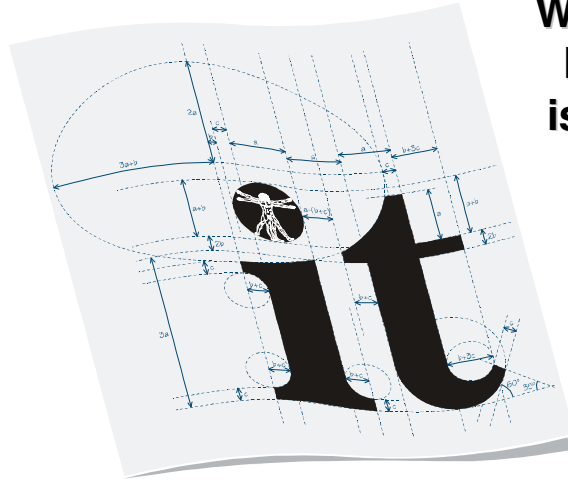


## Walk-through of key guideline issues, GEP-HI



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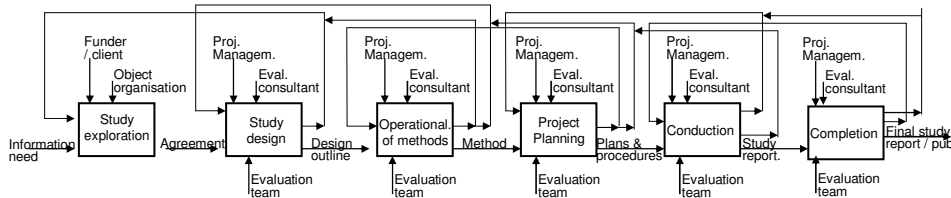
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### ***Evaluation is***

*“the act of measuring or exploring properties  
of a health information system  
(in planning, development, implementation, or operation),  
the result of which informs a decision to be made  
concerning that system in a specific context”*

*(Ammenwerth et al., 2004, p. 480)*

## Phases of an evaluation study



*It is a spiral model, stretched out!*

Note the definition of phase: "A defined segment of work" [ISO 9000-3]

*Σ: Preparing the entire foundation for the work*

### THE key issue

#### Study Exploration (section 3.1)

1.1	Th...
1.2	Primary audience
1.3	Identification of the study funding party (ies)
1.4	The organisational context of the evaluation study
1.5	
1.6	Identification of required expertise
1.7	A first sketch of the health care setting
1.8	First exploration of evaluation methods to be used
1.9	Ethical, moral and legal issues
1.10	Budget
1.11	Exploring the restrictions of study execution and publication
1.12	Result of Study Exploration
1.13	Formal acceptance to proceed to the next phase

Identify those who directly or indirectly will be affected by the study itself, by its anticipated outcome, or by the system that is being evaluated

The selected methods have to be tightly correlated with the information need and its qualities and the study objectives, taking the study setting constraints into account.

Which issues are relevant?

What are the restrictions?

**Σ: Starting building the study**

Study Design (section 3.2)	
2.1	Elaboration of the detailed rationale and objectives for the study
2.2	Key evaluation issues/questions
2.3	Candidate methods, and preferred ones
2.4	Composition of the study team
2.5	
2.6	
2.7	
2.8	Technical setting, the study context
2.9	Participants from the organisational setting
2.10	Material and practical
2.11	
2.12	Risk analysis
2.13	
2.14	Strategy for reporting and dissemination
2.15	Result of Study Design
2.16	Formal acceptance to proceed to the next phase

Get a rich picture of Who's Who, and their potential motives

Get a rich picture of the organisation

Place the planned activities in a calendar

Data protection and security principles and laws need to be obeyed. Have a strategy, policy and principles been formulated for how to handle problematic issues?

Seek approval to go on as now planned

**Σ: Preparing the HOW to do the study**

Operationalisation of Methods (section 3.3)	
3.1	
3.2	Approach
3.3	Assumptions
3.4	Pitfalls and perils
3.5	Expertise
3.6	
3.7	Timing
3.8	Justification of the methodological approach
3.9	Outcome measures
3.10	Quality Control on data (measures)
3.11	Participants
3.12	Study flow
3.13	Result of Operationalisation of Methods
3.14	Ethical, moral and legal issues
3.15	Approval of Operationalisation

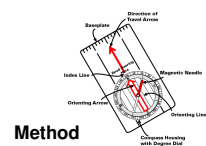
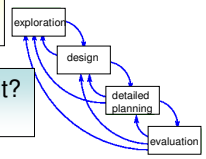
quantitative versus qualitative, subjective versus objective, formative versus summative, etc

Limitations of the methods (scope, accuracy, specificity, appli. range)? Of the hidden assumptions?

Which candidates in your set-up?

Which? How to get it? Can you get it?

Have the actual measures been tested as regards syntactic and semantic validity, are the calculations working properly, have the questionnaires been tested for validity, etc?



Get approvals, consents and permissions, prepare dedicated forms, etc.

*Σ: Preparing the WHEN to do WHAT*

Project Planning (section 3.4)		
4.1	Project management	Prepare a complete script
4.2	Evaluation activity mapping	
4.3		Prepare these ... as for all other projects
4.4		
4.5	Recruitment of necessary staff	Who, when, how – get it done!
4.6	Inform relevant stakeholders	
4.7	Result of Project Planning	
4.8	Approval of Project Planning	

*Σ: Executing the entire study work*

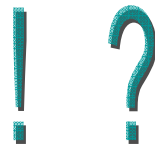
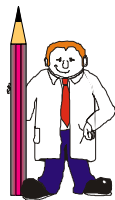
Conduction of the evaluation study (section 3.5)		
5.1	Establishment of	If your methods requires a frame of reference, then now is the time to acquire it
5.2	Undertake the study and collect data	
5.3	Quality control of findings	Explore unexpected events and unexpected observations to find causal relations
5.4	Interpretation of observations	
5.5	Observation of changes	
5.6	Continuous project management, quality management, risk management	Ordinary Project management activities
5.7	Regular reports	
5.8	Final result of Evaluation Study Implementation	Report summarizing main information on objectives, the setting, the conditions, the method, the outcome data and information, and the conclusions

*Σ: Closing up loose ends*

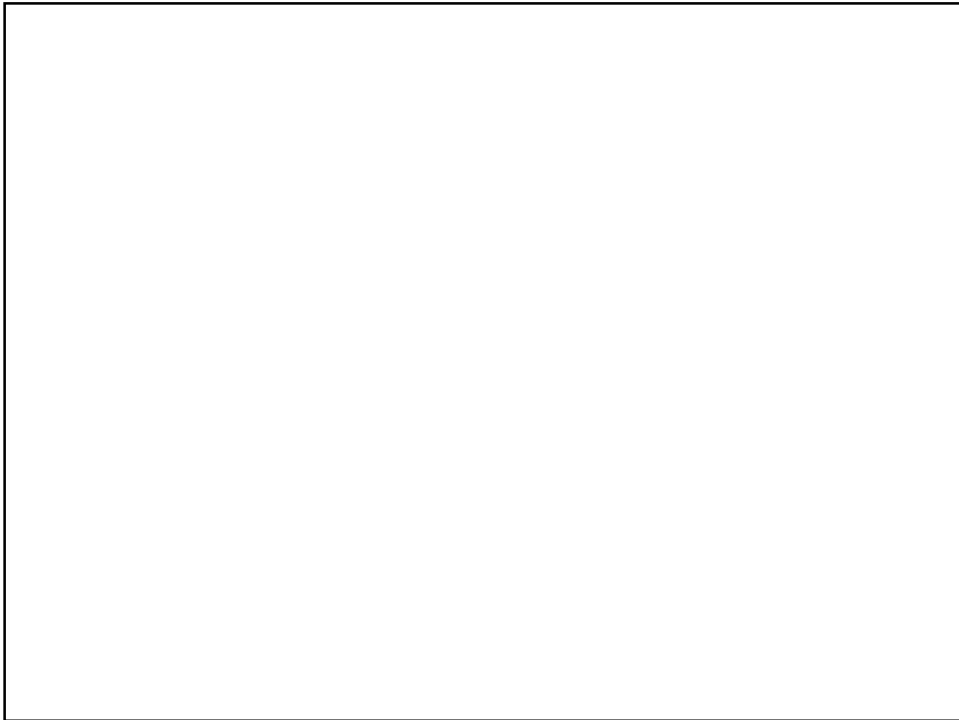
Completion of the evaluation		... if accountings of finances are needed
6.1		
6.2	Reports and publications	
6.3	Archiving	What, where, who, how, and for how long
6.4	Reporting guidelines	
6.5	Reporting scope	
6.6	Reporting message	
6.7	Authorship	ICMJE: In order of substantial intellectual contributions
6.8	Ethical and moral aspects	
6.9	Preparation of reports / publications	

For publicly available evaluation reports use the STARE-HI guidelines

**Suggestions or questions?**



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<http://iig.umat.at/efmi/>



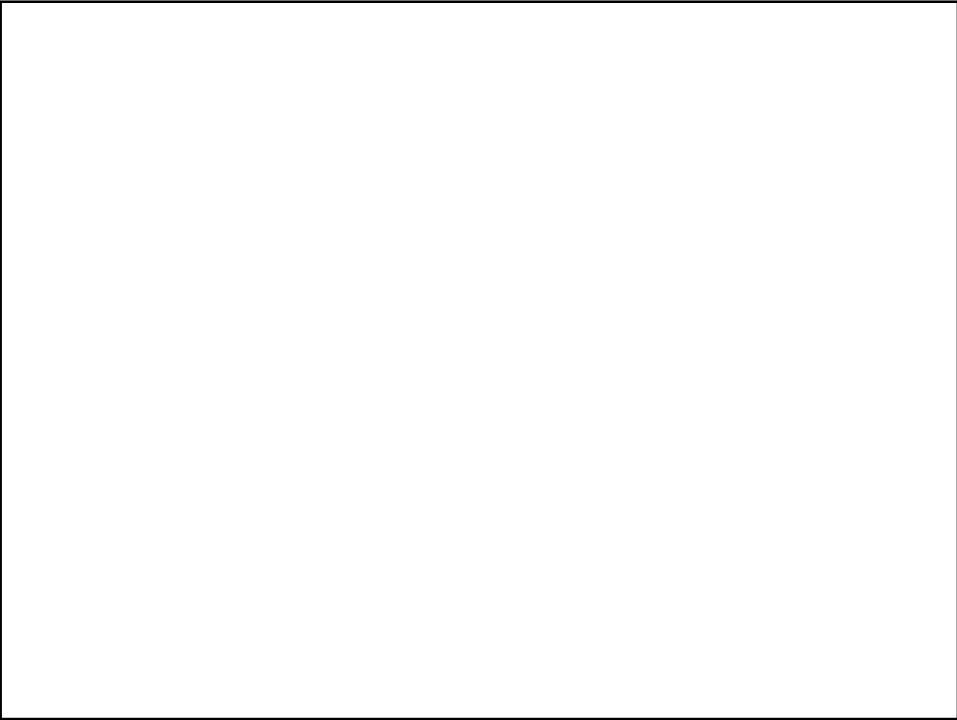
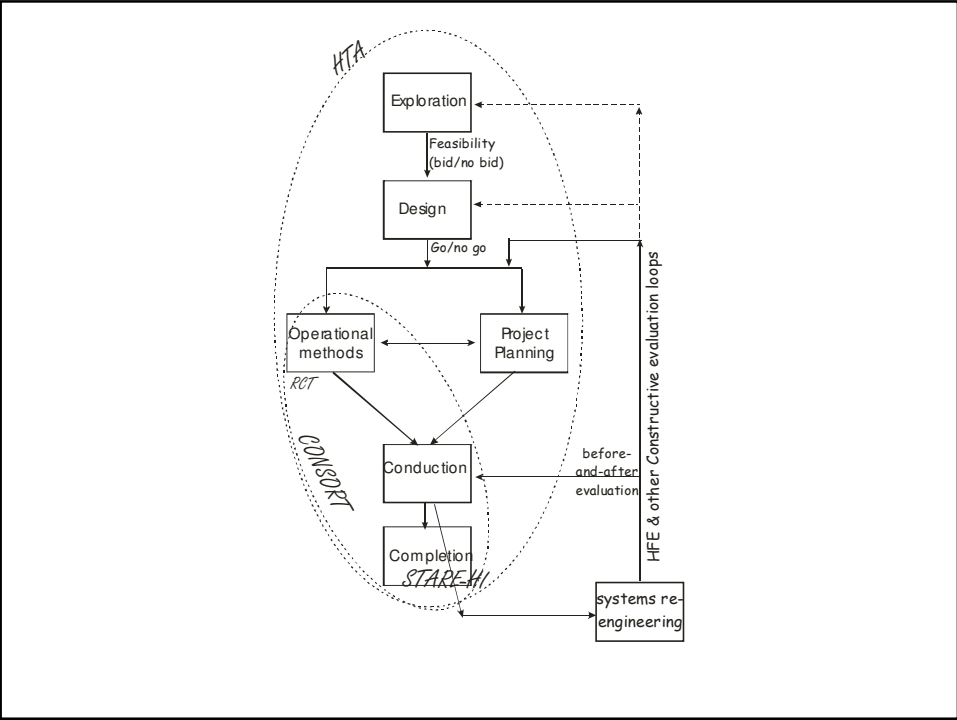
### **Motivation for the GEP-HI work**

We are striving towards evidence-based health informatics

We are striving at increasing the evidence base in order to enable systematic reviews and comparative studies

We seek to enable higher efficiency and effectiveness at evaluation studies

**"Well begun is half done!"**



## **Ethics**

- approval by relevant committees
- a set of procedures for situational behaviour
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