

**Proposal for a Workshop for MIE 2008 by EFMI WG on Evaluation in collaboration of the  
IMIA WG on Technology Assessment and Quality Development**

**Title**

**Guidelines for good evaluation practice and reporting**

**Abstract**

There is an increasing need to evaluate the effects of IT on health care delivery. However, many studies reported in the scientific literature falls short on some or several accounts. The objective of this workshop is to present and discuss the results of IMIA's WG on Technology Assessment and EFMI's WG on Evaluation on guidelines for Good Evaluation Practice (GEP-HI) and for reporting of evaluation studies (STARE-HI) in health informatics. The objective of the workshop is to present these developments and to discuss their merits with the attendants.

First, the background of the current work – i.e. the outcome of the HISEVAL workshop and the Declaration of Innsbruck – will be presented. Next, the principles of good evaluation practice will be outlined. Examples will be given on how these principles can be operationalized in practical situations. The approach will be discussed and suggestions for further extension and elaboration of GEP\_HI will be established. Next, the audience will get an introduction on STARE-HI, including an overview of the rationale for these guidelines and insight in the current state of reporting of evaluations of health informatics in the scientific literature. Participants will be encouraged to engage in discussions and to contribute to the further development of these guidelines.

The workshop will close with defining an agenda for future activities to be pursued by the Working Groups on Evaluation in the various Medical Informatics organizations (IMIA, EFMI, AMIA, APAMI etc).

**Keywords:** Evaluation, Good evaluation practice, guidelines for reporting

**Duration:** 2-2½ hours

**Level:** Intermediate - expert

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## **Extended abstract**

### **Topical outline**

The objective of the workshop is to report on recent activities from EFMI's WG on Evaluation and IMIA's WG on Technology Assessment and quality development.

In 2003, an ESF funded Workshop on evaluation of health informatics was held in Innsbruck. The invited participants representing not only the discipline of Medical Informatics, but also System Science, Sociology and Psychology, reviewed the state of the art and made a set of recommendations for further work. In particular three outcomes of future work were defined: 1) a statement on the relevance of evaluation of health informatics, including requirements for a science based, comprehensive, independent approach to evaluation (The Declaration of Innsbruck), 2) guidelines for good evaluation practice in health informatics (GEP-HI); and 3) guidelines (or a statement) on the reporting of evaluation studies in health informatics (STARE-HI).

In 2004 the Declaration of Innsbruck has been published, in 2006 STARE-HI has been developed up to a level ready for publication and in 2006/2007 GEP-HI has been outlined and will be further developed. In addition to the development of STARE-HI, additional activities took place that provide supporting material for STARE-HI.

During the workshop, these outcomes will be presented. The audience is invited to engage in the discussion on the feasibility of the presented work as well as on future development and enhancement of these outcomes. This workshop will also address how to extend the scope of the work of the IMIA's WG to include relevant work from the Asian-pacific region.

Proposed scheme of presentations:

Brief Background of the workshop and the Declaration of Innsbruck

Introduction to GEP-HI

Introduction to STARE-HI

Current state of reporting evaluation in Health Informatics

Roads to improvement

Summary of workshop, future developments

### **Attendee background**

Broad interest in evaluation of health informatics.

### **Presentation format**

Several short presentations, followed by discussions with participants aiming at assessment of the presented material and directions for future developments.

### **Learning objectives**

At the end of the workshop, the attendants will have knowledge of recent developments in guidelines for evaluation of health informatics. They will have actively contributed to shaping future developments in this domain. It will set the scene for the agenda for the working groups dealing with evaluation in health informatics.

### **Required equipment**

Beamer.

### **Classification**

Educational, developmental.

## Brief Biographies

**Jan Talmon** has been active in the field of evaluation of Health IT for many years. He has been leading a EU-funded concerted action on System Engineering in Health Informatics with a focus on evaluation, he was co-leader of the EU-funded concerted action on Assessment of information Technologies In Medicine (ATIM), participated in various EU-funded projects in which he contributed to the evaluation workpackages. He is co-author of the “Declaration of Innsbruck” on evaluation of health informatics. He is co-author of the “STatement on Reporting of Evaluation of Health Informatics” (STARE-HI) and contributing to the development of the guideline for “Good Evaluation Practice in Health Informatics” (GEP-HI). He is out-going chair of the IMIA Working group on Technology Assessment and Quality Improvement. He is co-editor of the International Journal of Medical Informatics.

**Nicolette de Keizer** PhD, is Assistant Professor in Medical Informatics at the Academic Medical Center – University of Amsterdam, The Netherlands. She has been active as a researcher (since 2007 principal investigator) in the field of Medical Informatics for more than 10 years. Her main research interests are terminological systems and evaluation. She has participated in the creation of an inventory of evaluation studies (<http://iig.umit.at/e/projekte/inventory/inventory.htm>). She is one of the co-authors of STARE-HI. Since 2007 she is a member of the editorial board of the International Journal of Medical Informatics. She is reviewer for several Medical Informatics Journals. She is incoming chair of the IMIA WG on Technology Assessment and Quality Development.

**Pirkko Nykänen** has been working from 1975-2002 in VTT (Technical Research Centre of Finland) Medical Engineering Laboratory as a senior researcher participating in and managing R&D projects with health care organizations and industries. In 2002 she started to work as a development manager in the National Research and Development Centre for Welfare and Health (STAKES) in the Unit for eHealth and eWelfare. She is responsible for the assessment and evaluation of health information systems and technology. Since September 2003 she has been appointed as acting professor in Tampere University, being responsible for information systems Master programme. She has also a senior lecturership position in health informatics. Dr Nykänen has been working as a visiting researcher in Lille University, France, in the Finnish Office for Health Technology Assessment and in the Pennsylvania State University, School of Information Sciences and Technology, USA. She chaired the Finnish Society for Social and Health Informatics 2003-2006. She is a member of the Scientific Board of the Finnish Office for Health Technology Assessment (FinOHTA) and a reviewer for many scientific conferences and journals.

**Jytte Brender**'s scientific focus is on the theoretical and practical aspects of Quality Management and Technology Assessment. She has an M.Sc. in biochemistry (Copenhagen University, 1973), an M.Sc. in computer science (Copenhagen University, 1991), and a European Doctorate & PhD in Medical Informatics (Aalborg University, Technology & Science Faculty, 1997). After 15 years at a university hospital and 9 years as an industrial researcher, she is presently associate research professor at the Institute of Health Science and Technology, Aalborg University, Aalborg, Denmark. Her research and interest in quality management and assessment, ranges from constructive assessment (dynamic, self-reflective, purpose-driven and corrective evaluation), to holistic analysis of information flow. Her broad expertise covers among other things organizational change and the theoretical aspects of the quality of semantic aspects of medical knowledge. Her latest work is a handbook of methods for constructive assessment of IT-based solutions, emphasizing the hidden aspects of methods, assumptions for application, conjecture on epistemological nature, as well as potential pitfalls and perils. It includes a framework for meta-analysis of evaluation studies dedicated to pinpointing the downside in such studies, while scrutinizing experimental biases.