
EFMI Working Group Assessment of Health Information Systems

Summary of activities

2002 - 2009

Basic Data

- **Year of establishment: 2002**
- **Objectives:**
 - **To foster interdisciplinary discussion on evaluation issues in health informatics.**
 - **To support communication of experiences by organizing tutorials and workshops.**
 - **To promote European networking on evaluation issues in health informatics.**
- **Number of Members: around 250 in the e-mail list**
- **Website : <http://iig.uit.at/efmi/>**

The members of the Working Group

- **Elske Ammenwerth (chair), Jytte Brender (Vice chair), Pirkko Nykänen (Vice chair), Nicolette de Keizer, Michael Rigby, Jan Talmon, Marie-Catherine Beuscart-Zéphir**
- **Further STARE-HI contributors: Jos Aarts, Emily Campbell, Petra Knaup, Christof Machan, Zahra Niazkhani, Christian Nøhr, Habib Pirnejad, Joshua Richardson, Rainer Röhrig, Dean F. Sittig, Murat Sincan, Christa Wessel, Johanna Westbrook, Jeremy Wyatt.**
- **Further GEP-HI contributors: Jos Aarts, Vivian Vimarlund, Christa Wessel and others**
- **Plus 250 more medical informatics researchers and professionals in the WG e-mail list**

Events organised by WG

- **Regular Events**
 - Workshops at MIEo9, MIEo8, MIEo6, MIEo5, MIEo3
 - Workshops at Medinfo2010 (planned), Medinfo2007, Medinfo2004
 - Workshops at AMIA2009 (Nicolet and I did also participate in the business meeting of AMIA2008 and 2007)
 - Workshop at STC2004 (is this a regular event, see also item below)
- **Special Events: Co-organization of STCs (e.g. Munich 2004)**

Major Outcomes of the WG

- Declaration of Innsbruck:
 - Result of Workshop of the European Science Foundation in 2002
 - Published as: Ammenwerth E, Brender J, Nykänen P, Prokosch H-U, Rigby M, Talmon J, et al. Visions and strategies to improve evaluation of health information systems Reflections and lessons based on the HIS-EVAL workshop in Innsbruck. *Int J Med Inf.* 2004 Jun 30;73(6):479-91.
 - Published as: Ammenwerth E, Aarts J, Berghold A, Beuscart-Zephir MC, Brender J, Burkle T et al. Declaration of Innsbruck. Results from the European Science Foundation Sponsored Workshop on Systematic Evaluation of Health Information Systems (HIS-EVAL). *Meth Inf Med* 2006;45 Suppl 1:121-3.
 - This declaration was starting point of this WG EVAL

Major Outcomes of the WG

- **STC2004 in Munich on Evaluation Aspects:**
 - **Blobel B, Gell G, Ammenwerth E, Engelbrecht R.**
Contribution of Medical Informatics to Health - Selected papers of the Special Topic Conference STC2004 of the European Federation of Medical Informatics (EFMI). Meth Inf Med 2006; 45: 51-136.

Major Outcomes of the WG

- STARE-HI guidelines:
 - Give recommendations on structure and content of an IT evaluation paper
 - Based on input of attendants of several workshops at major MI conferences and feedback from various experts through the invitation to comment on the WGs mailing list
 - Published as: Talmon J, Ammenwerth E, Brender J, de Keizer N, Nykänen P, Rigby M. STARE-HI - Statement on reporting of evaluation studies in Health Informatics, *Int J Med Inform* 2009; 78(1): 1-9.
 - Re-published in IMIA Yearbook Med Inf 2009
 - Adopted by EFMI, IMIA and AMIA WG
 - Referenced at the Equator network website that addressed guidelines for research publications
 - Adopted by *Methods of Information in Medicine* and the *electronic Journal of Health Informatics*, other journals are just being contacted
 - Several papers promoting STARE-HI

Major Outcomes of the WG

- **GEP-HI Guidelines:**
 - **Good Evaluation Practice Guidelines**
 - **Give recommendations how to plan and conduct an evaluation study**
 - **Working draft available on website**
 - **GEP-HI has been discussed during a workshop of the IMIA/EFMI WG on Human Factors Engineering as to assess its suitability for this type of HFE type of assessment studies**
 - **Several workshops have been organized during major MI conferences**

Major Outcomes of the WG

- **Website: Bad Health Informatics can Kill**
 - <http://www.uit.at/efmi>
 - Gives examples of IT failures and their effect on health care
- **Website: Evaluation Inventory Website**
 - <http://evaldb.uit.at>
 - Collect over 1.200 IT evaluation papers

Major Outcomes of the WG

- **Participation in the ACE initiative (Alliance for Clinical Excellence), to establish an evidence-base for a better Health IT Governance**
- **Regular educational workshops at MIE, Medinfo, AMIA**

Expected Outcomes of WG

- Finalization and publication of GEP-HI – Good Evaluation Practice Guidelines
- Finalization of Elaboration paper for STARE-HI
- Development of an elaboration paper for GEP-HI
- Development of mini-STARE-HI for conference papers
- Update of evaluation database, including input form
- Further workshops and tutorials on STARE-HI and GEP-HI
- Further development of the collaboration with ACE

List of papers that the WG was involved in the publication in journals and/or presentation in conferences

- PAPERS (1):
- Talmon J, Ammenwerth E, Brender J, de Keizer N, Nykänen P, Rigby M. STARE-HI - Statement on Reporting of Evaluation Studies in Health Informatics. Yearb Med Inform 2009: 23-31.
- Talmon J, Ammenwerth E, Brender J, de Keizer N, Nykänen P, Rigby M. STARE-HI - Statement on reporting of evaluation studies in Health Informatics, Int J Med Inform 2009; 78(1): 1-9.
- Ammenwerth E, Talmon J, Ash JS, Bates DW, Beuscart-Zephir MC, Duhamel A, Elkin PL, Gardner RM, Geissbuhler A. Impact of CPOE on Mortality Rates - Contradictory Findings, Important Messages. Meth Inf Med 2006;45(6):586-93.
- Brender J, Ammenwerth E, Nykänen P, Talmon J. Factors influencing success and failure of health informatics systems - A pilot delphi study. Meth Inf Med 2006; 45: 125-36.

List of papers that the WG was involved in the publication in journals and/or presentation in conferences

- PAPERS (2):
- Ammenwerth E, Talmon J, Ash JS, Bates DW, Beuscart-Zephir MC, Duhamel A, Elkin PL, Gardner RM, Geissbuhler A. Impact of CPOE on Mortality Rates - Contradictory Findings, Important Messages. *Methods Inf Med.* 2006;45(6):586-93.
- Brender J, Ammenwerth E, Nykänen P, Talmon J. Factors influencing success and failure of health informatics systems - A pilot delphi study. *Methods of Information in Medicine* 2006; 45: 125-36.
- Brender J. Evaluation of health information applications--challenges ahead of us. *Methods Inf Med.* 2006;45(1):62-6.
- Rigby M. Evaluation--the Cinderella science of ICT in health. *Yearb Med Inform.* 2006:114-20.
- Ammenwerth E, Brender J, Nykänen P, Prokosch H-U, Rigby M, Talmon J, et al. Visions and strategies to improve evaluation of health information systems Reflections and lessons based on the HIS-EVAL workshop in Innsbruck. *Int J Med Inf* 2004 Jun 30;73(6):479-91.
- Talmon J, Evaluation and implementation: a call for action. *Yearb Med Inform.* 2006:11-5.

List of papers that the WG was involved in the publication in journals and/or presentation in conferences

- CONFERENCES (1):
- Rigby M, Talmon J, Ammenwerth E, Brender J, de Keizer N, Nykänen P. Planning to test success - Employing the guidelines for Good Evaluation Practice in Health Informatics (GEP-HI). In: Macedo M (eds): Proceedings of e-Health 2009 (EH 2009) - IADIS Multi Conference on Computer Science and Information Systems, June 21 - 23, 2009, Algarve, Portugal. e-Health 2009. International Association for Development of the Information Society (IADIS). pp. 209 - 213.
- Rigby Michael; Talmon Jan; Brender Jytte; Ammenwerth Elske; De Keizer Nicolette F; Nykänen Pirkko. Linking Informaticians and End Users - Using the STARE-HI Evaluation Reporting Framework as a Unifying Design Approach. In: Adlassnig K.-P. et al. (Eds.): Medical Informatics in a United and Healthy Europe. Proceedings of MIE 2009. Stud Health Techn Inform 2009;150: 66-70. ISBN 978-1-60750-044-5
- Nykänen Pirkko; Brender Jytte; Ammenwerth Elske; Talmon Jan; de Keizer Nicolette; Rigby Michael. Introducing guidelines for good evaluation practice in health informatics. In: Adlassnig K.-P. et al. (Eds.): Medical Informatics in a United and Healthy Europe. Proceedings of MIE 2009. Stud Health Techn Inform 2009; 150: 958-62. ISBN 978-1-60750-044-5

List of papers that the WG was involved in the publication in journals and/or presentation in conferences

- CONFERENCES (2):
- Talmon J. Improving the quality of the evidence base of health informatics. AMIA Annu Symp Proc. 2008 Nov 6:1211-2.
- Talmon J, Ammenwerth E, Geven T. The Quality of Reporting of Health Informatics Evaluation Studies: A Pilot Study In: MEDINFO 2007 Building Sustainable Health Systems (K.A. Kuhn, J.R. Warren and T.Y. Leong, Eds). Stud Health Techn Inform 2007; 129: 193-197.
- Talmon J, Ammenwerth E. "The declaration of Innsbruck": some reflections. In: Roger France FH, de Clercq E, de Moor G, van der Lei J, editors. Health Continuum and Data Exchange in Belgium and in The Netherlands - Proceedings of Medical Informatics Congress (MIC 2004) & 5th Belgium E-Health Conference. Amsterdam: IOS Press; 2004. p. 68-74. ISBN 1-58603-487-1.
- Ammenwerth E, Brender J, Nykänen P, Prokosch H-U, Rigby M, Talmon J. The Evaluation Roadmap. In: Spil TAM, Schuring RW (Hrsg.): E-Health Systems - Diffusion and Use. The Innovation, The User and the Use IT Model. Hershey: Idea Group Publishing. pp. 324-329. ISBN 1-591-40424-X.

List of papers that the WG was involved in the publication in journals and/or presentation in conferences

- CONFERENCES (3):
- Blobel B, Gell G, Ammenwerth E, Engelbrecht R. Contribution of Medical Informatics to Health - Selected papers of the Special Topic Conference STC2004 of the European Federation of Medical Informatics (EFMI). *Meth Inform Med* 2006; 45: 1-136.
- Ammenwerth E, Brender J, Nykänen P. The need for systematic assessment of health information systems: Aims and activities of the EFMI working group "Assessment of Health Information Systems". In: Blobel B, Gell G, Hildebrand C, Engelbrecht R (Eds.): *Proceedings of EFMI MIE 2004 Special Topic Conference - Contribution of Medical Informatics, to Health*. Berlin: Akademische Verlagsgesellschaft. 2004. ISBN 3-89838-055-6. 3 - 4.

Collaboration with other WGs

- **IMIA WG Health Technology Assessment and Quality**
- **IMIA/EFMI WG on Human Factors Engineering**
- **AMIA WG on Evaluation**