

MIE 2003

Workshop IPHIE and EFMI WG “Assessment of Health Information Systems”

## **Evaluation of Health Information Systems: What theory and practice to include in our curricula?**

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### **Abstract**

To further improve the level of students graduating M. Sc. medical/ health informatics programs as it comes to their theoretical knowledge and practical skills in evaluating health information systems requires a thorough understanding of how we should cover this subject matter in our curricula. Medical/health informatics graduates should know how to design and carry out evaluation studies if we want them to become the future experts in creating information systems that truly support health care workers in their daily practice.

The purpose of this workshop is to capture the experience of the international medical informatics community on educating students on this subject matter, and to analyze what important concepts and methodological skills we need to pass on to our students to enable them to become proficient in designing and conducting evaluation studies.

### **Introduction**

Recent developments in medical informatics research offer great challenges and possibilities to further implement and integrate information and communication technologies (ICT) in healthcare. It is evident that the quality and efficiency of health care can be raised by use of ICT technologies as these may support health care professionals in making decisions and thus may reduce clinical errors, or may aid in streamlining patient care processes. However, health care is at risk if the impact of ICT technologies on the health care practices in which we integrate these is not thoroughly understood. Rigorous evaluations of ICT that yield generic results require a new generation of medical informatics specialists who are familiar with the methodology to design and conduct these studies. The question then is how we should educate our graduates, that is, which methodological skills (study design, statistics, psychometrics, epidemiology, ethnography) should we concentrate on in our curricula to enable them to perform high-quality evaluation studies.

### **Goals**

In this workshop we will focus on:

- The way in which theory and practice of evaluation of health information systems is implemented in medical informatics programs of two European partner universities within IPHIE (International Partnership of Health Informatics Education).

- Ms. Sc. student research projects within IPHIE that focus on evaluation of health information systems.

After the students' presentations, discussion of the international medical informatics audience is promoted, addressing the following issues:

- What theory and practice on evaluation of health information systems is covered in the various medical and health informatics curricula?
- What modes of education are used to support the acquisition of the theory and practical skills in students in each of these curricula?
- What is the length of studies for this educational component each of these curricula?
- Which methodologies on conducting evaluation studies should we (at the minimum) include in our curricula?
- How does this subject matter relate to the IMIA WG 1 recommendations on education in health/ medical informatics?

### **Schedule:**

The workshop will start with two introductory presentations on the theory and practice subject matter on evaluation of health information systems included in the M. Sc. Medical Informatics programs of the universities of Amsterdam and Innsbruck.

Subsequently, three students of the medical informatics programs of these universities will present their research project focusing on evaluation of health information systems. Thereafter, Dr. J. Wyatt, co-author of the well-known handbook 'Evaluation Methods in Medical Informatics' will comment on each of the students' research papers and will set up a framework for discussion.

The workshop ends with a discussion by the audience on the topics raised in the introduction session.

### **Professional interest audience:**

Attendees from different backgrounds, but especially those involved in evaluation studies in the medical/health informatics field and those involved in educational programs on medical/health informatics are cordially invited to attend this workshop.