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eHealth Beyond the Horizon –
Get IT There
Proceedings of MIE2008
The XXIst International Congress of the European Federation for Medical Informatics

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Preface

The first part of the MIE 2008 conference theme – *eHealth Beyond the Horizon* – highlights the expectations for the future of eHealth and raises the question: What sort of developments in eHealth services can we imagine emerging above the horizon in the years to come? We have received a good number of high quality papers giving different perspectives of this future, some of them already available today in pilot scale, some of them outlined in visions.

The second part of the theme – *Get IT there* – has triggered a large number of papers describing how to create, evaluate, adjust and deliver products and deploy services in health care organizations for the necessary information technology as a basis for the eHealth applications that are essential in order to respond to the challenges of the health systems.

We, as society, are facing great challenges for our health systems. Our national health systems will have to treat proportionately more people due to the change in age distribution, with more illnesses, higher expectations, and more expensive technologies based on the biomedical scientific progress, but using proportionally less money and fewer workers. In addition, the increased mobility between countries within the European Union and a large number of immigrants from the war zones of the world creates challenges. On the other hand, the increased global co-operation and willingness of the countries to co-operate and address the possibilities for cross-border care – e.g. for highly specialised care and centres of excellence – give hope. The conference will address the challenges we face, in order to cope with these changes. We cannot know for sure what is below the horizon, but we know that enormous possibilities lie in eHealth.

As researchers, we will share our results and critical evaluation of new methods and possibilities. We encourage an open and constructive scientific discussion that is global in nature. We are very happy that this year MIE has also attracted a good number of non-European participants from all continents.

We, as stakeholders, want the medical informatics society to contribute substantially to the agenda and make the roadmap for the future health services. For several decades information technology has been applied in healthcare in interplay among stakeholders, organizations, and applications. Let us identify what makes a difference and brings the best of the past into the future.

When we grasp the future and have to fulfil the expectations, we have to ensure that the health applications are reliable, interoperable, sustainable, efficient, effective, and ubiquitous. The vital questions we therefore face are: What form of health systems, i.e. can we envisage which are sustainable in the long run, and how do we set about building them? How do we engage in optimizing the health services, given the complexity of current organizations, current skills and resource shortages, and the fundamental barriers that exist everywhere to undertake radical change?

Thoughts, visions, and objectives on the European arena have been brought forward by the European Commission with an action plan for a European eHealth Area: eHealth – making healthcare better for European citizens acknowledging that eHealth and interoperability can offer a number of golden opportunities. The 7th Framework Program will contribute to the realization of these visions.
This conference celebrates that 30 years have gone by since the first conference was organised by the European Federation of Medical Informatics – EFMI. The conference this year is organised by the Swedish Federation of Medical Informatics but the scientific evaluation and organisation of the conference has been conducted by a broad European Scientific Programme Committee in co-operation with the EFMI council. The following persons were members of the SPC: Stig Kjær Andersen (Chair), Jos Aarts, Marie-Christine Jaulent, Gunnar Hartvigsen, Jacob Hofdijk, Dipak Kalra, Gunnar Klein, Sabine Koch, Yunkap Kwankam, Victor Maojo, M. Cristina Mazzoleni, George Mihalas, Göran Petersson, Martin Rydmark, Stefan Schulz, and Hans Ahlfeldt. In addition, we were assisted by an international team of expert reviewers, listed in the following pages.

The Scientific Programme Committee received 360 submissions of which 267 were full papers. To ensure a high quality, each submission was reviewed by at least two reviewers. The entire review process took place in the period from November 15th 2007 to February 1st 2008 and was accomplished by 210 scientific peers, who accepted 142 papers for publication. Finally, a small team of editors, consisting of Andersen, Klein, Schulz, Aarts, and Mazzoleni, reviewed the accepted papers and ensured the incorporation of the reviewers’ comments and improvement suggestions.

The papers in the proceeding are grouped by themes according to the submission categories and the supplied keywords. Within the themes, the papers are in alphabetic order by the first author. As the last theme, three doctoral students from different areas of medical informatics were selected to present and discuss their research under the guidance of a panel of distinguished research faculties.

Let MIE 2008 be an opportunity to bring together all stakeholders in the eHealth to come and to exchange knowledge and insight in a lively, stimulating, and creative environment, thus creating a common ownership to the future of eHealth.

The editors would like to thank all the authors of the scientific contributions, the reviewers and our colleagues of the Scientific Programme Committee.

Stig Kjær Andersen
Gunnar O. Klein
Stefan Schulz
Jos Aarts
M. Cristina Mazzoleni
Reviewers for MIE 2008

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