Electronic Healthcare: Interoperability and Applications for Medicine, Health and Home Care

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The Volume 11, 2015 of the European Journal of Biomedical Informatics (EJBI) brings many papers focused on electronic healthcare. EJBI provides immediate open access to peer-reviewed papers, which will be published in the running first issue of EJBI during this calendar year. The second and third issues of EJBI in 2015 are special topic issues related to different electronic healthcare topics. The first special topic issue edited by Bernd Blobel and Libor Seidl concerns with the topic Concepts, Models and Implementations for Innovative Interoperable eHealth Solutions. The second special topic issue edited by Francesco Pincirolli and Anne Moen concerns with Apps for Medicine, Health and Home Care.

The second issue in 2015 deals with the important problem of interoperability. It presents selected papers of the 15th International HL7 Interoperability Conference held in Prague, Czech Republic, February 2015. The inability to share information across systems and between care organizations is just one of the major obstacles towards quality, efficiency, security and cost-effectiveness of healthcare. There are many reasons for this state, including underinvestment in information technologies, lack of political will, fragmented markets with inadequate development of new systems, lack of standards, complexity of medical data, data entry problems, security and confidentiality. The gap between the demand for healthcare from an increasingly well-informed citizens and the ability of the government and healthcare organizations to meet this demand is widening all the time. The concept of interoperability has dramatically changed since the establishment of the Health level 7 standard for open communication between hospital organizational units in 1987 in the United States of America. This special topic issue tackles the entire spectrum including Electronic Health Record systems and the core application in electronic healthcare.

The third issue in 2015 deals with Apps for Medicine, Health and Home Care. The published reviewed papers are based on contributions from the conference Apps for Medicine, Health and Home Care: Elements of Safety and Effectiveness, held in Milano, Italy, May 2014. The issue is a new challenge for many of the historically settled and widely relevant stakeholders active in the electronic healthcare area. They are challenged a specific way, facing needs to find out how new tools are instrumental for the proper accomplishment of their role. Currently it is the app user who takes the direct risks and responsibilities for possible outcomes that may not be perceived, undesired or unknown. Thus there is a compelling need for reports from well executed studies, which provide accessible and clear descriptions of requirements for effectiveness and safety of apps for medicine, health and home care. Nevertheless a scope like this is not easy. Performing an exhaustive evaluation of each available app is not affordable by anybody. Even the level of the methods to be used for such evaluations asks for reliable suggestions. As contribution to such evolutionary framework the papers in this special issue do the attempt to help, sometime as a vision, some other times at the practical level.

In the year 2015 European Journal for Biomedical Informatics (EJBI) welcomes original articles dealing with topics influencing electronic healthcare. Authors are not paying an article processing fee for the immediate release of peer-reviewed articles, but a small financial support is required in case that the support of projects or sponsors is acknowledged (see Instruction to authors). Due to the focus of the journal to semantic interoperability issues we ask authors for translation of structured abstract of their articles to at least one European language. EJBI provides immediate open access to peer-reviewed papers, which will be published in the running first issue of EJBI during this calendar year. The other issues of EJBI are special issues related to different biomedical informatics topics. Topics for special issues can be proposed to editor-in-chief of EJBI using the form Proposal of EJBI special issue for further processing. Topic for special issue is specified by an open call or by a special event. We invite you to propose special topics that would help to accelerate new information and knowledge for health care delivery.