

Technical Paper ■

# Task Force of the European Federation of Medical Informatics Journals: Background, Rationale and Purpose

## Delovna skupina časopisov pri Evropski zveze za medicinsko informatiko: ozadje, razlog in namen obstoja

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**Abstract.** The paper presents an analysis of how EFMI disseminates new knowledge and of the active medical informatics journals in EFMI member countries, which was carried out as an outcome of the EFMI Council meetings in London 2008, Sarajevo 2009 and Antalya 2009. The analysis identifies eight active major informatics journals and several other publications. Most are subscription-based and published at least quarterly. There is a possibility for the editors to meet regularly and form a community of practice with the aim of further improving their effectiveness in disseminating new knowledge and best practice in medical informatics. It is feasible to share expertise and it may be possible to harmonise several aspects of preparation and submission of manuscripts so that some of the identified barriers in publishing are reduced.

**Izveček.** Članek predstavlja dejavnost Evropske zveze za medicinsko informatiko (EFMI) in časopise s področja medicinske informatike v državah članicah EFMI. Izhaja iz analize, opravljene na srečanjih v Londonu leta 2008, Sarajevu 2009 in Antalyi 2009. Delovna skupina omogoča redna srečanja urednikov, ki bi olajšala pretok znanja in izmenjavo dobrih praks, poleg tega pa bi se dalo poenotiti številne vidike priprave prispevkov.

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## Introduction

The European Federation for Medical Informatics (EFMI) is a non-profit scientific and professional organization established in 1976 that today consists of 31 national members.<sup>1-4</sup> All European countries are entitled to be represented in EFMI by an appropriate national medical informatics society. The term 'medical informatics' is used to include the whole spectrum of health informatics and all its sub-disciplines and allied disciplines. The Medical Subject Headings (MeSH) defines medical informatics as:<sup>4,5</sup> *'The field of information science concerned with the analysis and dissemination of medical data through the application of computers to various aspects of health care and medicine.'* This definition was introduced in 1987 as a MeSH term.

EFMI operates with a minimum of bureaucratic overhead with each national society supporting the federation by sending a representative to participate in the council. English has been adopted as the official language, although simultaneous translation is often provided for congresses in non-English speaking countries.<sup>6</sup> EFMI has 16 working groups: Smart Cards in Health Care 'CARDS'; Social Security and Welfare; Education in Health Informatics 'EDU'; Electronic Health Records 'EHR'; Evaluation and Assessment of Health Information Systems 'EVAL'; Informatics for Disabled People and Rehabilitation 'IDR'; Information Planning and Modelling in Health Care 'IPAM'; Libre/Free and Open Source Software 'LIFOSS'; Case-mix and Severity of Cases; Medical Informatics in Transition Countries 'MICIT'; Medical Imaging Processing 'MIP'; Natural Language Understanding 'NLU'; Nursing Informatics in Europe 'NURSIE'; Human and Organisational Factors of Medical Informatics 'HOFMI'; Primary Care Informatics 'PCI'; Safety, Security and Ethics 'SSE'; and Traceability 'TRA'.

To date, EFMI has organized 21 European congresses of medical informatics, including the Medical Informatics Europe (MIE) congresses in

Cambridge (1978), Berlin (1979), Oslo (1988), Glasgow (1990), Vienna (1991), Jerusalem (1993), Lisbon (1994), Copenhagen (1996), Thessaloniki (1997), Ljubljana (1999), Hannover (2000), Budapest (2002), St. Malo (2003), Geneva (2005), Maastricht (2006), Gothenburg (2008) and Sarajevo (2009). The MIE 2011 conference will be held in Oslo. Traditionally, MIE conferences were not held in the year in which the International Medical Informatics Association (IMIA) organises its triennial conference MEDINFO.<sup>1</sup> EFMI has also started a new series of meetings: the Special Topic Conferences (STCs). The STC concept has the following components: a) organization should be done by a member society possibly in combination with its annual meeting; b) EFMI Council meeting should be the integral part of STC; c) topic of the conference should be defined by the organizing member society; d) considering the topic, the relevant EFMI working groups should be engaged; e) contributions should be mostly by invitation; f) STCs are small 2-day conferences with 100+ participants.

The first conference STC took place in Bucharest/Romania 2001, then in Nicosia/Cyprus 2002, Rome/Italy 2003, Munich/Germany 2004, Athens/Greece 2005, Timisoara/Romania 2006, Brijuni/Croatia 2007, London/United Kingdom 2008, and Antalya/Turkey 2009. In 2010, the STC will take place in Reykjavik/Iceland, and in 2011 in Ptuj/Slovenia. The proceedings of these conferences were usually published by Springer in the series 'Lecture Notes in Medical Informatics' and by IOS Press in the series 'Studies in Health Technologies and Informatics'. A selection of the best papers from the MIE conferences were published in a special volume of the International Journal of Medical Informatics and will be published in the Methods of Information in Medicine, while the special proceedings of STCs is published by IOS Press as collection of peer reviewed articles.

## Review of medical informatics journals in Europe

Medical informatics scientific and research production in Europe is growing both in quantity and quality. Promoting high-quality research is a major goal of EFMI.<sup>1,4,6</sup> EFMI has two highly respected official general journals, the International Journal of Medical Informatics (former title: International Journal of Bio-Medical Computing), currently edited by Charles Safran and Jan Talmon, and Methods of Information in Medicine, currently edited by Reinhold Haux. EFMI also publishes several sub-speciality official journals covering the spectrum of medical informatics sub-disciplines. The time-honoured method to disseminate high-quality scientific research is via the proceedings of the MIE annual conference. EFMI also plays a major role in education and in the harmonization of medical informatics sub-disciplines through the organization of STCs. Both MIE and STC proceedings are peer reviewed and published by IOS Press (Amsterdam, The Netherlands). Usually, MIE proceedings are indexed in Medline/PubMed. Most medical informatics journals are published in local languages, but many of them also incorporate English summaries or contain combined articles published in domestic and English language. Altogether, EFMI provides highly effective means for worldwide dissemination of medical informatics research conducted in Europe. However, in addition to the proceedings, journal editors have the opportunity to do more to disseminate knowledge and increase the understanding of our discipline.

## Analysis of publishing activities within EFMI members

Most of the information about the EFMI can be found on the official website ([www.efmi.org](http://www.efmi.org)). Furthermore, most of national societies have their own websites providing useful information about publications and meetings in EFMI member

countries. Our analysis is based on the facts generated from EFMI database stored on EFMI website and collected from national representatives of EFMI member countries.

A search of Medline with the search terms 'EFMI' and 'European Federation for Medical Informatics' returns only 21 papers – 18 in medical informatics related journals: Informatics in Primary Care (6), International Journal of Medical Informatics (3), Methods of Information in Medicine (2), Studies in Health Technologies (6); and 3 in non-informatics/non-EFMI journals. Authors of the papers are: Blobel (2), De Lusignan (6), France (1), Horsch (1), McKeon (1), Masic (2), Michalás (2), Naszlady (1), Tallberg (1), Talmon (1), Trpisovský (1), van Goor (1), and Zvarova (1). Medline search using the term 'IMIA' was performed (for comparison) and 150 papers were found; the search term 'AMIA' resulted in 244 papers found. Most of EFMI papers are related to the activities of working groups – PCI is the most prominent<sup>5,6</sup> – and relatively few initiatives at the level of the federation. Detailed analysis of EFMI website showed that only 14 of 31 members have their official scientific or professional medical informatics journal or newsletter listed (Table 1). Medical informatics journals have their articles published in English with three published in their national language. There are three journals published only as e-journals.

The frequency of ISSN registered publications varies: one journal is published biannually, two quarterly, one every two months, five journals are published 2–3 times per year, two journals monthly and one journal nine times per year. Medical informatics is the principal subject of all of the journals, but several of them focus on other sub-disciplines and allied disciplines. Most of the medical informatics journals are international publications, though three are restricted to national circulation. Two journals are financed by ministry of health and/or other public institutions, while others use subscription as the way of financing.

EFMI country	Journal title	Publisher	Editor-in-Chief	ISSN	Esta. year	Issues/year	Subscription	Web site	Language	Field	Peer reviewed	Financed by
Austria	Artificial Intelligence in Medicine	Elsevier	Klaus-Peter Adlassnig	1386-5056	1989	9	email	yes	English	MI, other	internat.	subscription
Bosnia and Herzegovina	Acta Informatica Medica	AVICENA, Sarajevo	Izet Masic	0353-8109	1993	4	email	yes	English	MI, other	internat.	subscription
Croatia	Bilten HDMI (Bulletin of the CSMI)	CSMI	Kristina Fišter	1330-0253	1992	2	email	yes	Croatian	MI, other	no	membership in the society
	Medicinska informatika	CSMI	Josipa Kern	1330-1799	1993	2	email	yes	English, Croatian	MI	national	ministry of science, publicity
Czech Republic	Lékař a Technika	SBMILJ	Karel Roubik	0301-5491	1970	4	email	yes	Czech	MI, biomedical engineering	national	public institutions, subscription
	European Journal for Biomedical Informatics	EuroMISE	Jana Zvarova	1801-5603	2005	2	email	yes	English, other	biomedical informatics	internat.	other
Denmark	Newsletter	DSMI	-	-	-	-	-	yes	Danish, English	MI	national	public institutions
France	Informatique et Sante	Springer-Verlag	Patrice Degoulet	-	-	2	email	yes	French, English	MI	national	public institutions, subscription
Germany	Biometrie, Informatik und Epidemiologie in Medizin und Biologie	Urban&Fischer Verlag	-	-	-	-	email	yes	German	MI, other	national	public institutions, subscription
Ireland	Newsletter	-	-	-	-	-	-	-	-	-	-	-
Israel	ILAMI Journal and The Health Screen	-	-	-	-	2	-	-	-	MI, other	-	-
Slovenia	Informatica Medica Slovenica	SIMIA	Gaj Vidmar	print:1318-2129 elect.:1318-2145	1993	2	email	yes	English, Slovenian, other	MI, biostatistics, other	internat., national	MI society (SIMIA)
Spain	I+S	SEIS	-	-	-	6	-	-	-	MI, other	-	-
Sweden	Computer Methods and Programs in Biomedicine	Elsevier	Torny Groth	0169-2607	1985	12	paper, email, online	yes	English	MI	internat.	subscriptions
Ukraine	Clinical Informatics and Telemedicine	UAMI	Oleg Yu Mayorov	1812-7231	2003	2-3	email	yes	Ukrainian, English	MI, other	internat.	public institution
United Kingdom	Informatics in Primary Care	Radcliffe Publishing	Simon de Lusignan	1476-0320	1993	4	paper, online	yes	English	PHC, clinical informatics	internat.	PHCG BCS, subscriptions
	International Journal of Medical Informatics	Elsevier	Charles Safran, Jan Talmon	1386-5056	1961	12	paper, online	yes	English	MI	internat.	subscriptions
EFMI	Methods of Information in Medicine	Schattauer	Reinhold Haux	0026-1270	1962	6	paper, online	yes	English	MI	internat.	subscriptions

Table 1 EFMI member countries medical informatics journals.

## Mission statements of task force of EFMI journal editors

Editor-in-Chiefs of medical informatics journals are invited to create a joint mission statement and set out the objective and purpose of all EFMI journals. We believe that the joint statement will foster the dissemination of scientific knowledge and increase our understanding of medical informatics as a discipline. Additionally, we intend to produce and issue a core document stating the fundamental principles upon which all medical informatics journals editors should agree. The common goals will be identified and agreed on the scope and standard of papers that should be published in EFMI medical informatics journals. The reasons for setting out the statement are:

- To promote editorial excellence by enforcing the use of standards and guidelines (International Committee of Medical Journals Editors guidelines; Committee of Publication Ethics; other relevant documents<sup>7</sup>);
- To improve the quality of scientific studies published in EFMI medical informatics journals by imposing same standards for evaluating studies in medical informatics (guidelines already accepted as official EFMI document, but there were no further steps taken to ensure their use);
- To promote scientific publishing excellence by enforcing standards of paper formatting ('camera-ready' manuscript format; Vancouver referencing style);
- To improve diffusion of scientific knowledge through the medical/health informatics area (recognition and diffusion of EFMI research, education, clinical practice guidelines in EU countries should be promoted);
- To increase collaboration among EFMI medical informatics journal editors and schedule regular meetings of the Task Force;
- To explore the potential for using shared pool of reviewers, sharing information on review process and sharing expertise: technical editorial information, experiences, initiatives, publishing resources and tools (such as the open source Open Journal System or commercial/publisher solutions);
- To encourage articles not suitable for medical informatics journals to be published elsewhere and support the communication with editors of such journals;
- To provide a common voice when issues of common interest arise and enhance collaboration between national societies and EFMI bodies;
- To promote European initiatives in stimulating publications and top-quality research.

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