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Editorial

Patient-centered Systems

The 2000 IMIA Yearbook of Medical Informatics bears the well-timed title: *Patient-centered Systems*. The use of the Internet in health care is increasing exponentially, not only for browsing websites for information and knowledge by professionals, but also for the electronic interchange of patient-related data and medical knowledge, nowadays increasingly used by patients themselves. A very substantial amount of web-based traffic is related to health care (up to 35-40%) and a growing proportion of this traffic is used by patients or their relatives.

This year, three authors prepared invited Review Papers on this subject. Six guest editors wrote Synopses of papers that were selected for inclusion · in the Yearbook, and 34 referees assisted in the selection of the latter papers. As usual, the papers included in the Yearbook were selected from the refereed literature, published during the previous year, by a process in which for each paper at least three international reviewers were involved. In addition, overviews are given of a selection of Research and Education programs in some medical and health informatics, as has also been done over the past years.

Dr. Homer Warner, emeritus professor, Department of Medical Informatics, University of Utah, Salt Lake City, USA, has prepared this year's Preface to the Yearbook. Dr. Warner was invited because of his very early involvement in our field. In fact, his early publications comprise areas that are today still of great relevance for medical and health informatics: patient record systems, decision-support methods, patient monitoring, modeling, etc. It is a great honor that he was willing to write the Preface to this Yearbook.

This 2000 IMIA Yearbook is the ninth in the series of IMIA Yearbooks of Medical Informatics. Interest in the Yearbooks is increasing and many of the approximately 50 Member and Corresponding Societies of IMIA order Yearbooks for their members. Some of the Member Societies distribute the Yearbook to all their members as part of their membership. Each year, approximately 10,000 copies of the Yearbook are distributed worldwide.

Patient-centered Systems

Physicians and other healthcare workers are confronted nowadays with

a large variety of systems for the practice of health care. The most recent developments in health care are systems that contain computer-based patient record systems that have access to patient data residing in systems elsewhere. The use of the Internet is a major focal point for the interchange of data contained in these systems. Within hospitals, a local version of the Internet (Intranet) often supports the transmission of the results of biochemical analyses from the laboratory to clinical departments, or of clinician's orders for drugs to the hospital pharmacy. Electronic data interchange on the Internet enables general practitioners in primary care to collaborate with hospital-based specialists in a shared-care setting, for instance, by electronically transmitting referral letters, discharge reports, reports on X-rays or on ECGs. Many physicians also use the Internet for knowledge browsing. An increasing number of patients, however, also use the World-Wide Web for retrieving medical knowledge about their own disease or that of relatives; a few years ago, for instance, Medline was made available to the general public (via PubMed), in addition to researchers, students and physicians. The growth of Internet traffic by patients and their relatives is already impressive, and expanding.

The editors requested the support of a number of colleagues to write original articles about this new and interesting paradigm of accessing data and knowledge by patients themselves. The 2000 IMIA Yearbook, therefore, includes four excellent contributions on this subject, from Andrew Balas (University of Missouri, Columbia, MI, USA) on *Managing Clinical Knowledge for Health Care Improvement*; Warner Slack (Harvard Medical School, Boston, MA, USA), on *Patient-computer Dialogue*; Patricia Flatley Brennan (University of Wisconsin, Madison, WI, USA) on *Patient-centered Information Systems*;

and Rolf Engelbrecht (GSF, MEDIS, Neuherberg, Germany) on *Electronic Health-care Records: an essential part of Health Telematics Applications.*

Research and Education in Medical and Health Informatics

This year's section on education and training in medical and health informatics comprises again an interesting cross-section of activities in different countries. Contributions are given by Alexa T. McCray (National Library of Medicine, Bethesda MD, USA), Arie Hasman (University of Maastricht, The Netherlands), Sherrilynne Fuller (University of Washington, Seattle WA, USA), Günther Gell (University of Graz, Austria), and Reinhold Haux (University of Heidelberg, Germany).

Guest Editors

After the selection of papers to be included in the Yearbook was made by the 34 referees (see listing of referees below), guest editors were requested to write a Synopsis and give a review of the papers in the different sections. They include: Toomas Timpka (University of Linköping, Sweden) on *Health and Clinical Management*; Heather A. Heathfield (Manchester Metropolitan University, UK) on *Computer-based Patient Records*; Paul Gorman (Oregon Health Sciences University, Portland OR, USA) on *Information Systems*; Yoichi Satomura (Chiba University Hospital, Chuou-ku Chiba, Japan) on *Image and Signal Processing*; Joanny Gouvernet (Hôpital Timone Adultes, Marseille, France) on *Decision-support Systems and Knowledge Processing*; and Paul D. Fisher (University of Victoria, Victoria BC, Canada) on *Education in Medical Informatics.*

The editors are most grateful to these colleagues for their contributions to the Yearbook.

IMIA

As usual, the Yearbook contains extensive and updated information on IMIA, its Member Societies and its Working Groups. Nancy Lorenzi (University of Cincinnati, Cincinnati OH, USA), carefully prepared the Section on Working Groups. IMIA's Executive Director, Steven Huesing (Edmonton, Alberta, Canada) assisted in the preparation of the general IMIA pages. IMIA representatives from most countries offered material on their particular Societies. A full list of Presidents and Secretaries of Member Societies and addresses is included in the Yearbook.

New Editors

After about 10 years of spending time and effort preparing the IMIA Yearbooks, the present Editors have decided to step down and to hand over the responsibility to a new team. They are happy to announce that for the forthcoming period their task will be taken over by Dr. Reinhold Haux (University of Heidelberg, Germany) and Dr. Casimir A. Kulikowski (Rutgers University, New Brunswick, NJ, USA). The present editors will, together with Dr. Marion Ball (First Consulting Group, Baltimore, MD, USA), assist the new editors as the members of the Yearbook's Advisory Board.

The 2001 Yearbook

The 2001 IMIA Yearbook of Medical Informatics will certainly be devoted to a highly interesting and current theme; the newly appointed Edi-

tors will soon decide on this theme and start the work on the 2001 IMIA Yearbook.

For this Yearbook the editors will again invite a host of review writers to contribute with their visions to this forthcoming Yearbook. IMIA's Institutional Members that are active in this area will also be invited to contribute.

Acknowledgments