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Editorial

Computing and Collaborative Care

The 1997 IMIA Yearbook of Medical Informatics is the sixth in the series. Approximately 10,000 copies of the Yearbook are distributed worldwide each year through IMIA's more than 45 Member and Corresponding Societies.

The 1997 Yearbook bears the title: *Computing and Collaborative Care*.

This year the editors were assisted by 12 authors who prepared four invited Review Papers, by seven guest editors who wrote Synopses of papers included in the Yearbook, and by 28 referees who assisted in the selection of the papers.

As usual, the papers were selected from the refereed literature published during the previous year, i.e., 1996. In addition, overviews are given of a selection of Education and Training programs in medical and health informatics.

Each year different centers are requested to describe their educational activities. Over time, the educational activities in medical and health informatics worldwide will virtually all have been covered.

This year's preface to the Yearbook has been prepared by Dr. Morris Collen, Director Emeritus, Kaiser Permanente Medical Care Program, Oakland CA, USA.

Computers for Collaborative Care

Information technology has been widely introduced in health care. No longer is the patient record or are other patient data, such as CTs or ECGs, confined to one location only. In many countries, data are routinely exchanged electronically, enabling the support of *collaborative care*, also called *shared care*. The use of systems is no longer restricted to advanced areas of care only, such as hospitals or diagnostic function laboratories. Patient data can be present at the place where patients and clinicians meet. In addition, the care for patients can be shared among different care providers, such as in cases of patients with chronic diseases or patients with cancer. In these cases, patients are often simultaneously treated by both physicians and nurses in primary care and hospitals. These clinicians then have to be able to use the same patient data for diagnosis and therapy. The only way to accomplish this is by electronically exchanging the data. Some of the review papers in this Yearbook show clearly the advancement made in certain areas of care in the electronic exchange of patient data. An earlier Yearbook already stressed the integration of systems and data within the hospital. With the given technology of

today, advanced patient care needs no longer be confined to the walls of specialized institutions, such as modern hospitals; the hospital can stretch out into the community and primary care may take place within the walls of the hospital. Even patient monitoring can be done under certain circumstances in the patient's home. Consultation can be provided from a distance and electronic medical assistance can be close by. The transformation of health care is now possible because of this type of support. It should be realized, however, that this goes together with new responsibilities for all those who care for the patient.

The editors requested the support of a number of colleagues to write original articles about this new and interesting subject. We are grateful that they all responded positively. The 1997 Yearbook, therefore, includes a number of excellent contributions on this subject: Clement J. McDonald and colleagues (Regenstrief Institute for Health Care, Indianapolis IN, USA) contribute on the health informatics standards; a view from Mid-America; Glyn H. Hayes (AAH Meditel Ltd, Bromsgrove, UK) on the requirements of an electronic medical record to suit all clinical disciplines; Peter J. Branger (Erasmus University Rotterdam and Bakkenist, Amsterdam) on clinicians at work; sharing care in the information age;

and Ravi S. Raman and colleagues (West Virginia University, Morgantown WV, USA) on collaboration technology for rural health-care.

Education in Medical Informatics

This year's papers on education and training in medical and health informatics comprise again an interesting cross section of activities in different countries: Stephen Kay et al. (University of Manchester, UK); E. Andrew Balas et al. (University of Missouri, Columbia MO, USA); and George I. Mihalas (University of Medicine and Pharmacy, Timisoara, Romania).

In addition to the papers on this subject of the last years, the series on education and training is further extended and it is hoped that this stimulates the establishment of other training programs elsewhere.

Guest Editors

After the selection of papers to be included in the Yearbook was made by the 28 referees, guest editors were requested to write a Synopsis and review of the papers in the different sections.

They include: Judy Ozbolt (University of Virginia, Charlottesville VA, USA) on *Health and Clinical Management*; J. Marc Overhage (Regenstrief Institute for Health Care, Indianapolis IN, USA) on *Computer-based Patient Records*; François-Christophe Jean (AT & T ISTELE, Issy-les-Moulineaux, France) on *Information Systems*; Kazuo Yana (Hosei University, Tokyo, Japan) on *Image and Signal Processing*; Constantin F. Aliferis (University of Pittsburgh, Pittsburgh PA, USA) on *Decision-support Systems*; Giordano Lanzola (University of Pavia, Pavia, Italy) on *Knowledge Processing*; and

Joseph Hales on *Education in Medical Informatics*.

IMIA

As usual, the Yearbook also contains extensive information on IMIA, its Member Societies and its Working Groups. The Section on Working Groups was again carefully prepared by Dr. Jean-Raoul Scherrer of Geneva, who is IMIA's Vice President for Special Interest Groups and Working Groups. IMIA's Secretary, Dr. Bjarte Solheim from Oslo, gave assistance in the preparation of the general IMIA pages. IMIA representatives from most countries offered material on their respective Societies. A full list of presidents and secretaries of Member Societies and addresses is included in the Yearbook.

The 1998 Yearbook

The 1998 IMIA Yearbook of Medical Informatics will be on a highly interesting and current theme: *Medical Informatics and the Internet*.

The 1998 IMIA Yearbook hopes to offer once again a representative overview of the state of the art in medical and health informatics in this area. Companies that are active in this area are invited to contribute as well.

Acknowledgments

The editors acknowledge the contributions of the Referees and the Guest Editors. The editors would also like to thank the high-level contributions by the colleagues who wrote the Review Papers and the contributions in the Education and Training Section. They are grateful for the time and effort given by the managing editors, Jaap Brand, Martine de Bruyne, Manon Kuilboer, Peter Moorman, Frank Pierik,

Bob Schijvenaars. A good deal of organizational work was done by the secretaries of the Department of Medical Informatics of the Erasmus University Rotterdam (Désirée de Jong in the entire organization of the Yearbook and the collection of papers and all other material for the Yearbook, correspondence with authors, referees, reviewers, synopsis writers and journal publishers, together with Rosa Scholte, in preparing the Yearbook for the Publisher). The contributions of Schattauer Verlag in Stuttgart (Dieter Bergemann and Hannelore Hensen) are also gratefully acknowledged. We would like to thank all authors and publishers for their willingness to contribute papers to the 1997 Yearbook, all IMIA Member Societies, and especially Jean-Raoul Scherrer and Bjarte Solheim for their contributions to the IMIA sections.

List of Referees who contributed to the selection of articles in the 1997 IMIA Yearbook of Medical Informatics:

M.J. Ackerman, USA
 A. Aubert, Belgium
 R.H. Baud, Switzerland
 R.P. Baumann, Switzerland
 J.R. Beck, USA
 K. Campbell, USA
 L. Edenbrandt, Sweden
 L.M. Fagan, USA
 M. Fieschi, France
 E.S. Gelsema, The Netherlands
 S.B. Henry, USA
 B. Humphreys, USA
 C.A. Kulikowski, USA
 B. de Faria Leão, Brazil
 F.J. Leven, Germany
 K.C. Lun, Republic of Singapore
 J. Michaelis, Germany
 G. Molino, Italy
 S. Powsner, USA
 H-U. Prokosch, Germany
 A. Rosenfalck, Denmark,
 W.W. Stead, USA
 H. Takeda, Japan
 T. Timpka, Sweden
 J.F. Veenland, The Netherlands
 C. Wang, Japan
 J. Zvárová, Czech Republic
 P. Zweigenbaum, France

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