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Editorial

The Computer-based Patient Record

The theme of this year's IMIA Yearbook of Medical Informatics is the computer-based patient record. Many institutions around the world are developing and using systems that rely on electronic records of patient encounters, and many others are considering a move in that direction. A host of issues arises including data integrity, data security, and patient confidentiality. The effort and time involved in entering the data into the computer system together with care-provider acceptability of the system also cannot be ignored. The reader will find many of these issues discussed in this edition of the Yearbook, both in review papers and several of the selected articles.

This Yearbook is the fourth in the series. The first Yearbook appeared in 1992 and around 10,000 copies have been distributed each year primarily to IMIA membership organizations. The Yearbook is intended to serve as a compilation of some of the most exciting work going on in the field of medical informatics. The field has much to offer in an era when health care professionals are becoming increasingly aware of the role that computers can play in improving the delivery of health care.

IMIA

The Yearbook begins with detailed sections describing the International Medical Informatics Association. IMIA's Secretary Dr. B. Solheim contributed to the General Information section and Dr. J-R Scherrer prepared the information on IMIA Working Groups. IMIA representatives provided general information about their National Society or Regional Organization. Contact information for IMIA member societies as well as current and forthcoming events are also listed.

Articles Selected for Inclusion in the 1995 Yearbook

All articles reprinted in the Yearbook have been published in refereed journals during the preceding year. Articles were suggested by members of the medical informatics community because of their outstanding technical and scientific content as well as for the contribution they have made to the field.

All suggested articles were reviewed by a panel of referees, and a selection was made of the best articles. This year thirty referees, who are listed at the end of this editorial, participated in the review and selection of articles for the Yearbook. Each article was reviewed by at least three referees who looked specifically at the following criteria: significance to medical informatics, health care and/or medicine; quality of scientific and/or technical content; originality and innovativeness; reference to related prior work; and organization and clarity of presentation.

This year the Yearbook contains 47 articles organized into seven sections. Each section includes a Synopsis by one of the guest editors of the 1995 Yearbook. The sections and guest editors are: *Health and Clinical Management* (Dr. H. Takeda, Japan), *Computer-based Patient Records* (Dr. F. Borst, Switzerland), *Information Systems* (Dr. M. Frisse, USA), *Image and Signal Processing* (Dr. N. Saranummi, Finland), *Decision Support Systems* (Dr. H. Heathfield, UK), *Knowledge Processing* (Dr. Y. Shahar, USA), and *Education* (Dr. P. Dev, USA). The synopses should give the reader of the Yearbook a good idea about the content of each section and a sense of the current issues in the field.

Review Papers

The solicited review papers included in this volume are all concerned with the topic of the computer-based patient record, the theme of this year's Yearbook. Original papers have been contributed by Dr. J. Cimino, USA, Dr. A.M. van Ginneken, the Netherlands, Dr. J-R Scherrer, Switzerland, Dr. D. Detmer, USA, and Dr. C. Safran, USA. Together, these papers give further insight into the issues involved, as hospitals and other health-care institutions make more and more of their data available in electronic form.

Education and Training

Last year the Yearbook included, for the first time, descriptions of the education and training programs at several institutions. This year that tradition has been continued. This year's descriptions include the programs at Columbia University, New York, USA (Drs. P. Clayton and J. Cimino), Stanford University, Palo Alto, USA (Dr. E. Shortliffe), Charles University, Prague, the Czech Republic (Dr. J. Zvarova), Broussais University Hospital, Paris, France (Dr. P. Degoulet), and Linköping University, Linköping, Sweden (Dr. O. Wigertz).

Reference Lists

Two subject indexes are provided at the end of the volume. The first is a subject index of the articles included in the Yearbook. The second is a subject index of all articles that appeared during 1994 in six medical informatics journals: Computers and Biomedical Research, Computer Methods and Programs in Biomedicine, International Journal of Biomedical Computing, Journal of the American Medical Informatics Association, Medical Informatics, and Methods of Information in Medicine. A full listing of all articles from these journals is also included.

Acknowledgments

The editors would like to acknowledge the assistance of the managing editors, guest editors, and referees who have contributed to making this another interesting and high-quality publication. The contributions of the authors of the review and education and training papers are also gratefully acknowledged. The production of the Yearbook involves numerous tasks including collecting articles, corresponding with authors, guest editors, referees, IMIA representatives and journal publishers, and preparing the final copy for the publisher. We would like to acknowledge the editorial assistants, Désirée de Jong, Rosa Scholte and Henriëtte van Waay of the Department of Medical Informatics of the Erasmus University, who have once again provided superb assistance with these tasks. The support of Dieter Bergemann and the staff of Schattauer Verlag in Stuttgart is also gratefully acknowledged. Finally, we would like to thank all authors for their willingness to contribute papers to this edition of the Yearbook.

List of Referees who contributed to the selection of articles in the 1995 IMIA Yearbook of Medical Informatics:

S. Andreassen, Denmark
R.H. Baud, Switzerland
K. Bernstein, Denmark
C.G. Chute, USA
M. Corn, USA
R. Dimitru, Romania
L. Edenbrandt, Sweden
R. Engelbrecht, Germany
O. Estévez Uscanga, The Netherlands
B. de Faria Leao, Brazil
M. Fieschi, France
G. Gell, Austria
W.E. Hammond, USA
D. Ingram, UK
M.G. Kahn, USA
S. Kaihara, Japan
J.A. Kors, The Netherlands
E.M.J. Koski, Finland
N.M. Lorenzi, USA
G.I. Mihalas, Romania
J.R. Möhr, Canada
A. Nowlan, UK
M. Okajima, Japan
D.J. Protti, Canada
N.K. Roderer, USA
P. Rubel, France
W.W. Stead, USA
J.L. Talmon, The Netherlands
T.W. Tan, Republic of Singapore
J. Wyatt, UK