CONTENTS

MEDICAL RECORDS		
Coronary care information system: its use in the assessment of prognosis in acute myocardial infarction	J L Willems et al University of Leuven, Belgium	1
ACIS - a clinical information system	M A Fox University of California, USA	g
An analysis of 3 years' experience with the re-designed system for basic medical documentation within the MSH	G von Gaertner-Holthoff P R Pocklington Medical School Hannover Germany	19
Experiments with medical diagnostic systems	J Janecki H Kokott Medical Academy, Poland	29
An on-line, interactive information system for kidney transplantation	Q P Lansbergen University Hospital Leyden Netherlands	37
MFS - a user-oriented system for diagnostic data management	E Guidotti R Arrigoni Centro Diagnostico Italiano	49
An attempt to evaluate the contribution of common laboratory findings : an experiment in neurology	J L Golmard et al INSERM, France	55
TEXT PROCESSING		
Artificial medical languages, a solution for clinical needs in documentation, example using REMEDE system	M de Heaulme INSERM, France	63
KLAUKON - a microprocessor system for free text acquisition with automatic error checking	W K H Sager et al Universität Geissen, Germany	73
Free text analysis: an attempt to solve the documentation problem	G Gell Universitätsklinik fur Radiologie, Austria	83
GENERAL PRACTICE		
A survey of developments in medical records and information systems in the United Kingdom	A L Rector et al University Hospital & Medical School Nottingham, UK	91
Computerization of the medical record of the general practitioner: systematic registration at each contact patient - general practitioner	J Heyrman MIG, Belgium	101



The provision of data processing facilities for medical practitioners	L R Neal Brunel University, UK	109
Satisfying the information needs of the general practitioner for improved patient care	M G Sheldon General Practitioner, UK	117
IMAGE PROCESSING		
Information processing in research and routine nuclear cardiology	C N de Graaf et al Institute of Nuclear Medicine Netherlands	121
Image analysis in histo-cytopathology	L Arnould et al Institut de Morphologie Pathologique, Belgium	159
Computer simulation of monochromatic X-rays	G T Herman State University of New York USA	167
Real time computation of pulmonary mechanics by digital computer	H Lorino et al Hôpital Henri Mondor, France	179
The computer in the functional study of the kidney with radionuclides	J Moreno-González et al Clínica Puerta de Hierro, Spain	189
Improvement of programming efficiency in medical image processing by a dialog language	G Pfeiffer K H Hoehne DESY, Germany	203
Systems support for the routine requirements of clinical neurophysiology	P R Pocklington et al Medical School Hannover, Germany	217
INFORMATICS TECHNOLOGY		
On the expression of relations in medicine: linguistic aspects	B J Kostrewski The City University, UK J Anderson King's College Hospital, UK	227
Software of dialogues: physician - computer - patient	A Brodziak Silesian School of Medicine, Poland	237
Formal languages and their semantics tools for the application programmer	G Osterburg K Schadewaldt German Cancer Research Center	241
MEDICAL DECISION MAKING		
A decision rule in parenthood diagnosis and its consequences	C Chastang F Gremy INSERM, France	251

Interactive programming language for validation and interrogation of evolutive data	J P Chantalou INSERM, France	261
A system for computer-aided prognosis - a management function of the medical information system WAMIS	W Dorda et al Institute of Medical Computer Science, Austria	269
Theory of evidence and medical diagnostic	P Smets Brussels University, Belgium	285
Computer-aided classification of chronic bronchitis in comparison with other diagnostic tools	R Thurmayr et al Institut für Medizinische Statistik und Epidemiologie der TU München, Germany	293
TRAINING IN MEDICAL INFORMATICS		
Review of the MUMPS language and its applications to medicine	J Zimmerman Washington University, USA F Schutte Free University, Netherlands	303
The communicational structure of	O Rienhoff	
medical information systems and its educational consequences	P L Reichertz Medical School Hannover, Germany	315
Educational aspects in medical informatics	F Schutte et al Free University, Netherlands	329
IMPLEMENTATION AND USER EDUCATION		
COMPADOS: how to convince a physician to use a computerized medical record system	J van Egmond R J Wieme University of Gent, Belgium	339
The influence of privacy acts on medical informatics	K Boehm German Cancer Research Center	351
Rules for confidentiality - practical experience in a community based real-time system	R H Fisher Exeter Community Health Services Computer Project, UK	363
The objectives and design philosophy of the real-time computer project at the Queen Elizabeth Medical Centre	P M Hills Queen Elizabeth Medical Centre, UK	385
MODELLING		
The utilization and validation of mathematical models in medicine and public health	N T J Bailey World Health Organisation	393
Testing alternative inventory policies for a regional blood bank	B Page Technische Universität Berlin, Germany	403

A model of the foetal circulation for the interpretation of foetal heart rate patterns	A F L Veth Free University, Netherlands	413
Compartmental analysis of the distribution of Buflomedil	P d'Athis et al Hôpital du Bocage, France	421
DATABASES		
A large database on a minicomputer	A Bongers J M L Kouwenberg University Hospital Leyden, Netherlands	431
OP72 - data technical aspects	F Bergqvist S Bengtsson Uppsala University, Sweden	443
On the design of a database system for clinical research	S C Chang et al Free University, Netherlands	457
Using CODIL to handle poorly structured clinical information	C F Reynolds et al Brunel University, UK	465
CLINICAL LABORATORIES		
A laboratory data processing system for non-numeric results	P J L Sequeira Withington Hospital, UK	475
A surgical pathology file experiences with 30,000 records	M Härringer H Becker University of Graz, Austria	481
Data structures and data base problems in clinical chemistry information systems	A J Porth I Mieth Medical School Hannover, Germany	489
Clinical laboratory systems	S Sargent Queen Elizabeth Medical Centre, UK	497
A common approach to a variety of clinical laboratories	D R Mace London Hospital, UK	509
SIGNAL PROCESSING		
A 128-channel electrocardiographic data acquisition system	P Block et al University Hospital Jette, Belgium	521
Features to segmentate EEG recordings a comparative study	B H Jansen et al Free University, Netherlands	533
ABSCESS - a system for the analysis by small computer of EEG signals in a	B B MacGillivray et al Royal Free Hospital, UK	545

Computer analysis of motor unit discharge patterns	L Philipson Lund University Hospital, Sweden	555
Neurophysiological signals averaging stimuli minimization	J Villalobos X Majem <i>Clinica Corachan, Spain</i>	565
Computerized determination of lung function parameters	L H van Montfort et al State University of Groningen, Netherlands	575
HEALTH CARE PLANNING		
National policy and co-ordination of health care EDP in Finland	I Linnakko et al National Board of Health, Finland	581
The impact of computer technology on health care	J A Dinklo Philips' Medical Systems, Netherlands	589
A study of the demands made on casualty services by the population of socially deprived areas	J A Farrer et al Royal Lancaster Infirmary, UK	597
Monitoring of alimentary and respiratory infections	J Radkovsky Institute of Social Medicine & Organization of Health Services, Czechoslovakia	604
The transfer of outpatient clinics to rural hospitals: a feasibility study and cost-benefit analysis	I T Russell et al University of North Carolina, USA	613
Models, information systems and the management of health care organizations	G A Gorry Baylor College of Medicine, USA	623
TRANSFERABILITY		
The patient-service scheduling system at the Dresden Medical Academy and its further development on the basis of an ESER EDPS	W D Grimm Medizinische Akademie 'Carl Gustav Carus', E Germany	633
TREATMENT		
A computer program for calculating intravenous feeding regimens and its application in a teaching hospital and a district general hospital	G Shearing et al University of Newcastle-upon- Tyne, UK	641
Compliance aspects of a computer- assisted anticoagulation control system	A M Vossepoel Leiden University Medical Centre, Netherlands	651

SPECIAL INTEREST PAPERS

Is a large computer system of value in the intensive care unit?	A E S Goh B Richards UMIST, UK	657
The strategic analyses and initial implementation of the shared hospital information system	A Gunji Ministry of Health and Welfare, Japan	663
On-line support for basic medical information in a large university hospital	R Klar et al Universität Göttingen, Germany	671
An approach to efficient on-line mass storage of physiological parameters in an intensive care environment	H Schillings et al Universität Göttingen, Germany	679
EVALUATION		
A new approach to evaluation in the NHS experimental computer programme	B W H Molteno Trent Regional Health Authority, UK	691
New tools for evaluation : their application to computers	R Rosser Charing Cross Hospital Medical School, UK T Benson	
	Charing Cross Hospital, UK	701
Evaluation of the diaphane dialysis registry	P Degoulet et al INSERM, France	711
NURSING		
The relationship between nursing and medical informatics	K J Hannah University of Calgary, Canada	721
Nursing intervention scoring system: a concept for management, research and communication	A G Greenburg et al Veterans Administration Hospital, USA	729
Implementation of a patient monitoring system at Herlev Hospital	B S Nielsen P Andersen Copenhagen County Hospitals, Denmark	739
INDEXING AND ADMINISTRATIVE SYSTEMS		
A review of the national standard child health computer system and its potential benefits	J S Parkinson Welsh Health Technical Services Organisation, UK	745
A review of the use of computers in hospital and community indexes in the United Kingdom	J R Bryant S M Fenlon Addenbrooke's Hospital, UK	757
_	- ,	

Computerized support of activities and identification of related data in Kiel KIS	G Griesser M Jainz Hospital of Christian- Albrecht, Germany	767
Computer system for blood donors' management	J Vaqué Ciudad Sanitaria de la Seguridad Social, Spain	775
Feed-back in an obstetric data base	O J S van Hemel et al St Hippolytus Hospital, Netherlands	783
Replicable, multi-purpose patient index systems - an analysis of some necessary features	A R Wills London Hospital, UK	797
Author Index		813
Subject Index		819