

Contents

1	Medical Informatics as a Scientific Discipline	1
	A. Venot, A. Burgun, S. Després, and P. Degoulet	
2	Medical Vocabulary, Terminological Resources and Information Coding in the Health Domain	11
	C. Duclos, A. Burgun, J.B. Lamy, P. Landais, J.M. Rodrigues, L. Soualmia, and P. Zweigenbaum	
3	Management and Dissemination of Health Knowledge	43
	A. Venot, J. Charlet, S. Darmoni, C. Duclos, J.C. Dufour, and L. Soualmia	
4	Representation of Patient Data in Health Information Systems and Electronic Health Records	65
	M. Cuggia, P. Avillach, and C. Daniel	
5	The Processing of Medical Images: Principles, Main Applications and Perspectives	91
	L. Legrand	
6	Enhanced Medical Intervention: Surgetics and Robotics	117
	A. Moreau-Gaudry and P. Cinquin	
7	Medical Diagnostic Decision Support	141
	B. Séroussi, P. Le Beux, and A. Venot	
8	Computerized Drug Prescription Decision Support	167
	B. Séroussi, J. Bouaud, C. Duclos, J.C. Dufour, and A. Venot	
9	Computerized Medico-Economic Decision Making: An International Comparison	191
	P. Landais, T. Boudemaghe, C. Suehs, G. Dedet, and C. Lebihan-Benjamin	
10	Public Health Decision Support	221
	C. Jacquelinet, I. Belhadj, F. Bayer, E. Sauleau, P. Lévy, and H. Chaudet	

11 Security, Legal and Ethical Aspects of Computerised Health Data in Europe	249
C. Quantin, F.-A. Allaert, C. Daniel, E. Lamas, and V. Rialle	
12 Hospital Information Systems	289
P. Degoulet	
13 Sharing Data and Medical Records	315
P. Staccini, C. Daniel, T. Dart, and O. Bouhaddou	
14 Computerising the Doctor's Office	349
A. Venot and M. Cuggia	
15 Computerizing the Dental Office	365
V. Bertaud-Gounot, B. Chaumeil, E. Ehrmann, M. Fages, and J. Valcarcel	
16 E-health	405
R. Beuscart, E. Chazard, J. Duchêne, G. Ficheur, J.M. Renard, V. Rialle, and N. Souf	
17 Translational Bioinformatics and Clinical Research Informatics	429
C. Daniel, E. Albuissou, T. Dart, P. Avillach, M. Cuggia, and Y. Guo	
18 Human Factors and Ergonomics in Medical Informatics	463
H. Chaudet, F. Anceaux, M.C. Beuscart, S. Pelayo, and L. Pellegrin	
Index	487

Medical Informatics, e-Health

Fundamentals and Applications

Venot, A.; Burgun, A.; Quantin, C. (Eds.)

2014, X, 494 p. 124 illus., 81 illus. in color., Hardcover

ISBN: 978-2-8178-0477-4