

Content

Chapter 1 Telecardiology and Chronic Disease Management	1
Cardiac Tele-Rehabilitation with the SAPHIRE System	2
<i>O. Nee, A. Hein, R. Ludwig, D. Willemsen, C. Busch, T. Scheffold</i>	
Cardiological Diagnosis Network (CARDIODIAGNET)	6
<i>V. D. Moga, T. Ciocârlie, M. Moga, R. Avram, R. Seromenho, T. Cronje, A. S. Anayiotos, G. Fleishman, R. Bonifaci, L. Bosneag, V. Stoicu-Tivadar, L. Stoicu-Tivadar</i>	
Studying Factors in Telemedicine Sustainability	12
<i>R. S. Gundim, L. W. Chao</i>	
Telemedicine for HIV/AIDS Care in Resource-Limited Settings and Users' Satisfaction	15
<i>M. Zolfo, V. Renggli, O. Koole, C. Kiyan, I. de Waard, L. Lynen</i>	
Telemonitoring – the Intelligent Solution for Chronic Patient Care	19
<i>H. Korb</i>	
Telephone Hotline Service (THS) for Children and Adolescents with Type 1 Diabetes as a Strategy to Reduce Diabetes-Related Emergencies and Costs for Admittance	26
<i>A. L. Bernardini, G. Chiari, M. Vanelli</i>	
Vitaphone Tele-ECG-Card 100 IR: Telemonitoring of Patients with Cardiac Dysrhythmia	30
<i>B. von Ehren, H. Korb</i>	
Chapter 2 Telecare and Services for the Ageing	32
Ambient Intelligence for the Elderly (AmIE): An Empowering Way of Independent Living of Elderly	33
<i>L. Claeys, J. Criel, S. Christiaens, L. Trappeniers</i>	
Co-Producing Telehealthcare Systems for Elderly Communities in Multi-Agency Service Environments	38
<i>G. Maniatopoulos, R. Wilson, M. Martin</i>	
Elderly Care and Maintaining a Good Quality of Life in the Rural Communities of Developing Countries and Sub Sahara Africa is a Global Challenge	44
<i>L. Jumbo Ekale</i>	
The Use of Visual Landmarks in a Wayfinding System for Elderly with Beginning Dementia	48
<i>D. Veldkamp, F. Hagethorn, B. Kröse, P. de Greef</i>	

Vital Sign Monitoring in Nursing Home for Elderly <i>J. H. Legarreta, C. Paloc</i>	52
---	----

Chapter 3 eHealth in Support of Routine Medical Practice **56**

Adoption of eHealth Applications: A Model to Investigate the Technology Acceptance within Healthcare Professionals	57
--	----

E. Safari Mehr, A. Albadvi

RIGHT System as a Support in Diagnosis	62
--	----

Zwiefka, J. Klakočar, M. Bogowolska –Wępsięć, J. Maroszek, K. Frączkowski, R. Dudek

Telecommunications Infrastructure Readiness for Practicing Telehealth in Philippine Remote Rural Areas	68
--	----

J. Montalban, A. B. Marcelo

The Innovative Searching Engine “YTPO”	73
--	----

J. Vinarova, B. Kapsazov, P. Mihova, I. Penjurov

Chapter 4 Health Informatics and Patient Safety **78**

Bidirectional Voice Interaction with Dental Electronic Health Record	79
--	----

J. Zvarova, T. Dostalova, M. Nagy, P. Hanzlicek, M. Seydlova, R. Hippmann, L. Smidl, J. Trmal, J. Psutka

Mapping Clinical Databases to the Neuroweb Ontology: Lessons Learned	84
--	----

I. Vassányi, T. Dulai, D. Muhi

Medical Diagnosis Using Artificial Intelligence Technology	88
--	----

Abdel-Badeeh M. Salem

Near Field Communication (NFC) Technology – An Enabler of the Internet of (Medical) Things	92
--	----

J. Morak, D. Hayn, P. Kastner, G. Schreier

New Paradigm for Telemedical Collaboration: Design of Intelligent Agent Functions	96
---	----

F. T. Adilova, R. Sh. Ibragimov

Procedures Based on the Dialog Semantics for Emergency and Teleconsulting Call Centers	103
--	-----

S. Ionita, M.M. Ionita, S. Puscoci, F. Serbanescu

RESIST: A Platform to Support Medical Web-Services: A Case Study	107
--	-----

M. Da Silveira, N. Guelfi

SAPHIRE-Intelligent Healthcare Monitoring Based on Semantic Interoperability Platform	111
<i>A. Dogac, G. Laleci, M. Olduz, I. Tasyurt, M. Yuksel, A. Okcan</i>	
Security Considerations for Integrated Telecare Systems	117
<i>F. Şerbanescu, S. Puşcoci, F. Bajan, S. Ionita</i>	
The Formulation of a Scientific Problems and Its Practical Solution Using “The Symbiosis of Telemedicine and Neural Networks”	121
<i>O. Kasimov, E. Karchenova, I. Maksimova</i>	
The Introduction of Electronic Referrals in Norway	125
<i>V. Heimly</i>	
Towards Pervasive ICT Solutions in the Healthcare Sector: An Integrated Technology Approach to Safer and Efficient Clinical Processes in Organizations	131
<i>E. Sini, P. Locatelli, N. Restifo</i>	
Chapter 5 Telehealth and Supporting Self Care in 21st Century	136
A Mobile Telemedicine Solution Offering More Comfort and Privacy in Stress Urinary Incontinence Treatment	137
<i>F. Galbiati, A. Holopainen, A. Remes</i>	
Comparison of Usability Evaluation Methods for Telecare Applications	140
<i>T. N. van Schie, A. J. M. Rövekamp, M. J. C. Hilgersom, A. C. M. Dumay</i>	
Economics and Marketing of Modern Telemedicine for Developing Regions and Countries	145
<i>V. L. Stolyar, A. I. Sel’kov, O. U. Atkov, E. A. Sel’kova, N. V. Chueva</i>	
Finding out What Elderly Think of the E-Health Homecare Project Zorrgemak	152
<i>A. J. M. Rövekamp, T. N. van Schie, M. J. C. Hilgersom, A. C. M. Dumay</i>	
Virtual Hospitals Promote Improved and Flexible Healthcare at Home	156
<i>G. Grasczew, T. A. Roelofs, S. Rakowsky, P. M. Schlag</i>	
Chapter 6 International Telemedicine and eHealth Initiatives and Developments	160
Continuous Professional Development: The Role of Telemedicine in	161

Continuous Medical Education in Nigeria <i>O. J. Adebola</i>	
eHealth – The Effective Application of Information and Communication Technologies <i>E. T. Kldiashvili</i>	165
Planning Wireless Cities and Regions To Support Telemedicine Applications <i>C. A. Szabo</i>	169
The Experience of the Development of Tele-Medical Design in Saratov Railway Clinic - Telemedical Centre: The Experience and the Hopes <i>O. Kasimov, E. Karchenova, V. Tuchin</i>	173
The Implementation Process of Electronic Medical Record System in Indian Hospital <i>S. A. Shabbir</i>	177
The Jubilees of Medical Informatics in Bosnia and Herzegovina <i>I. Masic, S. Toromanovic, A. Novo, H. Pandza, Z. Masic, A. Dzananovic</i>	185
Towards An International Telemedicine Training Programme <i>M. Mars</i>	190
Chapter 7 eLearning	194
A Strategy for Health Professionals Learning at Distance: Focus on Brazilian Sentinels Hospitals <i>R. S. Gundim, R. Q. Padilha, C. A. Petramale</i>	195
Development of a Web Education Module on Endocrine Physiology for Nursing Students <i>E. M. L. Rangel, I. A. C. Mendes, E. C. Cárnio, J. A. Crispim</i>	199
eDietary Intake Portal for Food Recording, Reporting and Nutrition Education <i>L. M. Y. Chung, J. W. Y. Chung, B. Chen, Th. K.S. Wong</i>	202
E-Learning and Teleconference in Trauma Education <i>F. S. Collet e Silva, A. C. Antunes, B. Fontes, R. S. Poggetti, D. Biolini, C. W. Lung</i>	208
Evaluation of the Effectiveness of a Psychoeducational On-line Program Directed to Children & Teenagers with Neuromuscular Disease <i>L. Paz, J., A. Caro, I., A. De la Cruz Beldarrain,, E. Lazaro Pérez</i>	211
Evaluation of the Effectiveness of a Psychoeducational On-line	218

Program Tailed to Parents of Children and Teenagers with Neuromuscular Disease <i>J. F. López Paz, I. Amayra Caro, E. Lázaro Pérez, A. De la Cruz Beldarraín</i>	
How to Provide High Quality Contents for Low Resource Settings <i>C. Kiyani, M. Zolfo, I. de Waard, V. Renggli, L. Lynen</i>	223
Medical Informatics Education and Distance Learning at Sarajevo Biomedical faculties <i>I. Masic, H. Pandza, Z. Masic</i>	227
Multimedia Teaching Systems as Educational Tool in Everyday Work of Pharmaceutical Companies 5 Years of Practical Experience <i>A. Dolnitskii, J. Dolnitskii</i>	233
Virtual Health Care Knowledge Center in Georgia <i>T. Schrader, E. Kldiashvili</i>	239
Chapter 8 eHealth for Developing Countries and Low Resource Settings	243
Access and Connectivity for Community Based Health Workers in Developing Countries: Employing Wireless Technologies <i>A. Iluyemi, J. S. Briggs</i>	244
Adoption of U.S. Immunization Registries in Ukraine <i>M. Popova</i>	251
EHealth Market Segmentation Framework in Developing Countries <i>P. Nuq</i>	256
Pakistan – How to Speed up the Introduction of EHealth Services in Developing Countries <i>V. Androuchko, A. Z. Malik</i>	260
Tele-Psychology: Users’ Demands <i>M. Jordanova, L. Vasileva, M. Rasheva, R. Bojinova</i>	266
The Role of Education for the Introduction of EHealth Services in Developing Countries <i>V. Androuchko, A. Malik, P. Nuq, C. Omaswa, L. Lungten</i>	270
Unified Public Health Informational Space of the Republic of Uzbekistan <i>T. Khakimov, M. Baymukhamedov, M. Matsapaeva, V. Kuznetsov, D. Khusanov</i>	275
Chapter 9 Tele dermatology	284

Africa Teledermatology Project: A Viable Model of Telemedicine-Supported Dermatology Healthcare Programme in Sub-Saharan Africa	285
<i>S. Kaddu, C. Kovarik, G. Gabler, H. Peter Soyer</i>	
KSYOS TeleDermatology The Netherlands: Safe and Reimbursed	288
<i>L. Witkamp</i>	
TELECOMP – A Telemedical Compliance Management System for Patients with Psoriasis	290
<i>D. Hayn, W. Salmhofer, R. Hofmann-Wellenhof, P. Kastner, G. Schreier</i>	
Chapter 10 New Trends in eHealth	294
Consumer Attitudes towards eHealth in Greece – an Update	295
<i>C. E. Chronaki, K. Vareli, T. Roumeliotaki</i>	
Diagnostic Image Archive System for Rapid Web Based Access to the Consultant through Metropolitan Area Network	300
<i>N. P. Chowdhry, A. W. Ansari, I. A. Shah, A. Q. K. Rajput, A. K. Baloch, B. S. Chowdhry</i>	
Ethical Issues in the Delivery of Telecare and Telehealth Services	307
<i>M. J. Fisk</i>	
HEALTH@HOMELL: Integration of the Living Lab Approach in EHealth Projects	311
<i>L. P. del Arbol, P. A. de-Alarcón, L. C. Fernández</i>	
Integrated Telemedicine Services, Based On Medical Telecenters Network - Experimental Results	315
<i>F. Bajan, S. Puscoci, S. Ionita, F. Șerbanescu</i>	
Integration of “Intelligent” SMS into PCS*CARE Clinical Hospital Information System	319
<i>M. Citavy, R. Trzicky</i>	
More Intelligent Smart Houses for Better Care and Health	322
<i>I. Bierhoff, A. van Berlo</i>	
OFSETH: Optical Fibre Sensors Embedded Into Smart Textile for Healthcare Monitoring	326
<i>F. Narbonneau</i>	
RFID: Opportunities and Challenges in Health Care	330
<i>M. Elham, M. A. Pourhoseingholi, Kave Baghai, M.R. Zali</i>	
Short Message Systems for Health Promotion	336
<i>T. R. Nyberg</i>	

TEMOS – Integrated Services for the Medical Support of Travellers and Expatriates	345
<i>M. Lindlar, C. Mika, R. Gerzer</i>	
The Digital Life Centre: a Living Lab for Education in Real World Situations	350
<i>B. Kröse, I. Bierhoff, M. Schilders</i>	
Chapter 11 Efficiency in eHealth	353
Implementation and Maintenance Costs for a Telehealth System in Brazil	354
<i>R. M. Figueira, M. B. M. Alkmim, A. L. P. Ribeiro, M. Pena, F. E. Campos</i>	
The Implementation Experience of a Telehealth Center in a Brazilian University Hospital	359
<i>M. B. M. Alkmim, R. M. Figueira, G. G. R. Carvalho, M. Pena, A. L. P. Ribeiro</i>	
The Implementation Experience of the National Telehealth Program in Brazil	365
<i>A. E. Haddad, M. B. M. Alkmim, C. L. Wen, S. Roschkes</i>	
Transition to Quality at Medical Device Manufacturers in Turkey and CE Marking	370
<i>İ. Salkim</i>	
Using SNOMED CT® in Casemix for Determining Costs for Pathology Services	376
<i>G. A. Brox, J. L. Huston</i>	
Chapter 12 Telepsychiatry: Why Not?	382
International Telepsychiatry, Patient Acceptability Study	383
<i>D. Mucic</i>	
Posttraumatic Stress Disorder and Telepsychiatry	385
<i>M. Stojakovic</i>	
Telepsychiatry in Assessment and Treatment of Asylum Seekers (Patient-Satisfaction Survey)	389
<i>D. Mucic</i>	
Telepsychiatry: A New Tool for Remodeling Mental Health Assistance in South Brazil	395
<i>F. Resmini, A. P. Tavares, A. Sparenberg, T. Russomano, S. Bairy,</i>	

R. Timm, A. Born, A. W. Wiemann, B. Beskow, R. Cardoso

Chapter 13 Telenursing and Nursing Informatics 398

International Telenursing: a Strategic Tool for Nursing Shortage and Access to Nursing Care 399

L. Schlachta-Fairchild, D. Castelli, R. Pyke

Research Project: A Remote Oncology Nursing Support at Hospital SÍrio Libanês, São Paulo – Brazil 406

R. S. Gundim, R. Q. Padilha

Telenursing Panel: Telenursing Implementation Strategies and Success Factors 409

D. Castelli, L. Schlachta-Fairchild, R. Pyke

Late Submissions 415

Medical Service in Rural Areas of Germany by Telemedicine 416

M. Schauer, G. W. Meyer

Telemedicine Challenges in Africa 420

C. F. Morris

Author Index 424