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This book series was started in 1990 to promote research conducted under the auspices of the EC programmes’ Advanced Informatics in Medicine (AIM) and Biomedical and Health Research (BHR) bioengineering branch. A driving aspect of international health informatics is that telecommunication technology, rehabilitative technology, intelligent home technology and many other components are moving together and form one integrated world of information and communication media. The series has been accepted by MEDLINE/PubMed, SciVerse Scopus, EMCare, Book Citation Index – Science and Thomson Reuters’ Conference Proceedings Citation Index.

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Digital Healthcare Empowering Europeans
Proceedings of MIE2015

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Preface

This volume contains the proceedings of the MIE2015 conference, “Digital healthcare empowering Europeans”, highlighting the impact that digitisation has on all citizens, medical staff, patients and their carers. Over decades digitisation of healthcare has become almost ubiquitous, spreading from healthcare organisations into the homes and personal appliances of practically every citizen. Similarly, biomedical and health informatics has spread from dedicated manufacturers to the largest information technology companies. MIE2015, the 26th Medical Informatics in Europe Conference, has been jointly organised by the European Federation for Medical Informatics (EFMI) and the Spanish Society of Health Informatics (SEIS), organisations which were both established in 1976. MIE2015 takes place in the splendid city of Madrid, Spain, from May 27th to 29th, 2015. EFMI is a federation of national medical informatics associations from 30 European countries, and its purpose is to develop and disseminate knowledge and expertise in the field of biomedical and health informatics. Besides the national associations, the working groups, which include experts in specialist fields ranging from electronic patient records, medical imaging, and evaluation to nursing and rehabilitation, are the main channel through which new knowledge and ideas are developed and disseminated.

“Digital healthcare empowering Europeans”, the theme of MIE2015, is addressing a range of important aspects, relating to opportunities for or impact of new approaches and IT tools in day-to-day life affecting the citizens. The conference theme aligns with collective efforts of multiple parties: patients, care providers, system developers, researchers, and ultimately the entire population of Europe to join in to enjoy benefits that digitisation of health information offers. Digitisation enables involvement of people in management of their own health and empowers people to be in more control of all aspects of their health and for the care they require. The conference provokes discussions of inherent challenges to design and adequately deploy ICT tools, to assess health IT interventions, train users, and exploit available information and knowledge to scrutinise visions for continuous and ubiquitous availability and interoperability in health care. MIE2015 brings together participants that share their latest achievements in biomedical and health informatics, including the role of the user in digital healthcare, where interdisciplinary collaboration may achieve care, and treatment processes supporting quality of life for citizens, healthcare providers, and the society. Contributions address methodologies and applications, success stories and lessons learned as well as an outlook on on-going projects and directions for the future.

The editors would like to thank all the authors from 43 countries for their excellent work as well as the 310 reviewers for lending their expertise to the conference, thereby contributing to the final achievements. Special thanks go to the Spanish Local Organising Committee for the contribution in hosting the conference and to EFMI President Anne Moen for her constant commitment to a great event.

Ronald Cornet, Lăcrămioara Stoicu-Tivadar, Alexander Hörbst, Carlos Luis Parra Calderón, Stig Kjær Andersen, Mira Hercigonja-Szekeres

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Contents

Preface v

Ronald Cornet, Lăcrămioara Stoicu-Tivadar, Alexander Hörbst,
Carlos Luis Parra Calderón, Stig Kjær Andersen
and Mira Hercigonja-Szekeres

Reviewers for MIE2015 vii

Papers

1. Information and Knowledge Representation and Processing

Incidence Rate of Canonical vs. Derived Medical Terminology in Natural Language
Vasile Topac, Daniel-Alexandru Jurcau and Vasile Stoicu-Tivadar

Expertizer: A Tool to Assess the Expert Level of Online Health Websites
Richard Zowalla, Martin Wiesner and Daniel Pfeifer

A Connecting System for Cardiological Lexicons
Stefano Bonacina, Sara Marceglia, Veronica Pinello, Silvia Magni
and Francesco Pinciroli

A Framework for Contextual Design and Evaluation of Health Information Technology
Craig Kuziemsky and Andre Kushniruk

Observing Health Professionals’ Workflow Patterns for Diabetes Care –
First Steps Towards an Ontology for EHR Services
M. Schweitzer, N. Lasierra and A. Hörbst

Discovering the Role of Morphology on the Understanding of Biomedical Terminology by Paramedical Students
Meriem Rais and Natalia Grabar

Simulating Realistic Enough Patient Records
James Cunningham and John Ainsworth

From IHE Audit Trails to XES Event Logs Facilitating Process Mining
Ferdinand Paster and Emmanuel Helm

Participatory Design for Drug-Drug Interaction Alerts
Daniel Luna, Carlos Otero, Alfredo Almeraress, Enrique Stanziola,
Marcelo Risk and Fernán González Bernaldo de Quirós

Automatic Extraction of Numerical Values from Unstructured Data in EHRs
Elise Bigeard, Vianney Jouhet, Fleur Mougin, Frantz Thiessard
and Natalia Grabar
Exploring Brand-Name Drug Mentions on Twitter for Pharmacovigilance  
_Pablo Carbonell, Miguel A. Mayer and Alex Bravo_  
55

Methods for Sonic Representation of Heart Rate During Exercise  
_Minodora Andor, Anca Tudor, Sorin Paralescu and George I. Mihalas_  
60

Development of a Database and Processing Method for Detecting Hematotoxicity Adverse Drug Events  
_Yoshie Shimai, Toshihiro Takeda, Shirou Manabe, Kei Teramoto, Naoki Mihara and Yasushi Matsumura_  
65

Synthesizing Analytic Evidence to Refine Care Pathways  
_Haifeng Liu, Xiang Li, Yiqin Yu, Jing Mei, Guotong Xie, Adam Perer, Fei Wang and Jianying Hu_  
70

Content Based Image Retrieval Using Local Binary Pattern Operator and Data Mining Techniques  
_Oana Astrid Vatamanu, Mirela Frandeş, Diana Lungeanu and Gheorghe-Ioan Mihalas_  
75

Health Consumer-Oriented Information Retrieval  
_Vincent Claveau, Thierry Hamon, Sébastien Le Maguer and Natalia Grabar_  
80

A Methodology for Mining Clinical Data: Experiences from TRANSFoRm Project  
_Roxana Danger, Derek Corrigan, Jean K. Soler, Przemyslaw Kazienko, Tomasz Kajdanowicz, Azeem Majeed and Vasa Curcin_  
85

Use of Eye-Tracking Technology in Clinical Reasoning: A Systematic Review  
_Katherine Blondon, Rolf Wipfli and Christian Lovis_  
90

Visual Analytics in Medical Education: Impacting Analytical Reasoning and Decision Making for Quality Improvement  
_Christos Vaitsis, Gunnar Nilsson and Nabil Zary_  
95

Why Do We Need and How Can We Realize a Multi-Disciplinary Approach to Health Informatics?  
_Bernd Blobel, Frank Oemig and Diego M. López_  
100

Investigation of the Quality and Effectiveness of Telemedicine in Children with Diabetes  
_Aikaterini Chorianopoulou, Paschalina Lialiou, Enkeleit-Aggelos Mechili, John Mantas and Marianna Diomidous_  
105

How to Use Concept Mapping to Identify Barriers and Facilitators of an Electronic Quality Improvement Intervention  
_Mariëtte van Engen-Verheul, Niels Peek, Tom Vromen, Monique Jaspers and Nicolette de Keizer_  
110

Insights and Limits of Usability Evaluation Methods Along the Health Information Technology Lifecycle  
_Romaric Marcilly, Andre W. Kushmiruk, Marie-Catherine Beuscart-Zephir and Elizabeth M. Borycki_  
115
Improvement of Diagnosis Coding by Analysing EHR and Using Rule Engine: Application to the Chronic Kidney Disease

**Jérémy Lardon, Hadyl Asfari, Julien Souvignet, Béatrice Trombert-Paviot and Cédric Bousquet**

Multidisciplinary Modelling of Symptoms and Signs with Archetypes and SNOMED-CT for Clinical Decision Support

**Luis Marco-Ruiz, J. Alberto Maldonado, Randi Karlsen and Johan G. Bellika**

Auditing of SNOMED CT’s Hierarchical Structure Using the National Drug File – Reference Terminology

**Aleksandr Zakharchenko and James Geller**

Design, Development and First Validation of a Transcoding System from ICD-9-CM to ICD-10 in the IT.DRG Italian Project

**Vincenzo Della Mea, Omar Vuattolo, Lucilla Frattura, Flavia Munari, Eleonora Verdini, Loris Zanier, Laura Arcangioli and Flavia Carle**

Re-Use of SNOMED CT Subset in Development of the Danish National Standard for Home Care Nursing Problems

**Anne Randorff Højensen, Kirstine Rosenbeck Goeg and Pia Britt Elberg**

Multi-Agent Architecture for the Multi-Skill Tasks Modeling at the Pediatric Emergency Department

**Ines Ajmi, Hayfa Zgaya, Slim Hammadi, Lotfi Gammoudi, Alain Martinot, Régis Beuscart and Jean-Marie Renard**

Clinical Decision Support Using a Terminology Server to Improve Patient Safety

**Alba Garcia-Jimenez, Alberto Moreno-Conde, Alicia Martinez-Garcia, Ignacio Marin-León, Francisco Javier Medrano-Ortega and Carlos L. Parra-Calderón**

Biomarkers in the Ontology for General Medical Science

**Werner Ceusters and Barry Smith**

Toward a Patient Safety Upper Level Ontology

**Julien Souvignet and Jean-Marie Rodrigues**

Lessons Learned in the Generation of Biomedical Research Datasets Using Semantic Open Data Technologies

**María del Carmen Legaz-García, José Antonio Miñarro-Giménez, Marcos Menárguez-Tortosa and Jesualdo Tomás Fernández-Breis**

Semantic Interoperable Electronic Patient Records: The Unfolding of Consensus Based Archetypes

**Rune Pedersen, Rolf Wynn and Gunnar Ellingsen**

Toward a Use Case Based Classification of Mobile Health Applications

**Mobin Yasini and Guillaume Marchand**
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combining Archetypes with Fast Health Interoperability Resources in</td>
<td>180</td>
</tr>
<tr>
<td>Future-Proof Health Information Systems</td>
<td></td>
</tr>
<tr>
<td>Diego Bosca, David Moner, Jose Alberto Maldonado and Montserrat Robles</td>
<td></td>
</tr>
<tr>
<td>An IT Architecture for Systems Medicine</td>
<td>185</td>
</tr>
<tr>
<td>Matthias Ganzinger, Matthias Gietzelt, Christian Karmen,</td>
<td></td>
</tr>
<tr>
<td>Daniel Firnkorn and Petra Knaup</td>
<td></td>
</tr>
<tr>
<td>Outcome-Driven Evaluation Metrics for Treatment Recommendation Systems</td>
<td>190</td>
</tr>
<tr>
<td>Jing Mei, Haifeng Liu, Xiang Li, Yiqin Yu and Guotong Xie</td>
<td></td>
</tr>
<tr>
<td>Identifying Redundant and Missing Relations in the Gene Ontology</td>
<td>195</td>
</tr>
<tr>
<td>Fleur Mougin</td>
<td></td>
</tr>
<tr>
<td>Integrating Low-Cost Rapid Usability Testing into Agile System</td>
<td>200</td>
</tr>
<tr>
<td>Development of Healthcare IT: A Methodological Perspective</td>
<td></td>
</tr>
<tr>
<td>Andre W. Kushniruk and Elizabeth M. Borycki</td>
<td></td>
</tr>
<tr>
<td>Interactive Resistance Chair to Promote Strengthening Exercise in</td>
<td>205</td>
</tr>
<tr>
<td>Older Adults</td>
<td></td>
</tr>
<tr>
<td>In cheol Jeong and Joseph Finkelstein</td>
<td></td>
</tr>
<tr>
<td>Version Changes in Medical Software: Proposing Minimal Requirements</td>
<td>210</td>
</tr>
<tr>
<td>for Release Notes and a Version Number Convention – An Operators’</td>
<td></td>
</tr>
<tr>
<td>Point of View</td>
<td></td>
</tr>
<tr>
<td>Janko Ahlbrandt, Constantin Bott, Peter Moll, Tolga Naziyok,</td>
<td></td>
</tr>
<tr>
<td>Raphael W. Majed and Rainer Röhrig</td>
<td></td>
</tr>
<tr>
<td>Normalized Medical Information Visualization</td>
<td>215</td>
</tr>
<tr>
<td>Ricardo Sánchez-de-Madariaga, Adolfo Muñoz, Roberto Somolinos,</td>
<td></td>
</tr>
<tr>
<td>Antonio Castro, Iker Velázquez, Oscar Moreno, José L. García-Pacheco,</td>
<td></td>
</tr>
<tr>
<td>Mario Pascual and Carlos H. Salvador</td>
<td></td>
</tr>
<tr>
<td>META-GLARE: A Shell for CIG Systems</td>
<td>218</td>
</tr>
<tr>
<td>Alessio Bottrighi, Stefania Rubrichi and Paolo Terenziani</td>
<td></td>
</tr>
<tr>
<td>Enrich Classifications in Psychiatry with Textual Data: An</td>
<td>221</td>
</tr>
<tr>
<td>Ontology for Psychiatry Including Social Concepts</td>
<td></td>
</tr>
<tr>
<td>Marion Richard, Xavier Aimé, Marie-Odile Krebs and Jean Charlet</td>
<td></td>
</tr>
<tr>
<td>Reuse of EHRs to Support Clinical Research in a Hospital of Reference</td>
<td>224</td>
</tr>
<tr>
<td>Miguel A. Mayer, Laura I. Furlong, Pilar Torre, Ignasi Planas,</td>
<td></td>
</tr>
<tr>
<td>Francesc Cots, Elisabet Izquierdo, Jordi Portabella, Javier Rovira,</td>
<td></td>
</tr>
<tr>
<td>Alba Gutierrez-Sacristan and Ferran Sanz</td>
<td></td>
</tr>
<tr>
<td>A New Approach for Cleansing Geographical Dataset Using Levenshtein</td>
<td>227</td>
</tr>
<tr>
<td>Distance, Prior Knowledge and Contextual Information</td>
<td></td>
</tr>
<tr>
<td>Adrien Ugon, Thomas Nicolas, Marion Richard, Patrick Guerin,</td>
<td></td>
</tr>
<tr>
<td>Pascal Chansard, Christophe Demoor and Laurent Toubiana</td>
<td></td>
</tr>
<tr>
<td>Prediabetes and Cardiovascular Risk Alert Programs – Useful Tools</td>
<td>230</td>
</tr>
<tr>
<td>for Preventing Diabetes Mellitus and Cardiovascular Events in</td>
<td></td>
</tr>
<tr>
<td>Primary Medicine</td>
<td></td>
</tr>
<tr>
<td>Horia Virgolici, Bogdana Virgolici and Victor Purcarea</td>
<td></td>
</tr>
</tbody>
</table>
Filling the Gap Between Guideline Development and Formalization Process – A Requirement Analysis
Soudabeh Khodambashi and Øystein Nytrø

Electronic Patient Records System as a Monitoring Tool
Michael Shifrin, Natalia Kurdumova, Gleb Danilov, Olga Ershova, Ivan Savin, Irina Alexandrova, Ekaterina Sokolova and Togrul Tabasaranskiy

2. Health Information Management

IANUA: A Regional Project for the Determination of Costs in HIV-Infected Patients
Barbara Giannini, Roberta Gazzarata, Patrizia Orcamo, Caterina Merlano, Giovanni Cenderello, Alberto Venturini, Antonio Di Biagio, Giovanni Mazzarelo, Marcello Montefiori, Marta Ameri, Maurizio Setti, Claudio Viscoli, Giovanni Cassola and Mauro Giacomini

Can eHealth Reduce Medical Expenditures of Chronic Diseases?
Masatsugu Tsuji, Sheikh Abu Taher and Yusuke Kinai

Secure Public Cloud Platform for Medical Images Sharing
Wei Pan, Gouenou Coatrieux, Dalel Bouslimi and Nicolas Prigent

Implementability of Stroke Guidelines: A Pragmatic Comparison Between US and European Recommendations Using eGLIA
Andrea Freixa, Tiago Moreira, Olivier Bill and Nadim Anani

Online Pharmaceutical Care Provision: Full-Implementation of an eHealth Service Using Design Science Research
João Gregório, Ângela Pizarro, Afonso Cavaco, Rolf Wipfli, Christian Lovis, Miguel Mira da Silva and Luís Velez Lapão

A System Dynamics Approach to Analyze Laboratory Test Errors
Shijing Guo, Abdul Roudsari and Artur d’Avila Garcez

A Template-Based Computerized Instruction Entry System Helps the Communication Between Doctors and Nurses
Toshihiro Takeda, Naoki Mihara, Rie Nakagawa, Shiro Manabe, Yoshie Shimai, Kei Teramoto and Yasushi Matsumura

Data Quality Evaluation in Medical Database Watermarking
Javier Franco-Contreras, Gouenou Coatrieux, Philippe Massari, Stefan Darmoni, Nora Cuppens-Boulahia, Frédéric Cuppens and Christian Roux

E-Health Stakeholders Experiences with Clinical Modelling and Standardizations
Kirstine Rosenbeck Gøeg, Pia Britt Elberg and Anne Randorff Højen
An Adaptive Scheduling Model for a Multi-Agent Based VEPR Data Collection Actions  
Pedro Vieira-Marques, Jorge Jácome, José Hilário-Patriarca and Ricardo Cruz-Correia

Secondary Use of Structured Patient Data: Interim Results of a Systematic Review  
Riikka Vuokko, Päivi Mäkelä-Bengs, Hannele Hyppönen and Persephone Doupi

Implementing a Tele-Expertise System to Optimise the Antibiotic Use and Stewardship: The Case of the Montpellier University Hospital (France)  
D. Morquin, R. Ologeanu-Taddei, Y. Koumar, R. Bourret and J. Reynes

Exploring User Experience of a Telehealth System for the Danish TeleCare North Trial  
Pernille Heyckendorff Lilholt, Lisa Korsbakke Emteker Hasum and Ole Kristian Heflesen

Engaging in Large-Scale Digital Health Technologies and Services. What Factors Hinder Recruitment?  
Siobhan O’Connor, Frances S. Mair, Marilyn McGee-Lennon, Matt-Mouley Bouamrane and Kate O’Donnell

Development and Trial of ePoint.telemed – An Open Web-Based Platform for Home Monitoring of Chronic Heart Failure Patients  
J. Artur Serrano and Halgeir Holthe

Mobile Technology Support for Clinical Decision in Diabetic Keto-Acidosis Emergency  
Mirela Frandes, Bogdan Timar, Alexandra Tole, Stefan Holban and Diana Lunguamu

Nursing Intervention Using Smartphone Technologies; A Systematic Review and Meta-Analysis  
Eunjoo Jeon and Hyeoun-Ae Park

3. Healthcare Service Delivery

Clinical Data Warehousing for Evidence Based Decision Making  
Lekha Narra, Tony Sahama and Peta Stapleton

Using a Snowflake Data Model and Autocompletion to Support Diagnostic Coding in Acute Care Hospitals  
Joseph Noussa-Yao, Abdelali Boussadi, Monique Richard, Didier Heudes and Patrice Degoulet

Planning, Execution and Monitoring of Physical Rehabilitation Therapies with a Robotic Architecture  
José Carlos González, José Carlos Pulido, Fernando Fernández and Cristina Suárez-Mejías
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Practice Guidelines Consistency for Patients with Multimorbidity: A Case-Study in the Management of Type 2 Diabetes and Hypertension</td>
<td>344</td>
</tr>
<tr>
<td>Alexandre Galopin, Jacques Bouaud, Suzanne Pereira and Brigitte Séroussi</td>
<td></td>
</tr>
<tr>
<td>Approach to Extract Billing Data from Medical Documentation in Russia – Lessons Learned</td>
<td>349</td>
</tr>
<tr>
<td>Georgy Kopanitsa and Vladimir Yampolskiy</td>
<td></td>
</tr>
<tr>
<td>Adina Niţulescu, Mihaela Crişan-Vida, Lăcrămioara Stoicu-Tivadar and Elena Bernd</td>
<td></td>
</tr>
<tr>
<td>Devising Outlier-Based Alerts for Medication Orders</td>
<td>359</td>
</tr>
<tr>
<td>Gouri Prakash</td>
<td></td>
</tr>
<tr>
<td>Diagnostic Imaging Requisition Quality when Using an Electronic Medical Record: A Before-After Study</td>
<td>364</td>
</tr>
<tr>
<td>Marc Benard, Jacques Bouaud, Claude Marsault, Frank Boudghene, Marie-France Carette and Brigitte Séroussi</td>
<td></td>
</tr>
<tr>
<td>Using EHRs for Heart Failure Therapy Recommendation Using Multidimensional Patient Similarity Analytics</td>
<td>369</td>
</tr>
<tr>
<td>Maryam Panahiazar, Vahid Taslimitehrani, Naveen L. Pereira and Jyotishman Pathak</td>
<td></td>
</tr>
<tr>
<td>Nurses’ Expectations and Perceptions of a Redesigned Electronic Health Record</td>
<td>374</td>
</tr>
<tr>
<td>Zulma Gonzalez, Francisco Recondo, Janine Sommer, Bibiana Schachner, Gabriela Garcia, Daniel Luna and Sonia Benítez</td>
<td></td>
</tr>
<tr>
<td>Mapping Russian Laboratory Terms to LOINC</td>
<td>379</td>
</tr>
<tr>
<td>Georgy Kopanitsa</td>
<td></td>
</tr>
<tr>
<td>Managing Uncertainties in the Surgical Scheduling</td>
<td>384</td>
</tr>
<tr>
<td>Lisa Wiyartanti, Myon Woong Park, Dahee Chung, Jae Kwan Kim, Young Tae Sohn and Gyu Hyun Kwon</td>
<td></td>
</tr>
<tr>
<td>Electronic Whiteboards: Review of the Literature</td>
<td>389</td>
</tr>
<tr>
<td>Rebecca Randell, Joanne Greenhalgh, Jeremy Wyatt, Peter Gardner, Alan Pearman, Stephanie Honey and Dawn Dowding</td>
<td></td>
</tr>
<tr>
<td>Evaluation of Compliance with Recommendations of Prevention of Thromboembolism in Atrial Fibrillation in the Elderly, by Data Reuse of Electronic Health Records</td>
<td>394</td>
</tr>
<tr>
<td>Laurie Ferret, Jean-Baptiste Beuscart, Grégoire Ficheur, Régis Beuscart, Michel Laycks and Emmanuel Chazard</td>
<td></td>
</tr>
<tr>
<td>Automatic Landmarks Detection in Breast Reconstruction Aesthetic Assessment</td>
<td>399</td>
</tr>
<tr>
<td>Francisco J. Núñez-Benjumea, Carmen Serrano and Begoña Acha</td>
<td></td>
</tr>
<tr>
<td>A Multi-Method Pilot Evaluation of an Online Diabetes Exercise System</td>
<td>404</td>
</tr>
<tr>
<td>Clara Schaarup and Ole K. Højlesen</td>
<td></td>
</tr>
<tr>
<td>Title</td>
<td>Page</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>A Recommender System for Medical Imaging Diagnostic</td>
<td>461</td>
</tr>
<tr>
<td>Eriksson Monteiro, Frederico Valente, Carlos Costa and José Luís Oliveira</td>
<td></td>
</tr>
<tr>
<td>The Effect of Pharmaceutical Services-Based eHealth Intervention on Chronic Patient Health Outcomes</td>
<td>464</td>
</tr>
<tr>
<td>A.M. Pizarro, J.P. Gregório and L.V. Lapão</td>
<td></td>
</tr>
<tr>
<td>4. Ambient Assisted Living and Wellbeing</td>
<td></td>
</tr>
<tr>
<td>Feasibility of Post-Acute Hip Fracture Telerehabilitation in Older Adults</td>
<td>469</td>
</tr>
<tr>
<td>McKenzie Bedra and Joseph Finkelstein</td>
<td></td>
</tr>
<tr>
<td>Multimedia Health Records: User-Centered Design Approach for a Multimedia Uploading Service</td>
<td>474</td>
</tr>
<tr>
<td>Fernando Plazzotta, John C. Mayan, Fernando D. Storani, Juan M. Ortiz, Gastón E. Lopez, Gastón M. Gimenez and Daniel R. Luna</td>
<td></td>
</tr>
<tr>
<td>Tablet Technology for Rehabilitation After Spinal Cord Injury: A Proof-of-Concept</td>
<td>479</td>
</tr>
<tr>
<td>Gabriella Fizzotti, Carla Rognoni, Arianna Imariso, Alessandro Meneghini, Caterina Pistorini and Silvana Quaglin</td>
<td></td>
</tr>
<tr>
<td>Dynamic Feature Selection Applied to the Recognition of Grasping Movements in the Control of Bioprosthetic Hand</td>
<td>484</td>
</tr>
<tr>
<td>Marek Kurzynski</td>
<td></td>
</tr>
<tr>
<td>A Kinect Based Intelligent E-Rehabilitation System in Physical Therapy</td>
<td>489</td>
</tr>
<tr>
<td>Norbert Gal, Diana Andrei, Dan Ion Nemesh, Emanuela Nădășan and Vasile Stoicu-Tivadar</td>
<td></td>
</tr>
<tr>
<td>AUVA – Augmented Reality Empowers Visual Analytics to Explore Medical Curriculum Data</td>
<td>494</td>
</tr>
<tr>
<td>Sokratis Nifakos, Christos Vaitis and Nabil Zary</td>
<td></td>
</tr>
<tr>
<td>5. Research and Education</td>
<td></td>
</tr>
<tr>
<td>End-User Expectations During an Electronic Health Record Implementation: A Case Study in Two Academic Hospitals</td>
<td>501</td>
</tr>
<tr>
<td>Erik Joukes, Ronald Cornet, Ameen Abu-Hanna, Martine de Bruijne and Nicolette de Keizer</td>
<td></td>
</tr>
<tr>
<td>A European Inventory of Data Elements for Patient Recruitment</td>
<td>506</td>
</tr>
<tr>
<td>Justin Doods, Caroline Lafitte, Nadine Ulliac-Sagnes, Johan Proeve, Florence Botteri, Robert Walls, Andy Sykes, Martin Dugas and Fleur Fritz</td>
<td></td>
</tr>
<tr>
<td>OPTIMED Platform: Curriculum Harmonisation System for Medical and Healthcare Education</td>
<td>511</td>
</tr>
<tr>
<td>Martin Komenda, Daniel Schwarz, Christos Vaitis, Nabil Zary, Jaroslav Štěrba and Ladislav Dušek</td>
<td></td>
</tr>
</tbody>
</table>
Comparing Video and Avatar Technology for a Health Education Application for Deaf People

Ionuț Adrian Chiriac, Lăcrămioara Stoicu-Tivadar and Elena Podoleanu

Requirements for a Patient Recruitment System

Björn Schreiweis and Björn Bergh

Evaluation of Internet Social Networks Using Net Scoring Tool: A Case Study in Adverse Drug Reaction Mining

Sandrine Katsahian, Erica Simond Moreau, Damien Leprovost, Jeremy Lardon, Cedric Bousquet, Gaëtan Kerdelhué, Redhouane Abdellaoui, Nathalie Texier, Anita Burgun, Abdelali Boussadi and Carole Faviez

Understanding the Perceived Usefulness and the Ease of Use of a Hospital Information System: The Case of a French University Hospital

R. Ologeanu-Taddei, D. Morquin and R. Bourret

Health Information Systems: Evaluation and Performance of a Help Desk

Leandro Pintos, Adriana Stieben, Gabriela Garcia, Agustina Briatore, Agustina Bertoia, Sonia Benitez, Diego Giunta, Anaia Baum and Fernán Gonzalez Bernaldo de Quiros

Problem Solving for Volatilizing Situation in Nursing: Developing Thinking Process Supporting System Using NursingNAVI® Contents

Satoko Tsuru, Fumiko Wako, Miho Omori and Kumiko Sudo

Challenges of Stimulating a Market for Social Innovation – Provision of a National Health Account

Sofie Wass and Vivian Vimarland

Competence Assessment of Centres Participating in Clinical Trials

Guillaume Bouzillé, Pierre Asfar, Marc Cuggia and Jean-François Hamel

Development of Knowledge Profiles for International eHealth eLearning Courses

Juliane Herzog, Stefan Sauermann, Alexander Mense, Mathias Forjan and Philipp Urbauer

Analysis of EU – USA Cooperation Opportunities on IT Skills for Healthcare Workforce

Vicente Traver, Stathis Th. Konstantinidis, Panagiotis D. Bamidis and Nabil Zary

6. Digital Healthcare Services

A WSN Healthcare Monitoring System for Elderly People in Geriatric Facilities

Xiao Yu, Peter Weller and Kenneth T.V. Grattan

Assisting E-Patients in an Ask the Doctor Service

Amine Abdaoui, Jérôme Azé, Sandra Bringay and Pascal Poncelet

Metadata Requirements for Portals

Tim Benson
Citizen Personas: Exploring Challenges of Citizen-Centric eHealth
   Lone Stub Petersen and Pernille Bertelsen

Internet of Things for an Age-Friendly Healthcare
   Evdokimos I. Konstantinidis, Giorgos Bamparopoulos, Antonis Billis and Panagiotis D. Bamidis

Contextual Cloud-Based Service Oriented Architecture for Clinical Workflow
   Jesús Moreno-Conde, Alberto Moreno-Conde, Francisco J. Niñez-Benjumea and Carlos Parra-Calderón

Acquisition of Character Translation Rules for Supporting SNOMED CT Localizations
   Jose Antonio Miñarro-Giménez, Johannes Hellrich and Stefan Schulz

Development of Hypertension Management Mobile Application Based on Clinical Practice Guidelines
   H. Kang and H.A. Park

The Impacts of Blended Learning Design in First Year Medical Studies
   Pierre Gillois, Jean Luc Bosson, Celine Genty, Jean-Philippe Vuillez and Jean-Paul Romanet

Clinical Simulation of Aortic Valve: A Narrative Review

OpenNCP: A Novel Framework to Foster Cross-Border e-Health Services
   Marcelo Fonseca, Kostas Karkaletsis, Isabel A. Cruz, Alexander Berler and Ilídio C. Oliveira

GA-ANFIS Expert System Prototype for Prediction of Dermatological Diseases
   Lejla Begic Fazlic, Korana Avdagic and Samir Omanovic

Facilitating the Adoption of Digital Technologies by the Elderly
   Séverine Loiseau, César Boog and Sylvia Pelayo

An integrated Diet Monitoring Solution for Nutrigenomic Research
   Costanza Conti, Elena Rossi, Sara Marceglia, Vittorio Tauro, Federica Rizzi, Monica Lazzaroni, Cristina Barlassina, Laura Soldati and Daniele Cusi

Draft Guideline for the Development of Evidence Based Medicine-Related Apps
   Andrea Gonnermann, Ute von Jan and Urs-Vito Albrecht

User Experience Integrated Life-Style Cloud-Based Medical Application
   Alexandra Serban, Oana Sorina Lupșe and Lăcramioara Stoicu-Tivadar

Designing the User Interfaces of a Behavior Modification Intervention for Obesity & Eating Disorders Prevention
   Ioannis Moulos, Christos Maramis, Alexandros Mourouzis and Nicos Maglaveras
Identifying Technology Interaction Opportunities Within a Gastroenterology Exam Room

Diogo Abrantes, Pedro Pimentel-Nunes, Mário Dinis-Ribeiro and Miguel Coimbra

Physical Activity Event Regularity and Health Outcome – ‘Undiscovered Country’ in Cohort Accelerometer Data

Michael Marschollek

Reshaping the Laboratory Results Presentation Layer: Three Interfaces for Handheld Devices

Frederic Ehrler, Marion Brissaud, Rolf Wipfli and Christian Lovis

Design and Evaluation of a Patient Website to Reduce Crowding in Emergency Departments: A Preliminary Study

Jessica Schiro, Romaric Marcilly, Nicolas Leroy, Clément Wawrzyniak, Alain Martinot and Sylvia Pelayo

Apps for Hearing Healthcare

Alessia Paglialonga, Gabriella Tognola and Francesco Pinciroli

New Technologies Applied to Surgical Processes: Virtual Reality and Rapid Prototyping

Cristina Suárez-Mejías, Gorka Gomez-Ciriza, Israel Valverde, Carlos Parra Calderón and Tomás Gómez-Cia

Experiences as Input to eHealth Design – A Hip Surgery Patient Journey Case

Maria Hägglund, Peter Bolin and Sabine Koch

ADVISE: First Results of a European Interoperative Information System Network Developed for the ADenoVirus Initiative Study in Epidemiology

Laurent Toubiana, Jérémie Riquier and Brigitte Duquesnoix

iCarer: AAL for the Informal Carers of the Elderly


A Medical Application to Bridge the Gap Between Clinicians and Clinical Data

Mark Finkelstein, Khawaja H. Bilal and Michael Palese

7. Advanced Analytics and Big Data in Healthcare

Virtual File System on NoSQL for Processing High Volumes of HL7 Messages

Eizen Kimura and Ken Ishihara

Analysis of Care Pathway Variation Patterns in Patient Records

Xiang Li, Jing Mei, Haifeng Liu, Yiqin Yu, Guotong Xie, Jianying Hu and Fei Wang

A Big Data-Driven Model for the Optimization of Healthcare Processes

Vassiliki Koufi, Flora Malamateniou and George Vassilacopoulos
Semantic Integration of Medication Data into the EHOP Clinical Data Warehouse

Denis Delamarre, Guillaume Bouzille, Kevin Dalleau, Denis Courtel and Marc Cuggia

Integrating Medical and Research Information: A Big Data Approach

Carlos M. Tilve Álvarez, Alberto Ayora País, Cristina Ruíz Romero, Daniel Llamas Gómez, Lino Carrajo Garcia, Francisco J. Blanco García and Guillermo Vázquez González

Measuring Data Quality: A Review of the Literature Between 2005 and 2013

Jürgen Stausberg, Daniel Nasseh and Michael Nonnemacher

8. Digitized Public and Private Healthcare Enterprise

Ethical, Legal and Social Issues Related to the Health Data-Warehouses: Re-Using Health Data in the Research and Public Health Research

Eugenia Lamas, Anne Barh, Dario Brown and Marie-Christine Jaulent

How to Represent the Decision Process in a Medication Plan: The Case of the Swiss Cohort of Inflammatory Bowel Diseases

Frederic Ehrler, Philippe Baumann and Christian Lovis

A High-Availability Architecture for Continuous Monitoring of Sleep Disorders

Alexandr Iovanovici, Alexandru Topirceanu, Mihai Udrescu, Lucian Prodan and Stefan Mihaiçuta

Sharing Models and Tools for Processing German Clinical Texts

Johannes Hellrich, Franz Matthies, Erik Faessler and Udo Hahn

Detecting Learning and Reasoning Patterns in a CDSS for Dementia Investigation

Helena Lindgren and Chunli Yan

A New Tool for Foetal Phonocardiography Simulation

Maria Romano, Paolo Bifulco, Luigi Iuppariello, Fabrizio Clemente, Gianni D’Addio and Mario Cesarelli

9. Bioinformatics

ISO 13606 Based System for Biomedical Parameter Storage, Querying and Alarm Detection

Miguel Ramos Naveira, Javier Broullón Molanes, Dolores Rimada Mora, Daniel Llamas Gómez, Lino Carrajo Garcia and Guillermo Vázquez González

A CAD System for the Acquisition and Classification of Breast TMA in Pathology

M. Milagro Fernández-Carrobles, Gloria Bueno, Oscar Déniz, Jesús Salido, Marcial Garcia-Rojo and Lucia González-López
Computational Study of the Self-Assembly of Two Different Cell Populations in Contact with a Biomaterial

Andreea Robu, Lacramioara Stoicu-Tivadar, Nicolae Robu and Adrian Neagu

Privacy-Preserving Statistical Query and Processing on Distributed OpenEHR Data

Meskerem Asfaw Hailemichael, Luis Marco-Ruiz and Johan Gustav Bellika

A Method to Pinpoint Undiscovered Links in Genetic and Protein Networks

Versavia Ancusa and Laura Broasca

A Socio-Technical Analytical Framework on the EHR-Organizational Innovation Interplay: Insights from a Public Hospital in Greece

Maria Emmanouilidou

10. Mobile Healthcare Services

A Framework for Evaluating mHealth Tools for Older Patients on Usability

G.A. Wildenbos, L.W. Peute and M.W.M. Jaspers

A Mobile Application Supporting Outpatient Treatment and Follow-Up

Serena Buzzacchino, Giordano Lanzola, Paolo Bossi, Lisa Licitra and Silvana Quaglini

Mobile Health Apps in Sweden: What Do Physicians Recommend?

Yiping Zhang and Sabine Koch

A Mobile Application to Manage and Minimise the Risk of Late Effects Caused by Childhood Cancer

Ann-Kristin Kock, Rafiye Kaya, Christian Müller, Björn Andersen, Thorsten Langer and Josef Ingenerf

Nurses Behaviour Pre and Post the Implementation of Data Capture Using Tablet Computers in a Rural Clinic in South Africa

Graham Wright, Don O’Mahony, Chrispin Kabuya, Helen Betts and Anthony Odama

How to Organize for a Large-Scale OpenEHR-Based Electronic Patient Record

Gro-Hilde Ulriksen, Rune Pedersen, Rolf Wynn and Gunnar Ellingsen

The Impact of eHealth and mHealth on Doctor Behavior and Patient Involvement: An Israeli and Portuguese Comparative Approach

Gabriel Catan, Rita Espanha, Rita Veloso Mendes, Orly Toren and David Chinitz

A Mobile Platform for Emergency Care

Eleonora Losiouk, Silvana Quaglini, Massimo Pesenti Campagnoni and Giordano Lanzola

Privacy Provision in eHealth Using External Services

Jaime Delgado and Silvia Llorente
Heart Rate Prediction for Coronary Artery Disease Patients (CAD): Results of a Clinical Pilot Study
Frerk Müller-von Aschwege, Anke Workowski, Detlev Willemsen, Sebastian M. Müller and Andreas Hein

11. Empirical Research Methodologies

How Much Does Hyperkalemia Lengthen Inpatient Stays? About Methodological Issues in Analyzing Time-Dependant Events
Emmanuel Chazard, Choé Dumesnil and Régis Beuscart

A Health Analytics Semantic ETL Service for Obesity Surveillance
M. Poulymenopoulou, D. Papakonstantinou, F. Malamateniou and G. Vassilacopoulos

Usability Evaluation of a COPD Remote Monitoring Application
Berglind Smaradottir, Martin Gerdes, Rune Fensli and Santiago Martinez

Applying Machine Learning to Gait Analysis Data for Disease Identification
Ranveer Joyseeree, Rami Abou Sabha and Henning Mueller

Public Health Triangulation to Inform Decision-Making in Belgium
N. Bossuyt, Y. Van Casteren, G. Goderis, J. Wens, S. Moreels, K. Vanthomme and E. De Clercq

An Original Imputation Technique of Missing Data for Assessing Exposure of Newborns to Perchlorate in Drinking Water
Alexandre Caron, Guillaume Clement, Christophe Heyman, Eva Aernout, Emmanuel Chazard and Alain Le Tertre

12. Digital Health Improving Management of Resources in Healthcare

Process Assessment by Automated Computation of Healthcare Quality Indicators in Hospital Electronic Health Records: A Systematic Review of Indicators
Emmanuel Chazard, Djabar Babaoysmail, Aurélien Schaffar, Grégoire Ficheur and Régis Beuscart

EHR System MojTermin: Implementation and Initial Data Analysis
Goran Velinov, Boro Jakimovski, Dragan Lesovski, Daniela Ivanova Panova, Dalibor Frtunik and Margita Kon-Popovska

Development of ISO 13606 Archetypes for the Standardisation of Data Registration in the Primary Care Environment
Jesús Barros Castro, Alejandro Lamelo Alfonsín, Javier Prieto Cebreiro, Dolores Rimada Mora, Lino Carrajo García and Guillermo Vázquez González

Implementation of a Cloud-Based Blood Pressure Data Management System
Mu-Hsing Kuo
A “pivot” Model to Set Up Large Scale Rare Diseases Information Systems: Application to the Fibromuscular Dysplasia Registry
Laurent Toubiana, Adrien Ugon, Alessandra Giavarini, Jérémie Riquier, Jean Charlet, Xavier Jeunemaitre, Pierre-François Plouin and Marie-Christine Jaulent

Serious Game Scores as Health Condition Indicator for Cancer Patients
Konrad Peters, Fares Kayali, Andrea Reithofer, Rebecca Wölfle, Ruth Mateus-Berr, Jens Kuczwar, Zsuzsanna Lehner, Anita Lawitschka, Barbara Brunmaier, Daniel Martinek, Marisa Silbernagl and Helmut Hlavacs

13. Digital Networks and Services

Developing a Mobile Application for Recording Learning Experiences in Nursing Practice
Marcus B. Becker, Marianne Behrends, Christoph Barthel, Thomas Kupka, Regina Schmeer, Iris Meyenburg-Altwarg and Michael Marschollek

Client-Side Medical Image Colorization in a Collaborative Environment
Ioan Virag, Lacramioara Stoicu-Tivadar and Mihaela Crisan-Vida

A User-Editable Web-Based Platform to Streamline Clinical Information Flow
Mark Finkelstein, Ammar Siddiqui, Theodore Pak, Kevin Hu, Chloe Ciccarrello, Vinicius Knabben, David Chiang, David C. Thomas and Yasmin S. Meah

Using EHR-Linked Biobank Data to Study Metformin Pharmacogenomics

A Cloud Based Real-Time Collaborative Platform for eHealth
Bogdan Ionescu, Cristian Gadea, Bogdan Solomon, Don Ionescu, Vasile Stoicu-Tivadar and Mircea Trifan

PyMedTermino: An Open-Source Generic API for Advanced Terminology Services
Jean-Baptiste Lamy, Alain Venot and Catherine Duclos

Designing ETL Tools to Feed a Data Warehouse Based on Electronic Healthcare Record Infrastructure
Fabrizio Pecoraro, Daniela Luzi and Fabrizio L. Ricci

Posters

Generic Case Extractor: Extended Export of Clinical Facts from i2b2
Daniel Firnkorn, Matthias Gietzelt, Christian Karmen, Matthias Ganzinger and Petra Knaup
Use of Meteorological, Environmental and Spatial Variables to Predict Drug Use
   J.J. Cubillas, M.I. Ramos, M.C. Gutiérrez, F.R. Feito, A. Parra and J.C. Arias

Improving Metadata Quality Assessment in Public Health and Epidemiology
   Christiana McMahon, Tito Castillo, Dennis Kehoe and Spiros Denaxas

Diagnosis Management of Gestational Diabetes Using a Decision Support System Based on Clinical Guidelines
   Nassim Douali and Marie-Christine Jaulent

A Method for Accurate Estimation of AUC for Repeated Intravenous Infusions
   Harukazu Tsuruta, Noritaka Mamorita and Naoya Arisaka

Analysis of Relationships Among Health-Risk Behavior in Korean Adolescents
   GyeongAe Seomun and Wonjung Noh

Influential Factors Related to Medical Information Security Practices: Organizational Awareness and Ethics
   Sonymous Kim and GyeongAe Seomun

Impact of Information Technology-Based Interventions for Type 2 Diabetes Mellitus on Glycaemic Control: A Systematic Review and Meta-Analysis
   Nouf Alharbi, Nada Alsabki and Simon de Lusignan

Model for the Integration of Heterogeneous Diagnosis Support Systems
   Oscar Marin-Alonso, Daniel Ruiz-Fernandez and Antonio Soriano-Paya

Secondary Use of Austrian Health Claims Data to Explore Adverse Drug Events
   Simone Sauter, Christoph Rinner, Lisa Neuhofer, Doron Edlinger, Wilfried Grossmann, Michael Wolzt, Gottfried Endel and Walter Gall

Medplan: An Interactive Patient-Healthcare Professional Medication Management Tool
   H. Anglada, M. Martin, M. Rovira, J.M. Sotoca, V. Escudero, A. Herranz and C. Codina

Decision Support to Help Identify Patients for Advanced Heart Failure Therapies
   R. Scott Evans, Deborah Budge, Jose Bemuzzillo, James F. Lloyd, Jen Nixon, Rami Alharethi, Kismet Rasmussen, Colleen Roberts, Benjamin D. Horne and Donald Lappe

BPM Applied to COPD Management
   Javier Ramirez, Daniel Ruiz and Virgilio Gilart

Using Gene Expression and Systems Biology to Interrogate Auditory Hallucinations in Schizophrenic Patients
   Guillermo Lopez-Campos, Javier Gilabert-Juan, Noelia Sebastian-Ortega, Rocio Gonzalez-Martinez, Juan Nacher, Julio Sanjuan and Maria Dolores Molto
Clinical Specimen Receipt System Using a Mobile Smart Device
   Kap No Lee, Deok Whan Kim, Hyung Jun Kim, Nam Sik Cho and Bong Woo Lee 951

Health Care Professionals and the Privacy Policy
   Kristina Kralik, Aleksandar Erceg, Vesna Ilakovac, Krešimir Šolić and Mira Hercigonja-Szekeres 953

Using Geographic Information Systems to Improve the Accuracy of Data Mining Models to Predict the Flow of Patients to the Health Centers
   J.J. Cubillas, F.R. Feito, M.I. Ramos, J.C. Arias, A. Parra and T. Ureña 954

Knowledge, Use and Attitudes Towards Information and Communication Technologies Among Medical Students
   Natasa Milic, Goran Trajkovic, Zoran Bukumiric, Andja Cirkovic, Jelena Milin Lazovic and Dejana Stanisavljevic 955

An Approach to Improve Medication Adherence by Smart Watches
   Fabian Sailer, Monika Pobiruchin, Martin Wiesner and Gerrit Meixner 956

Electronic Oral Health Record in Forensic Dentistry
   Jana Zvarova, Karel Chleborad, Karel Zvara and Tatjana Dostalova 959

E-OncoHealth: Telemedicine Program for Monitoring Onco-Hematological Outpatients
   Vicente Escudero-Vilaplana, Almudena Ribed, Sara Ibáñez-García, Roberto Collado-Borreli, Helena Anglada-Martínez, Ana Herranz-Alonso, Carlos Codina-Jané and Maria Sanjurjo-Sáez 960

A New Hospital Information System Toward a Promotion for Security and BCP Strategy
   Masayuki Honda and Takahiro Matsumoto 962

“Quartile” Screening Method to Analyze the Relationship Between HIS and “AEROS” in Japan
   Takayuki Hoshino, Nozomu Matsubara, Teruko Ueda, Yuichi Hirayama, Ayami Hoshino and Shiho Takaoka 964

Workflow-Based Integration of EDCS and PACS Supporting Image-Based Surrogates in Clinical Trials
   Daniel Haak, Charles-E. Page and Thomas M. Deserno 966

Development of an Advanced Clinical Decision Support System on Medication Safety
   Sara Ibáñez-García, Ana Herranz-Alonso, Jose Luis de la Rosa, Carmen Guadalupe Rodríguez-González, Maria Luisa Martin-Barbero and Maria Sanjurjo-Sáez 968

Integrating Home Monitoring for Transcranial Direct Current Stimulation (tDCS) Therapy to Professional Care Environment
   Elena Rossi, Giuseppe Pozzi, Lorenzo Rossi, Alberto Priori and Sara Marceglia 970
A Proposal of a Standard Format for Allergy Information in Electronic Medical Records
Masaharu Nakayama and Ryusuke Inoue

Comparing Representation Abilities of Semantic Standards in the Field of Emergency Room Treatment
Heike Dewenter, Dominik Brammen, Felix Walcher and Sylvia Thun

Design of a Health Analytics Online Program to Improve Healthcare Provider Orders
D. Papakonstantinou, M. Poulymenopoulou, F. Malamateniou and G. Vassilacopoulos

Exploiting Semantic Predications in a Graph Database
Andrej Kastrin, Thomas C. Rindflesch, Dejan Dinevski and Dimitar Hristovski

ePrescription in Critical Care Unit
Humberto Fernán Mandirola Brieux, Fernando Plazzotta, Calos Otero, Damian Borbolla and Sebastián Guillén

Use of a Computerized Clinical System as a Monitoring Tool for Infection Control
Stas Zusman, Alexander Axel, Liat Touderis, Pnina Schlaeffer and Eran Segal

Reusing Claims Data to Assess Parenthood as Risk Factor for Myocardial Infarction
Florian Endel, Simone Sauter, Lorenz Koller, Alexander Niessner and Georg Duftschmid

Archetype Representation of PROMs
Daniel Karlsson and Leili Lind

More Eating Disorder Patients than Others Double Check Information Given by Their Doctors
Rolf Wynn, Gunn Pettersen, Jan Rosenvinge, Svein Bergvik and Oddgeir Friborg

Analysis of Hospital Bed Management and Patient Mobility Using Open Data Sources
Fabrizio Pecoraro, Daniela Lazi and Fabrizio Clemente

Integrating and scaling Through CDA: Making Specialist and Longitudinal Records Interoperable
Fernando Campos, Daniel Luna, Guillermo Rosa Diez, Adrian Marano and Fernán González B. de Quirós

Spatial Science, Big Data and a European Health Intelligence Model
Nick Nicholas and Hamish Robertson

Piecewise Regression of Semi Logarithmic Plotting: A Method to Represent and Analyse Dynamics of Epidemics
Vincent Auvigne, Patrick Guérin and Laurent Toubiana
Using Model-Driven Engineering and Health Standards for Improving Healthcare Processes Management

Alicia Martínez-García, María José Escalona, Julián Alberto García-García, Gustavo Aragón, Alberto Moreano-Conde and Carlos Parra

BIMCV: Synergy Between Peta Bytes of Data in Population Medical Imaging, Computer Aided Diagnosis and AVR

María de la Iglesia-Vayá, José María Salinas, Gonzalo M. Rojas, Juan Carlos Pérez Cortés, Rafael Llobet, Miguel Angel Cazorla, Jacobo Martinez, Luis Martí-Bonmati, Ignacio Blanquer, Manuel Regaña and José Miguel Puig

A Clinical Decision Support System for the Admission/Discharge of Patients with Diabetes

Sumiko Akahori, Koji Uemura, Eizen Kimura, Koji Murao and Hideto Yokoi

Development of Support System for Aligning Dose-Distribution Images in Multiple Radiotherapy Using Nonlinear Registration Method

Koji Uemura, Takumi Tanikawa, Masami Mukai and Yutaka Ando

A Novel Cache and SSD-Based Index Structure for Health Record Indexing

Yang Du and Sule Yildirim-Yayilgan

Bringing Heterogenous Research Data Together: Data Protection for the German Centre for Lung Research (DZL)

Raphael W. Majeed, Stefan Kuhn, Clemens Ruppert, Andreas Günther and Rainer Röhrig

Information Technology in Research Methodology: Improvement or Maybe Not? Comparison of Different Methods of Data Collection in a Research Study of Attitude Towards Plagiarism

Martina Mavrinac, Gordana Brumini and Mladen Petrovečki

Smartphones in ADHD Management

Nihal Dizdar and Neşe Zayim

ContSys Under Ontological Scrutiny

Catalina Martínez-Costa, Stephen Kay, Nicholas Oughtibridge and Stefan Schulz

Secure Virtualised Working Environment for Clinical Research

Thomas Müller

A Software Solution for Maternity Rooms Assignment Management

Reza Jouwzaz, Julien De Jonckheere, Thameur Rakza and Regis Logier

A Software Solution for Neonatal Nosocomial Infections Monitoring

Reza Jouwzaz, Antoine Lamer, Nadine Kacet and Regis Logier

Use of an Anesthesia Database for the Estimation of Surgery Duration

Antoine Lamer, Julien De Jonckheere, Michel Delecroix and Régis Logier
The Design of Web-Based Medical Licensing Information System at Semarang City Health Office
Dina Nur Anggraini Ningrum, Yu-Chuan Li, Chien-Yeh Hsu and Cahya Tri Purnami

NATHCARE – Networking Alpine Health for Continuity of Care. The Pilot Case in the Province of Trento
Caludio Eccher, Michela Dalmartello, Elisa Morganti, Emanuele Torri, Giandomenico Nollo, Roberto Zuffada and Natalia Allegretti

Development of an Information Model for a Regional Shared EHR Based on the Concurrent Use of EN 13904 and ISO 13606 Standards
Pablo Serrano, Serapio Severiano, Jesús Castellano, Carmen Fuentes, Alfredo Paya, Ernesto Barrera and Mariano Casado

Tracking Study Patients in a University Hospital Information System
Sebastian Stäubert, Kirsti Meinel, Frank Meineke, Matthias Lobe and Alfred Winter

A Communicable Disease Query Engine
Johan Gustav Bellika, Luis Marco and Rolf Wynn

Functional Assessment Model for Hospital Information Systems in I.R. Iran
Somayyeh Abedian, Ehsan Bitaraf and Hossein Riazi

Mobile ICT Solution for House Calls Health Care Support
Dejan Zilli, Jožica Leskovšek and Srečko Natek

Contactless Blood Pressure Monitoring
In cheol Jeong and Joseph Finkelstein

Application of ISO 13606 Archetypes for a HIS-LIS Integration
Georgy Kopanitsa and Vladimir Yampolsky

EVITOM Project: Mobile App for Specific Oral Tolerance Induction in Children
Alberto Moreno-Conde, Antonio Ramírez-Jimenez, Elena Lechuga-Rodríguez, Francisco Jódar-Sánchez, Jesús Moreno-Conde, Alba García-Jímenez and Pedro Guardia-Martínez

Creating a Drug Knowledge Database for Integration into a Health Information System
Carlos Otero, Cintia Gimenez, Soledad Díaz, Romina Rebrij, Laura Mattioni and Daniel Luna

Telerehabilitation Programme Based on Serious Games and Lifestyle Monitoring
Alberto Moreno-Conde, Francisco Jódar-Sánchez, Marta Pajarro-Blázquez, Alvaro Dueñas-Ruiz, Begoña Ferrer-González, Mª José Zarco-Periñan and Carlos Parra-Calderón

Patients Drug Exchange Forum Corpus: Toward Drug Safety Signals Detection
Renaud Perichon, Emmanuel Chazard and Régis Beuscart