

EDITORIAL PREFACE

Special Issue on Multidisciplinary Approaches to Handling Complexity in Healthcare

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The human society is an example of a Complex Adaptive System (CAS) (Holland, 1992). Like other complex social systems, healthcare also involves many CAS (M. Niazi, Siddiqua, & Fortino, 2013). Thinking in terms of CAS and modeling these dynamics in terms of complex systems (M. A. Niazi & Hussain, 2013) therefore helps us in understanding why problems related to healthcare are difficult to solve, if analyzed solely from one dimensional perspective. These problems often involve complex dynamics and thus require multidisciplinary approaches for an amicable solution.

This Special Issue of the International Journal of Privacy and Healthy Information Management is focused on different healthcare-related issues and problems using multidisciplinary computational and social approaches.

The first paper “Publicness, Goal Ambiguity and Patient Safety: Exploring Organizational Factors in Hospital Practice” explores the contrast between publicness and patient safety. This is followed by “Health Expenditure: Short and Long-Term Relations in Latin America”, which examines the economic effects of healthcare expenditures with a focus on Latin America.

The next paper “Cost Effective Design of an RFID based Healthcare Service System” focuses on design issues in RFID-enabled healthcare systems. This is followed by “Segmentation of Lung Nodules in CT Scan Data: A Review”, which gives a comprehensive review of state-of-the-art segmentation techniques for lung cancer detection. Next, in the paper, “Sentiment Analysis for Healthcare”, the authors discuss the applications and usage of sentiment analysis in healthcare.

The last paper of the special issue “Analysis of Valuable Techniques & Algorithms Used in Automated Skin Lesion Recognition Systems” presents an overview of methods used for automated Skin Lesion Recognition Systems.

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REFERENCES

Holland, J. H. (1992). Complex adaptive systems. *Daedalus*, 121(1), 17–30.

Niazi, M. A., & Hussain, A. (2013). *Cognitive Agent-based Computing-I: A Unified Framework for Modeling Complex Adaptive Systems Using Agent-based & Complex Network-based Methods*. Dordrecht: Springer Netherlands. doi:10.1007/978-94-007-3852-2

Niazi, M. A., Siddiqa, A., & Fortino, G. (2013). Modeling AIDS Spread in Social Networks. In M. Klusch, M. Thimm, & M. Paprzycki (Eds.), *Multiagent System Technologies, LCNS* (Vol. 8076, pp. 361–371). Springer Berlin Heidelberg. doi:10.1007/978-3-642-40776-5_30