The world’s population is ageing fast. According to the United Nations the median age for all world countries will rise from 28 now to 38 by 2050. The world population over 60 will increase from 11% to 22%, and in the developed countries to 33%, that will increase healthcare costs as elderly people demands more health care. According WHO, in 2010 the percentage of gross domestic product spent on healthcare was already around 11% in Switzerland, Germany, Denmark, Austria, Portugal and is rising fast. Governments and private investors have been searching for sustainable solutions to break healthcare expenditure in addition to increase efficiency and quality of health care. The goal of our recent research goal is to describe the framework for information and communication technologies adoption, development and implementation in physiotherapy practice. Various technologies for electronic health records in physiotherapy, several developed by our research team, will be presented. Beside information system for better management of physiotherapists’ interventions, electronic health records for physiotherapy should include unobtrusive and wearable sensors, biofeedback devices, exergaming, and technique for external cueing for deficit oriented training that should enable home-based effective rehabilitation for improving disabilities and functions. We thought that the electronic health records for physiotherapy should allow better communication between different agencies involved in the treatment of a particular client; provide appropriate, alternative options for clients who present themselves for treatment time and time again; allows the possibility of developing and adoption of best practice based on adopting recognized research-based techniques and technologies, and sharing knowledge and expertise.

Biography

Octavian Adrian Postolache graduated in Electrical Engineering at the Gh. Asachi Technical University of Iasi, Romania, in 1992 and he received the PhD degree in 1999 from the same university. He is currently principal researcher of Instituto de Telecomunicações- leader of Pervasive Sensing and Computing Group, and Senior lecturer of Instituto Universitário de Lisboa ISCTE-IUL, Lisbon Portugal. His fields of interests are smart sensors and systems for biomedical applications, electronic health record. He has the leadership of different interdisciplinary research projects including projects related to HER. He is author and co-author of 10 patents, 4 books, 15 book chapters, 60 papers in international journals with peer review, more than 195 papers in proceedings of international conferences. He is IEEE Senior Member I&M Society, Chair of IEEE Wireless Communication in Measurements, Associate Editor of IEEE Sensors Journal, Technical Adviser of IEEE EMBS Portugal Chapter.