My Diabetes Advisor (MDA-P, MDA-D)

Overview

The Computational BioMedicine Laboratory at FORTH-ICS has developed a platform for the citizens which allows them to self-monitor their health status for wellbeing or for the proper self-management of chronic diseases such as diabetes, chronic obstructive pulmonary disease (COPD), hypertension and cardiovascular diseases.

The platform can be adapted and configured to different wellness or clinical domains providing the citizens with all the necessary tools for the improvement of their health education and literacy and for a better involvement in the proper management of their health.

More specifically, the My Diabetes Advisor (MDA) is a long-term daily-based management system for patients with diabetes, which comprises also the monitoring of risks of complications. The application for the patient (MDA-P) allows the patient to self-monitor her/his health status by capturing vital signs, life-style data (activity, diet, etc.) and medication data (insulin, OADs). Additionally, patients can fill in life-style and compliance questionnaires in order to provide, at the periodic reviews, a more complete picture of their health status to the general practitioner (GP). Moreover, educational material is also offered to patients in order to improve their self-management capability.

The system also offers the possibility of having the patient self-management supervised by GPs. In such case, using the doctor application (MDA-D), the general practitioner (GP) can view various types of vital signs of her/his patients such as blood glucose, blood pressure as well as weight and oxygen saturation. Furthermore, the life-style, medication data and compliance questionnaires can also be inspected. In this way, the GP is able to check the health status of their patients at any time and properly supervise and manage them.

Target Domains

Citizens with diabetes and their informal caregivers (family members, neighbours, close friends, etc.) which can take advantage from the system for self-monitoring and self-management and receive the necessary support for the long-term daily-based management of their chronic disease.
Description

Main Functionalities

The main functionalities of My Diabetes Advisor system include: online patient management (enroll new patient, disenroll patient), online insertion of measurements by the patient, graphical and tabular view of measurements such as:

- Glucose
- Blood pressure
- Weight
- Oxygen saturation

Furthermore, the system includes the insertion of medication data, lifestyle compliance questionnaires and personalized guidance through the care plan view.

State-of-the-art Technology

My Diabetes Advisor is a robust and reliable system that delivers state-of-the-art performance using 64-bit architecture and web technologies. It is compatible with major database management systems and with the latest versions of all popular web browsers.

Additional Information

The software suite Integrated Care Solutions (ICS) is a series of IT software, centered around the electronic health record, to support Patient Administration (ICS – A), solutions for Citizen (ICS-C), Pre-hospital Emergency Care (ICS – E), Health Information Infrastructure (ICS – H), the Integrated Electronic Health Record (ICS – I), Nursing and Medical Applications (ICS – M), Primary Health Care (ICS – P), citizen self-management (ICS-C), IT support (ICS – S), Welfare (ICS – W) and Picture Archiving and Communication (ICS – X). The ICS-X system is installed and operates at the University Hospital of Patras since 2005.

Contact details:  Dimitrios G. Katehakis

katehaki@ics.forth.gr