

# Using Information to Improve the Quality of Care in Type 2 Diabetes in Primary Care

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Dear reader,

You are opening the special topic issue "Using Information to Improve the Quality of Care in Type 2 Diabetes in Primary Care" of the European Journal for Biomedical Informatics. This issue contains the contributions presented at the workshop organized on the occasion of the European Federation of Medical Informatics special topic conference (STC) "Data and Knowledge for Medical Decision Support" held in Prague, Czech Republic, on April 16th 2013.

The WS3 workshop entitled "Using Information to Improve the Quality of Care in Type 2 Diabetes in Primary Care" was organized by EFMI Working group PCI - Primary Care Informatics, by 1st Faculty of Medicine of Charles University in Prague and by The Society of General Practice of Czech Medical Association J. E. Purkyně. The workshop was chaired by me and by prof. Simon de Luisignan from Great Britain.

In case of diabetes the quantitative and technological support is of great importance. First mathematical models in diabetology had been used in 1950s. 20 years later the information systems to support the clinical care for diabetic patients were used and simultaneously first consultation and expert systems for diabetes diagnostics and treatment were proposed. During last 30 years many technologies to support care for diabetes have been introduced, e.g. blood glucose monitoring systems, insulin delivery pumps, imaging technologies for diabetic retinopathy, close loop systems for diabetes treatment. To cover all these topics the annual conferences "Computers in diabetes" on the occasion of European Diabetes Society Congress were organized up to the end of 1990s.

Today most activities in this field are organized by the Diabetes Technology Society. It is a nonprofit organization committed to promoting development and use of technology in the fight against diabetes. It was established in 2001 by David C. Klonoff, Professor of Medicine at University of California, San Francisco. Annual meetings are organized by the society - this year in Bethesda, USA. European activities are also organized by this society, e.g. Certified European Diabetes Technician course in Copenhagen this year.

Many articles in the field of medical informatics are published in the important Journal of Diabetes Science and Technology. It is a bi-monthly, peer-reviewed scientific journal published by the Diabetes Technology Society, which covers all aspects of diabetes technology including glucose monitoring; insulin and metabolic peptide delivery; the artificial and bioartificial pancreas, telemedicine; software for modeling; physiologic monitoring; technology for managing obesity; diagnostic tests of glycation; and the use of bioengineered tools, new biomaterials, and nanotechnology to develop new sensors to be applied to diabetes. Articles cover both basic research and clinical applications of technologies being developed to help people with diabetes. First issue was published in January 2007.

Computers and technologies have been moving from special centers and clinics to the offices of General Practitioners. Therefore we have chosen this theme for the Prague Workshop and for this special issue of EJBI. Presenters have sent the majority of presented lectures to this issue and so I hope you will enjoy this very interesting part of Biomedical Informatics.