Journal of Diabetes Science and Technology
Volume 2, Issue 5, September 2008
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PERSPECTIVES on
Diabetes Information Technology

Definition of Information Technology Architectures for Continuous Data Management and Medical Device Integration in Diabetes

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Abstract

The growing availability of continuous data from medical devices in diabetes management makes it crucial to define novel information technology architectures for efficient data storage, data transmission, and data visualization. The new paradigm of care demands the sharing of information in interoperable systems as the only way to support patient care in a continuum of care scenario. The technological platforms should support all the services required by the actors involved in the care process, located in different scenarios and managing diverse information for different purposes. This article presents basic criteria for defining flexible and adaptive architectures that are capable of interoperating with external systems, and integrating medical devices and decision support tools to extract all the relevant knowledge to support diabetes care.

J Diabetes Sci Technol 2008;2(5):899-905

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Abbreviations: (DICOM) Digital Imaging and Communications in Medicine, (EHR) electronic health record, (HL7) Health Level Seven, (IHE) Integrating the Healthcare Enterprise, (IMS) IP Multimedia Subsystem, (IP) internet protocol, (IT) information technologies, (NGN) Next Generation Networks, (PDA) personal digital assistant, (RIA) Rich Internet Applications, (SOA) service-oriented architecture, (XML) Extensible Markup Language

Keywords: diabetes, continuous data management, device interoperability, software architecture

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