

## The Disease Self Management Network

The Disease Self-Management Network (DSMN) is a technology platform that supports intensive therapy of patients with Type I diabetes. OPTIUM Digital Solutions Inc., in partnership with The Charles H. Best Diabetes Centre have initiated the research and development of this technology since the Fall of 1998. This innovative solution has been recognized internationally by being nominated for the prestigious ComputerWorld Smithsonian Awards of 2001.



An initial ten patient study determined that the technology can dramatically increase the amount of patient data available to the

clinician and decrease the amount of time the clinician spends collecting and organizing that data. A federal government grant through CANAIRE, supported further development, evaluation and deployment of the network. A twenty patient multi-site study was completed with The Children's Hospital of Eastern Ontario in March 2003. Compaq Canada (now HP) as a critical partner provided the technology required for this project and IRIS Systems Inc. is our new development and support partner. The next phase is to upgrade the infostructure to support XML and HL7 standards and to enhance the clinical functionality to incorporate data needs of Type II Diabetes and other chronic conditions.



In diabetes management, most of this data is collected in paper form, which has clear disadvantages such as: incomplete and inaccurate data, difficulty in analyzing the data, time delays between visits and the potential for data loss. By utilizing leading edge technologies such as secure web-based data management tools and personal digital assistants (PDA), there is significant potential to dramatically improve the quality of care of diabetic patients by enabling regular monitoring and quick intervention. The DSMN provides an effective tool for patients, clinicians, and health care policy makers. The DSMN allows patients to view their own data in various formats

and consult with clinicians that have all the latest information. For clinicians, the DSMN provides secure and easy access to comprehensive patient data regardless of location. For public health care policy makers, the DSMN can provide aggregate data to better understand the diabetic health care requirements of communities across Ontario. Conceptual model of system provided below.



The DSMN has been developed by OPTIUM Digital Solutions Inc. in co-operation with the Charles H. Best Diabetes Centre.