

News/Press Release

Research project to study impact of mobile health technology on management of diabetes

June 2, 2022 - Montreal, Quebec. Serene Technologies is currently developing a collaborative partnership with the Seven Oaks Hospital Chronic Disease Innovation Centre (CDIC), and the George and Fay Yee Centre for Healthcare Innovation of the University of Manitoba for the conduct of a clinical study to evaluate the efficacy of a mobile health application for the management of diabetes.

This study named *SOS Diabetes* would be led by Dr. Claudio Rigatto (Academic Director Seven Oaks Hospital Chronic Disease Innovation Centre, Associate Professor, Internal Medicine, Faculty of Health Sciences, University of Manitoba; attending nephrologist, and Seven Oaks Hospital). The COVID-19 pandemic has changed the way people with diabetes are cared for in Canada. Indeed, patients with diabetes and other chronic diseases have been cared for via virtual medical visits during the last 2 years, including telephone or video conference calls. While this helped prevent spread of the virus, the management of diabetes became more challenging.

Diabetic patients need to monitor their blood sugar on a daily basis. In addition, the healthcare teams also need to closely monitor other parameters such as blood pressure, kidney function, eyesight, body weight and general health status in order to ensure optimal control of diabetes. Patients, especially when recently diagnosed, need to be accompanied throughout their diabetes education process, including the natural evolution of their condition, medication, diet, physical activity and healthy lifestyle. Phone or video calls are not sufficient for proper patient care. Several studies have shown that health literacy, patient's engagement and adherence to prescribed therapy are essential factors for well controlled diabetes. Moreover, other issues like solitude and community support, must be taken care of as part of the management of diabetes.

The SOS Diabetes study will evaluate the efficacy of a mobile health management solution called SERENE®, which was developed by Serene Technologies Inc., a start-up company based in Montreal, Quebec. SERENE® is more than an application, it is an integrated mobile health solution that empowers patients with peer-reviewed educational content, as well as condition -specific functions and tools that help patients with diabetes track their blood glucose, manage their medication, and monitor the most important aspects of their condition. SERENE® empowers patients through daily self-assessments that can improve adherence to therapy. SERENE® also empowers patients

by helping them evaluate and report their own symptoms, monitor their daily emotional states, as well as prepare for their medical visits in advance. Patients can view their information, and share the information with the health team through their mobile devices (phone, tablet). Treating physicians will also be able to have a general idea of any given patient's status at a glance, through the Serene website. Health team can then review the information and provide appropriate guidance and treatments.

The SOS Diabetes study will evaluate if SERENE® improves the management and control of diabetes. Half the patient volunteers will use SERENE® for 6 months, and half will continue with their usual care in the clinic. A computer will randomly choose which patients are assigned to each group.

SERENE® has the potential through its educational and technological interventions to help patients empower themselves by implementing self-management of diabetes, as well as tracking and displaying data, providing educational resources, and offering support from peers and the health care team.

About Seven Oaks Hospital Chronic Disease Innovation Centre (CDIC),

CDIC is an independent organization that partners with public and private sectors to conduct novel research and translate it into real world applications. Our multidisciplinary team has a unique combination of clinical, statistical, project management and business development expertise that is applied to clinical trials, innovative service delivery and systems improvement. We aim to change how healthcare is delivered by uniting experts from the healthcare, research, academic, and business sectors.

About the George and Fay Yee Centre for Healthcare Innovation

The George and Fay Yee Centre for Healthcare Innovation (CHI), was established as a partnership between the University of Manitoba and the Winnipeg Regional Health Authority. CHI platforms include clinical trials, data science, knowledge translation, knowledge synthesis, project management, health systems performance and evaluation. The centre brings together leaders and practitioners from all disciplines to ensure that the latest evidence is translated into improved patient outcomes, enhanced patient experiences and improved access to care for Manitobans.

About Serene Technologies

Serene® Technologies (a division of NutriMed Consulting Inc.) is a start-up company located in Montreal, Quebec; which is founded by Pierre Benjamin, M.D., MPH. The company is specialized in the development of digital health mobile solutions. The mission of the Serene® Technologies is to develop integrated health solutions that empower people affected by chronic diseases to actively participate in the management of their medical conditions through education about their health, nutrition, physical activity, and tracking information that can be shared with their health care professionals. The ultimate goal of Serene is to help people making better decisions about their health and improving their overall quality of life. The guiding values of Serene are Education, Empowerment and Empathy.

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