

Commercialization | The iDiary can be applied to any kind of illness and be adapted to input data from devices such as glucose monitors or be integrated with electronic health records.

With marketing support from SickKids Corporate Ventures and product support from Rogers, the inventors plan to expand the iDiary further into clinical practice.

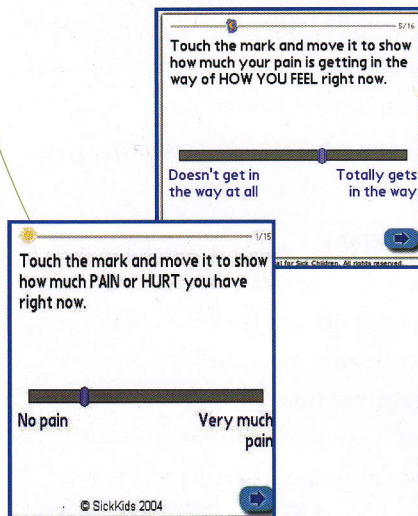
PROBLEM: Accurate and timely information about symptoms of outpatients with chronic conditions.

SOLUTION: Unprecedented access to symptoms of outpatients with chronic conditions as well as the ability to alert physicians to specified changes in patient symptom parameters.

IMPACT: More accurate treatment for pain and other chronic conditions. An estimated 29 per cent of Canadians live with chronic pain.

Pain Diary

SickKids researchers find a way to track chronic pain in real-time



The iDiary is an easy way for patients and physicians to accurately track chronic pain.

Chronic pain can impact all aspects of life for children who suffer from chronic pain illnesses, like juvenile arthritis and sickle cell anemia.

“To manage pain effectively and improve the quality of life for children suffering in pain, we need a more accurate and reliable way of collecting and analyzing symptoms,” says Dr. Jennifer Stinson, advanced practice nurse in the Chronic Pain Program at SickKids.

In response, Dr. Stinson and SickKids anaesthesiologist Dr. Guy Petroz partnered to create iDiary, a one-of-a-kind electronic pain diary that tracks symptoms in children with chronic health conditions in real-time and in their everyday environments using a handheld computer device. A handheld computer prompts patients to assess their pain symptoms through a customized survey three times a day. The encrypted survey data is then sent to the hospital for analysis via a wireless network.

“Traditional methods of monitoring chronic pain rely on paper diaries and patients recalling their symptoms over the past week or two,” Dr. Stinson says. “With iDiary we are able to more accurately monitor and identify changes in symptoms in real-time to gain a better understanding of what the patient pain experience is really like and how best to treat it.”

The software, initially developed to track arthritis pain, can be modified to suit the needs of the patient and include additional features for tracking symptoms of other illnesses, like cancer, asthma and diabetes. Currently, iDiary is being used in two North America-wide studies, including a study at SickKids. Dr. Petroz and Dr. Stinson explain that, ultimately, the goal is to bring iDiary into direct clinical practice and provide medical professionals with reliable and valid data needed for treatment of chronic illnesses. ■