



## **There's An App For That! WellDoc creates software to help patients and their doctors monitor medical conditions**

By Krista Brick  
October 25, 2011

Need a new recipe? There is an app for that. How about finding a restaurant review or changing the TV channel? There are apps for that, too. Mobile phones have not only made life more convenient, but a Baltimore company has proof that cell phones could be the key to the healthcare of the future.

Baltimore-based WellDoc has created software for mobile phones that helps patients monitor their medical conditions, while also offering real-time medical advice to manage them. That means a healthier lifestyle for the patient and a streamlined patient-care system for physicians.

Founded in 2005, WellDoc initially focused on developing its DiabetesManager app that enables patients and health care providers to coordinate diabetes care, propel self-management and achieve long-term adherence to treatment plans. "Without question, this is the future of medicine," says Ryan Sysko, WellDoc's founder and CEO. "The number of patients with chronic diseases compared with the number of [health care] providers is humongous. The only way to get efficiency will be to support patients using technology."

The Food and Drug Administration (FDA) and the American Diabetes Association (ADA) agree. Armed with FDA approval a year ago, a study of the DiabetesManager app was highlighted in the September issue of Diabetes Care, the world's preeminent diabetes-focused scientific journal published by the ADA. This study, conducted at the University of Maryland School of Medicine, concluded that the WellDoc system helped doctors and patients engage more effectively in monitoring and managing diabetes.

The study is the first of its kind for a mobile phone-based diabetes coaching and decision support intervention. The mean decline in A1c—the gold-standard measure for diabetes control—was 1.9 percent in the intervention group and 0.7 percent in the usual care group. It is estimated that every .01 percent drop in A1c can reduce by 37 percent the risk and costs of diabetes complications, such as eye, kidney and nerve disease. It can also mean a big reduction in the nearly \$174 billion per year spent on the disease in the United States, according to the Centers for Disease Control and Prevention.

"We studied the impact of combining web- and mobile-based patient coaching with clinical decision support for community primary care providers and compared this approach with standard diabetes management or usual care alone," says Charlene Quinn, R.N., Ph.D., the study's lead investigator. "The trial results indicate that doctors and patients can engage more effectively using mobile health tools like the WellDoc system to enhance patients' diabetes care and monitor their blood glucose."

The WellDoc system works by leveraging a device already used by nearly everyone: the cell phone. Patients test their blood sugar with a glucose monitor and enter their information into the WellDoc Automated Expert Analytics System using the cell phone app. From there, patients can get instant advice on their blood-sugar levels and suggestions for getting high levels back in check.

A patient's physician gets a virtual logbook every six weeks to help the doctor track and manage the data. "The physicians are able to handle more patients while offering those patients better care," Sysko says.

The WellDoc concept started to come together in 2004 when Suzanne Sysko Clough, M.D., a practicing endocrinologist at the University of Maryland Joslin Diabetes Center, struggled to help her patients manage their diabetes. Patients routinely forgot to bring their glucose readings logbook to their appointments and also felt overwhelmed by the information on diabetes care.

Clough noticed that patients who might have forgotten their logbooks were never without their cell phones. From that she created the concept of patient coaching via cell phone. "The secret sauce is the system's individualized care. The reality is the disease requires special support for each patient," Sysko says.

Joseph Rihel of Pasadena participated in a one-year WellDoc trial. At age 55, he was diagnosed with HA1C diabetes. By the end of the study, his A1c level dropped significantly. "[The WellDoc app] is a good tool to use, because it's like an umbrella looming over you with individual care 24/7," he says. "For me it closed the gap between usual care and good care."

For Rihel, the learning curve to use the system was small and he says he found it easy to be consistent with its use. "We haven't published the data yet, but we have been pleased with the percentage who use the system over time and those who sign up," Clough says. "We're continuing to make the system as engaging as possible."

WellDoc is getting set to release the WellDoc DiabetesManager commercially in the next few months. The company announced a partnership with AT&T last fall to provide billing, hosting, security and sales. AT&T already announced it would pilot WellDoc's system to its own employees.

The tool comes at zero cost to physicians as WellDoc works on getting health insurance companies to code and cover the product. The cost savings to physicians come in the form of time saved by being able to review patient data and analysis prior to a patient visit. Physicians are also able to provide more comprehensive care even while patients are on their own. "Health care budgets are constrained and everyone is looking for a way to make optimal investments with a cost-quality ratio," Sysko says. "We are well positioned given the outcomes." He expects patients to be able to access WellDoc through their health care providers by mid-2012.

In the near future, the service will be available not only on cell phones but through other platforms, such as tablets and in Ford vehicles via the Sync system. And the concept is one that can be adapted to support other chronic diseases such as heart disease, asthma and cancers.