

Success of telemonitoring systems hinges on features, design

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The success of mobile phone telemonitoring systems hinges both on their features and design, a <u>study</u> focusing on heart failure patients published late last week in the *Journal of Medical Internet Research* concluded. In particular, characteristics that led to improved care for such patients included ease of use, as well as immediate clinical feedback with self-care instructions, according to researchers.

While the study was small--it used data from 22 patients attending the University Health Network Heart Function Clinic in Toronto over a six-month period--the study's authors said that patients became more self-aware of their own behaviors, which improved their care-related actions. No issues with regard to usage were found, and even those patients with little or no experience with mobile phones were successful in using the system.

"Patients expressed becoming more aware of their heart failure condition and their own body, because they were taking their physiological measurements and symptoms daily and their weight and blood pressure targets were brought to their attention daily," the researchers wrote. "The automated feedback and clinician phone calls also alerted the patients when their health appeared to be worsening."

Such findings are important as more health organizations develop mobile monitoring strategies for the treatment of patients. For instance, researchers competing in the NCD (non-communicable diseases) Challenge, sponsored by IBM and Novartis, created a program called 2Vidas for pregnant women. The program provides access to monitoring tools at pharmacies and sends SMS messages to encourage positive healthy behavior. Another winning program from the contest, Dr. Diabetes, also helps diabetics to monitor their health using a handheld device.

Last summer, use of <u>WellDoc's DiabetesManager</u> cell phone solution was found to drastically reduce the percentage of blood glucose for type 2 diabetics over the course of a year. Smartphone-powered patient monitoring is expected to <u>hit 3 million users by 2016</u>, according to British firm Juniper Research.