

Novel Interactive Cell-Phone Technology for Health Enhancement

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Abstract

Self-care is essential in chronic disease management; however, adherence to self-care plans is often far from optimal. Advances in technology can facilitate self-management of chronic disease through patient empowerment and timely feedback. The Confidant system is a novel wireless remote patient monitoring and response system, centered around mobile phone technology, that translates scientifically supported knowledge for chronic disease management into action by providing easily followed daily coaching using the patient's own data. Daily provision of interactive, informative messages removes the burdens of recall, record keeping, decision making, scheduling, and data analysis. A pilot-controlled clinical trial evaluated the feasibility and efficacy of the Confidant system in the management of type 2 diabetes in 15 patients utilizing the cell-phone technology and 15 individuals in a control group (standard type 2 diabetes care). The study demonstrated improved levels of glycosylated hemoglobin, positive changes in diabetes management self-efficacy, and diabetes self-care activities among intervention group patients. A larger trial is now in development to demonstrate the clinical benefit of using the Confidant system among type 2 diabetic patients. This article describes the novel technology and applications of the Confidant system.

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Abbreviations: (PDMP) Personal Diabetes Management Program, (TSM) tailored self-management training

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