## Facilitating patient self management through telephony and web technologies in seasonal influenza. Informatics in Primary Care 2010; v18 n1 pp 9-16.

Zsolt Nagykaldi PhD, Walter L. Calmbach MD MPH, Lauren DeAlleaume PhD, Jonathan Temte MD PhD, James W. Mold MD MPH, John G Ryan DrPH

## Abstract

Purpose The aim of this project was to develop and test information technology implementations that could assist patients with influenza self-management in primary care settings. Although testing was conducted in the context of seasonal influenza, the project aimed to develop a blueprint that primary care practices could use in an influenza pandemic. Methods Four primary care practice-based research networks (PBRNs) systematically designed, implemented, tailored and tested a tiered patient self-management technology model in 12 primary care practices during the peak of the 2007 to 2008 influenza season. Participating clinicians received a customised practice website that included a bilingual influenza self-triage module, a downloadable influenza toolkit and electronic messaging capability. As an alternative option, a bilingual, interactive seasonal influenza telephone hotline that patients could call for assistance was provided. Results Influenza self-management web pages presented via nine customised practice websites received 1060 hits between February and April of 2008. The Self-management Influenza Toolkit was downloaded 76 times and 185 Influenza Self-Triage Module sessions were completed via practice websites during the course of testing. Logs of the telephony hotline indicated 88 calls between February and April 2008. Seventy-two percent of callers had influenza-like symptoms and 18% were eligible for antiviral therapy. The Spanish language option was selected by 21% of callers. Qualitative feedback from 37 patients (29 English and 8 Spanish) and six clinicians from four PBRNs indicated ease of use, problem-free access and navigation, useful and adequate information that was utilised in various ways by patients and a high level of overall satisfaction with these technologies. Both patients and clinicians provided rich and meaningful feedback about future improvements. Conclusions Primary care patients and their clinicians can adopt and successfully utilise influenza self-management technologies. Our pilot study suggests that web resources combined with telephony technology are feasible to set up and easy to use in primary care settings.