

H.B. JIMISON, M. PAVEL, W.J. HATT, M. CHAN, N. LARIMER, C.H. YU. *Delivering a multi-faceted cognitive health intervention to the home. Gerontechnology 2010;9(2):224;*

doi:10.4017/gt.2010.09.02.297.00 **Purpose** Cognitive function is a key health concern of older adults¹. Up to 50% of individuals aged 85 and over have measurable decline in cognitive function². Thus, a major goal of seniors and their families is to optimize their quality of life and independence by remaining mentally fit. Based on an early needs assessment, a cognitive health intervention would address the health concern of greatest importance to elders in maintaining quality of life and independence¹. **Method** Our overall approach to delivering an effective cognitive intervention for seniors was to develop a robust software platform to facilitate a coach in managing tailored cognitive health protocols for a large panel of seniors. The protocols address several areas that have been shown to relate to cognitive health^{3,4}: computer-based cognitive exercises (games), physical exercise, sleep management, and socialization. The coaching software enables (i) frequent contact with participants via a health coach, (ii) integration of known principles of health behavior change into the intervention to encourage success, and (iii) intervention protocols that are adaptive and tailored to the individual, based on monitoring data from the home. We piloted this system with 20 members of the ORCATECH Living Lab (mean age 78.3±7.8 years, 70% female). **Results & Discussion** Participants in the early phase of the coaching study were able to successfully use the coaching system (Figure 1). The lessons learned from our pilot test include recommendations for refining protocols to be set to a fixed length of time, requests for an increase in variety of activities, and a recognition of the importance of the initial phone or video assessment.

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Figure 1. Main page of the patient portal to the Coaching System