

This Case Study was included in LeadingAge New York's research paper "Senior Housing in New York State."

### **Selfhelp Community Services, Inc. (New York City, NY): Technology-enabled housing with services**

Selfhelp Community Services, Inc. is a 76-year old not-for-profit organization dedicated to enabling older adults and other at-risk populations to live in their own homes, independently and with dignity. Currently over 20,000 individuals in four boroughs of New York City and Nassau County are served by a number of Selfhelp programs and services that include six senior housing complexes (a seventh is under construction and will be completed by year end 2012), four Naturally Occurring Retirement Communities (NORCs), three case management programs, two community guardianship programs, five senior centers including one of only ten Innovative Senior Centers in New York City, extensive home care services, a legal resources program and a robust client-focused technology program.

The case study we present here examines how one aspect of Selfhelp's stated mission to "...lead in applying new methods and technologies to address changing needs of its community" is being carried out through the variety of products and services they offer their clients as well as the development of one of the first technology-enabled affordable senior housing high-rise apartment buildings.

#### *Technology Products/Systems*

*Virtual Senior Center:* In partnership with Microsoft, the NYC Department for the Aging and the NYC Department of Technology and Telecommunications, Selfhelp created the Virtual Senior Center (VSC), a program that allows homebound and case managed older New Yorkers to engage in activities like discussion groups, museum lectures and music classes, while remaining in their own home. Specially adapted computer equipment along with special senior friendly software developed by Selfhelp, with integrated web cameras, are placed into homes and, along with other assistive technology that may be required by the senior, allows these individuals to connect to real events, lectures and other programming developed by Selfhelp. The VSC also provides an online chat room that allows users to connect with each other either individually or in a group setting; and allows for more frequent contact with social workers.

*Health Monitoring Sensor System:* Since 2005, Selfhelp has been installing QuietCare, a wireless motion sensing system, in senior housing units for all residents that request it. Motion detectors (i.e., no cameras or audio) are installed throughout the apartment; within a few weeks, the system "learns" the resident's typical activity patterns (i.e., wake-up time, bathroom usage frequency, refrigerator usage, etc.). Out-of-pattern behaviors are noted on an easy-to-read dashboard and color-coded for urgency. Alerting and monitoring is done by the QuietCare call center and action taken according to resident-directed instructions. In a pilot study conducted with 27 Selfhelp residents and clients, it was found that the system provided timely intervention and prevented many emergencies and life-threatening situations [29].

*Telehealth Kiosks:* In partnership with Jewish Home Lifecare (a NYC-based not-for-profit provider of elder health services), and with funding from Enterprise Community Partners, Selfhelp is piloting a telehealth kiosk program. Approximately 50 residents from each of two Selfhelp affordable senior housing buildings have volunteered to use a personalized swipe card to activate the touchscreen device and record vital statistics (i.e., blood pressure, weight, blood oxygen rates, etc.)

on a regular basis. The kiosk provides individualized educational tips on exercise, weight control and health management based on the data inputted from each senior. Nurses from Jewish Home Lifecare monitor and track changes; residents are contacted when significant changes are observed.

*Computer Learning Centers/Cyber Classrooms:* Selfhelp provides computer learning centers in all five of its senior centers and several of its NORCs. Many hundreds of seniors have learned to use computers at these centers, ranging from acquiring basic skills (e.g., accessing the internet and using email) to more advanced skills (blogging, graphics and photo editing). Cyber classrooms have also been recently introduced. A large internet screen with a web camera is set up in the affordable housing community room; seniors can learn from a wide variety of instructors who can be physically located anywhere in the world. Recent programs conducted by Long Island University occupational therapy students include “Nutrition: Tips and Smart Food Choices to Healthier Eating”, “Yoga/Laughing Therapy: Laugh Away Your Pain!” and “Relaxation and Visualization: Stress Management, Deep Breathing Techniques and Visualization”.

### *Selfhelp K VII Apartments*

Selfhelp’s mission of helping seniors live independently and with dignity by providing them access to affordable housing, support services and state-of-the art technology will be further advanced by the opening of its 14-story, 92-unit affordable senior housing building in January 2013. Selfhelp K VII Apartments (“K VII”) is the culmination of years of planning that will incorporate many of the technology-enabled products and services currently offered throughout the Selfhelp community, all under one roof. Each unit will be computer-ready, energy efficient, have a roll-in shower and be wired to allow for sensor monitoring, if desired. The community room will be equipped with video chat-enabled computer work stations, a cognitive strengthening unit and a health screening kiosk.

K VII is unique in several ways. First, Selfhelp’s leadership team was committed from the beginning to creating a technology-enabled building and environment; thus, from the planning stage, the infrastructure was predicated on incorporating wireless capability throughout the building. The benefit of having this wireless capability is that it allows for more advanced technology to be deployed as it becomes available. Wiring was completed before the walls were closed and much thought and planning went into all the possible types of technology that could be brought into each room and community space that might allow older adults to live longer, more independent and safe lives.

Second, there was, and continues to be, an unparalleled level of dedication to securing numerous sources of funding to ensure the integrity of the project. Project partners include the NYC Housing Development Corporation, the Department of Housing Preservation and Development, JPMorgan Chase, Enterprise Community Partners, NYS Office for Aging, the Harry and Jeanette Weinberg Foundation, UJA Federation of New York and many other private foundations and sponsors. K VII has a total development cost of approximately \$26 million and is being financed with a mix of tax-exempt bonds, low-income tax credits, state and private grants and City Capital funding. Due to the many different requirements of the various funding streams, the location of the building site (Flushing), and the complexities associated with managing such a large project, there have been countless challenges along the way. However, the project is slated to open on schedule and will serve as a model to other organizations looking to deploy building and resident technologies to assist older adults in maintaining their independence and accommodating different levels of service needs.