LeadingAge® CAST
center for aging services technologies

Case Study:

Improving Well-being and Social Connections Through Technology for California Seniors Isolated by COVID-19

front porch

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Categories:

- Increased Access to Health Care, Resident Engagement and Satisfaction, Quality of Life, and Staff and Resident Efficiencies
- Reduced Social Isolation/ Feelings of Loneliness

About the Organization

Organization Name:
Eskaton and Front Porch

Main Contributors:
Sheri Peifer, Senior VP and Chief Strategy Officer, Eskaton

Kari Olson, Chief Innovation & Technology Officer, Front Porch and President, Front Porch Center for Innovation & Wellbeing

Organization Type:
Affordable Housing

Organization Description:
Eskaton has been serving Northern California's older adults and their families since 1968. As a nonprofit senior living and services provider, their mission is to enhance the lives of older adults.

Front Porch is a California-based nonprofit whose mission is to inspire and build community to cultivate meaningful relationships and experiences that respond creatively to changing needs.

Project Description

Eskaton and Front Porch are partners of Lighthouse for Older Adults, a CITRIS and University of California initiative that brings technology-enabled health and well-being to low-income California seniors during the COVID-19 crisis. Lighthouse for Older Adults is a rapidly deployable and scalable digital inclusion pilot program that provides internet accessibility and digital literacy training to improve access to health care services and communication, ultimately leading to improved health, engagement, information, safety, and well-being for 600 older adults across six affordable housing communities.

Connectivity Model

The connectivity model for Lighthouse at Eskaton and Front Porch is the deployment of property-wide Wi-Fi with the initial broadband connectivity preference for fiber, and secondarily for high-speed coax, depending on availability of services. To date, Eskaton has completed full Wi-Fi installations at three affordable housing communities, and Front Porch has completed one affordable housing Wi-Fi deployment with two additional communities in progress.

Under the Lighthouse "Rapid Pilot Deployment" (RPD), Eskaton and Front Porch distributed Google Hub Max devices to residents and staff during the 2020 winter holiday season. In this demonstration pilot, Eskaton connected devices to residential Wi-Fi at their community, and Front Porch deployed mobile/cellular hotspots for temporary internet connectivity for eight months.

Infrastructure Business Model

As an important demonstration of its power in partnerships, Lighthouse for Older Adults worked closely with CDW Healthcare to coordinate and secure broadband infrastructure construction for Eskaton and Front Porch.

Upon completion, Lighthouse for Older Adults will have completed deployments across six affordable housing communities with infrastructure funded through a variety of models. The construction and installation of broadband infrastructure has been funded through various resources, including grant funding, affordable housing community HUD budgets, developer fees, and organizational commitments and investments.

In 2014, Eskaton made an intentional decision to invest organizational capital from the parent company to build out basic Wi-Fi infrastructures in several of their owned HUD affordable senior housing communities. As part of the Lighthouse project, additional investments were made through the project grant to further strengthen the coverage and performance of the broadband connection in three Eskaton affordable housing communities and to ensure every home had adequate Wi-Fi to participate in the project.

The LeadingAge Center for Aging Services Technologies (CAST) is focused on accelerating the development, evaluation and adoption of emerging technologies that will transform the aging experience. As an international coalition of more than 400 technology companies, aging-services organizations, businesses, research universities and government representatives, CAST works under the auspices of LeadingAge, an association of 5,000 nonprofit aging services providers and other mission-minded organizations dedicated to making America a better place to grow old.

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All three Front Porch managed affordable housing communities were new broadband installations that required electrical, cabling, and equipment installation to build out the Wi-Fi coverage for every home, staff office, and common area. Funding for these installations came in part from CITRIS grant funding, and from community reserves or reserves resulting from developer fees.

Capital investment to build out the Wi-Fi infrastructure for the six buildings varied significantly—from $520 per unit to as much as $2,400 per unit. Oftentimes it is not the size of a building that matters, but the building materials, structure, layout, and geography (rural vs urban) that impacts costs. Installation costs were higher in affordable communities that were older, had more buildings on the property, and required significant electrical work, cabling, and network equipment.

Ongoing Service and Operations Business Model

- Standard of Service as a Utility (included with rent to all residents).
- Internet Service Provider (ISP) and infrastructure ongoing costs paid from affordable housing community operating budget.

Implementation Approach

Lighthouse for Older Adults relies on a user-centered approach to identify the perspectives of older adults regarding technology. The program's framework for digital inclusion is a three-legged stool: Broadband **Access**, **Affordability**, and **Adoption**; a stool, however, needs a seat, and so the fourth part of this framework is **Content**.

Broadband Access provides individuals access to not only the internet connectivity (Wi-Fi, cellular, ethernet, etc.), but access also to the devices necessary to connect to the internet (laptops, tablets, smartphones, etc.).

Broadband Affordability outlines the importance of connectivity costs. This includes ensuring sufficient funds to support a building's internet infrastructure needs and reducing or eliminating cost barriers for community residents to access those connections (including Wi-Fi and devices) on an on-going basis.

Broadband Adoption highlights the critical need for adequate, appropriate, and effective training and support for successful community engagement with technology. Adoption includes curriculum design and deployment, outreach strategies, and a community-based model that socializes technology learning and support.

Broadband Content is the user's digital destination. Meaningful, valuable, and relevant content to support the health and well-being of older adult users is critical to the Lighthouse project's digital inclusion efforts. Broadband content that is especially linguistically and culturally relevant is a significant gap; addressing this gap could make digital literacy far more relevant and appealing.

Eskaton's and Front Porch's implementation approach included four program areas in the deployment of our Lighthouse for Older Adults project.

Empathy/Research: The project team created and deployed an initial empathy survey of residents to obtain demographic information, self-reported rankings on perceived health, and digital literacy. Over 500 residents across six communities completed the initial survey in 12 languages, which informed the project design at each community.

Six communities hosted 60-minute focus group sessions to explore COVID-19 impacts, digital readiness, digital literacy, current barriers to technology adoption, and interest in participating in the Lighthouse Project. This process was important in assessing needs to develop a resident profile that supported the selection of resident devices.
The evaluation team reviewed the focus group sessions learnings and identified specific themes and patterns to inform project implementation.

Device Selection and Distribution: Through community surveys, focus groups, and interviews with residents and staff, the project's empathy process was critical to helping to identify the appropriate technology devices for the community. The reports highlighted a number of important findings that strongly determined device features and user experiences, such as larger screens for low vision, good quality speakers or extra headset devices for people living with low hearing, video chat capabilities, styluses to help users struggling with fine motor skills, and multilingual accommodations.

Since the Lighthouse RPD, project-issued devices to residents have included 24 Google Hub Max devices, 200 Lenovo Yoga tablets, 52 Samsung TabA tablets, and six Amazon Alexa Shows across four affordable housing communities in California. These devices were made available through Lighthouse partnerships with Parker, CDW, Volara, and Amazon; the project will distribute an additional 300 devices upon completion. While Eskaton provided its Lighthouse devices to residents as consumer-based product versions, Front Porch distributed its tablets with mobile device management software owned and managed by Front Porch.

Training and Curriculum Development: Training and curriculum were device-agnostic, simple, accessible for all literacy levels, and featured written materials and instructions (i.e., not all digital). Translations of all printed materials were made available to residents and service coordinators. The Lighthouse for Older Adults approach to curriculum and

learning focused on only the most important tasks and instructions for new users to know and understand, with content heavy on images and with high-contrast readability.

Peer- and Community-based Learning and Support: To sustain adoption and learning, support was offered through "pods" and small learning groups. After the completion of the three workshops, resident ambassadors and/or staff hosted weekly office hours in multiple languages to offer additional technology and social support. Resident ambassadors were identified by service coordinators for their social and technical skills. Resident ambassadors received their devices and training one to two weeks prior to deployment to the full community.

This peer-to-peer program structure offered several benefits. It increased the adoption of the devices among the residents, as well as the likelihood of residents seeking out support from a familiar, on-site person. This, in turn, significantly reduced staff burden to provide ongoing technology support.

Outcomes

A 2021 evaluation of the Lighthouse project by researchers from the UC Davis School of Medicine Office of Research's Evaluation Unit is ongoing and draws upon findings from pre- and post-intervention surveys, focus groups, and key informant interviews with participants, staff and project volunteers. Early outcomes include:

Social connectivity increased. Of 20 residents who participated in the RPD, 100% reported feeling more socially connected, and almost all (19, or 95%) said their Google devices helped them stay connected with family and friends. Of the 20, 18 (90%) reported feeling less lonely. These findings would be significant for any community of seniors but were particularly so during the shelter-in-place restrictions imposed by the COVID-19 pandemic.

Participants continued using their devices. Three months into the RPD intervention, 90% of participants reported feeling "somewhat" or "very confident" using their devices, and over half (55%) used their devices at least once per day. Video calls were the most popular feature, but many also used the devices to seek information (80%) or listen to music (75%).

Technology encourages in-person engagement and communication. In our first three Lighthouse communities, beyond using the devices to connect with the outside world, in-person communication and engagement is also increasing as residents join together to learn more about using the devices, try out apps and translation features, and/or take advantage of office hours and peer learning groups.

Challenges and Pitfalls to Avoid

For some, new tech devices are a tough sell. Some residents did not want to learn a new device because they already had one; others faced visual or cognitive challenges, were concerned about privacy and security, were reluctant to attend classes, or did not find it relevant. Across the first three Lighthouse communities, approximately 18-30% of residents initially declined to participate.

Residents need customized support. Many residents need extensive support with basic skills, such as checking battery charge levels and Wi-Fi connections. Without these supports, residents could become frustrated and give up.

Communication challenges add complexity to technology content. Language barriers, hearing impairment, and masks obscuring voices and lip reading introduced challenges to technology training.

Residents who can potentially benefit the most may also be the most reluctant to participate. Social isolation, physical and/or cognitive impairments were obstacles to participation; additional encouragement and support could help residents overcome these barriers.

Lessons Learned/ Advice to Share with Others

To respond to these challenges, project team members recommend:

- Tailor approaches to meet residents' needs, including exploring what those needs are at the outset (e.g., language translation, device type). Be open to using different devices.
- Support staff within communities to ensure project success. Resident success was boosted by staff roles in encouraging participation and engagement, troubleshooting, and offering insights during planning phases.
- Involve others in supporting residents' learning. Resident Ambassadors can build engagement and trust while reducing staff burden. Language-matched student interns and family members/caregivers also have roles to play. Language translators are most successful if they can offer support in person and are tech-savvy, with knowledge of the project goals.
- Support residents new to the world of technology by providing intensive, one-on-one, in-language support up front, ideally from a familiar, trusted source. (No one used a 1-800 technical assistance phone line offered in the RPD.)
- Build in time for tech adoption. Tech adoption cannot be rushed; it takes time and reinforcement (e.g., "booster" classes or a resident-led social club to practice using tablets and trying out new apps over time).