## LeadingAge® CAST
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Case Study:
# Providing Campus-Wide Wi-Fi in Affordable Housing

United Methodist Communities
Abundant Life for Seniors

PINNACLE COMMUNICATIONS

## Categories:

◆ Increased Access to Health Care, Resident Engagement & Satisfaction, and Increased Staff & Resident Efficiencies

◆ Reduced Social Isolation/ Feelings of Loneliness

**About the Organization**

**Organization Name:**
United Methodist Community—The Wesleyan

**Main Contributor:**
Pamela Joyce, Director of Social Services

**Organization Type:**
Affordable Housing

**Organization Description:**
United Methodist Communities (UMC), based in New Jersey, offers affordable senior housing for residents 62 years of age and higher. The Wesleyan, the subject of this case study, was the first of four UMC affordable housing communities to have property-wide Wi-Fi installed via Pinnacle Communications Corporation for residents and their families. For data security, this community has separate networks for business-related purposes and for residents.

## Project Description

This project involved a full fiber network, CAT6 Low-Voltage (LV) Cabling, and Wi-Fi installation at UMC The Wesleyan.

## Connectivity Model

UMC The Wesleyan has equipment only in common and public areas but is designed to allow each resident in their apartment units the ability to securely access the internet for either personal or telemedicine-related activity through a Virtual Private Network (VPN) over the campus-wide Wi-Fi. Each resident has their own unique log-in credentials to provide greater security given the HIPAA requirements for telehealth and telemedicine visits over Wi-Fi in these environments.

## Infrastructure Business Model

It was partially grant-funded and partially project-supported.

## Ongoing Service and Operations Business Model

UMC pays for ongoing monthly internet service, a low bulk rate, and has managed to have funds approved in its operating budget for this service, making the internet service available to all residents. The monthly fee paid by the project covers 24/7/365 technical support services for these systems for the life of the agreement. If the agreement were to end, the community owns the scalable fiber network, which can be used indefinitely.

## Implementation Approach

The design entailed using special common-area access points throughout the community. No equipment is placed in any apartments, for ease of installation. This ensures there are no resident challenges during the deployment. LV cabling is run on each floor and to the common areas, tied back to the main distribution frame (MDF) where the private branch exchange (PBX) and other equipment is housed.

## Outcomes

*Increased Access to Health Care*

Prior to the installation of Wi-Fi, there was limited telemedicine use reported at this community, even with a pre-designated private room dedicated to helping residents access health services via telemedicine. Once the Wi-Fi was installed, the residents were encouraged to use telehealth services more frequently, because the secure private

network enabled them to have these virtual visits from the comfort and privacy of their apartments or in the private office space with the assistance of a staff person.

### Reduced Social Isolation/Feelings of Loneliness

The new network facilitated connecting residents with their families over social networks, as well as enabling them to use popular audio and video calling apps like Facebook Messenger, etc. Moreover, once COVID restrictions eased, having private access to the internet in the apartments enabled family members who could work remotely to physically visit the resident, be close to them, to socialize, and even work onsite at this community, which facilitated increased family time.

The residents of this community came from diverse backgrounds and often spoke different languages. Internet access provided non-English speakers access to cultural content in their own native languages. One of the residents opted to go to the "computer room" to access culturally relevant information in Hindi, typically spoken in India. With the integration of Amazon Echo devices donated by a third party, some of the Spanish-speaking residents accessed information, entertainment, and content in Spanish. Lastly, one resident recently lost her dog and experienced increased anxiety. Staff encouraged her to use the Amazon Echo's "dog sounds" to soothe and comfort the resident. This eased the loss of her beloved companion. She reported feeling less lonely. Thus, per reports of the leadership, community-wide access to this network reduced feelings of isolation and loneliness and provided another tool for staff to address resident quality of life.

### Increased Resident Engagement and Satisfaction

Many residents did enjoy the addition of Wi-Fi. Of the 60 residents in this community, more than 25 residents are now using Wi-Fi regularly and more residents are slowly adopting the technology. Prior to this Wi-Fi installation, only two residents had Wi-Fi agreements directly with a local cable provider. In addition, the system helped some residents with anxiety and sleep issues through playing calming sounds on Amazon Echo to aid with better relaxation and sleep, which improved their quality of life and satisfaction. Another example is a resident, a Jehovah's Witness, who used the Amazon Echo to connect with the church via broadcasts, podcasts, and live streaming.

### Increased Staff and Resident Efficiencies

We encourage each resident to keep their password private in order to protect privacy and data. This contract enabled the community to apply to the AARP Foundation for the Amazon Echo devices. This grant increased residents' interactions with staff through software that included a platform of activities, announcements, medication reminders, and more.

## Challenges Faced

Initially, having the community-wide Wi-Fi created staff challenges because manually adding each resident and their device onto this proprietary network took more time than anticipated. Each resident then had to log in with a password and be taught how to use the device. This had to be repeated several times with each resident, over time, due to their general lack of familiarity with technology. The initial log-in of each device is a one-time process, so the network does remember each device and ties that back to the individual's proprietary passcode.

Due to COVID restrictions, it was challenging to add residents and onboard them onto the network since restrictions limited residents' access to training and to setting up their devices with the help of a staff member. The biggest challenge was familiarizing each resident with the device and its uses, as well as continually supporting them in using technology. Working with each resident independently to get them up and running took several visits and several reminders about how to access devices.

## Lessons Learned/ Advice to Share with Others

Providing a Wi-Fi instruction sheet to every resident with their unique passcode is extremely helpful in the onboarding process. Allowing for much more time than anticipated to roll out the program is advisable. Dedicating an on-site tech support person would be ideal. On-going resident "smart speaker" groups who gather to share experiences and learning is also helpful.