CASE STUDY

inviacom

Contributor:

Howard DeWitt

Executive Director

Campus-Wide blanketWiFi™ at Croasdaile Village Retirement Community Separately Accommodates Residents, Guests, Administrative, and Medical

Categories

- Prolonging Independence/Aging in Place
- Functional/Health Outcomes
- Staff Efficiencies
- Quality of Life/Satisfaction of Care

Organization Name

Croasdaile Village Retirement Community

Organization Type

Life Plan Community (LPC)

Other Partners

Providers of affordable senior housing, experiential learning program developers, and voice-activated software developers.

Organization Description

Located near Durham, North Carolina, Croasdaile Village is a not-for-profit, faith-based CCRC that offers premier services, amenities and care. It is affiliated with The United Methodist Retirement Homes, Inc., with 131 detached homes, 269 apartment homes, and assisted-living services. Situated on a 110-acre campus, Croasdaile Village is one of the most popular choices for retirement living in the Triangle and the surrounding area. A 77-million-dollar construction-expansion project is scheduled to complete in Fall, 2020.

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Project Description

Croasdaile Village previously attempted a capital-expenditure installation of a campus-wide WiFi system using a local supplier, which fell short of delivering a reliable Internet signal to residents and staff. Complaints directed toward management quickly escalated. Some residents had equipment right outside their villas and could not get a signal. Few could access the Internet consistently at the promised bandwidth. The local supplier installed one network and one shared Internet source.

"Our IT provider at the time said, 'don't go to any company, I can do this for $14,000, and it will work like a charm,'" says Howard DeWitt, Executive Director of Croasdaile Village. "Well, he did, and it didn't."

inviacom proposed a considerably more advanced solution that involved several manufacturers with proprietary implementation, equipment, design, and technology, promising campus-wide, wireless, high-speed Internet with 24/7/365 customer support. inviacom is an industry leader in this approach of providing campus-wide WiFi.

"I was very skeptical at first," says Howard, "I thought it was too good to be true."

Several endorsements from Executive Directors who are current inviacom customers allayed Howard's concerns.

"I knew all of the Executive Directors at those communities," says Howard, "and they all said, 'what inviacom says it can do—it can do.' I gained a lot of confidence at that point."

inviacom removed the ineffective network and hardware and installed a custom-designed system that worked exactly as planned from initial launch. In fact, inviacom recently replaced that original system with a 100-percent upgrade, using the latest technology, at no capital cost to the community, and with no adjustment to the monthly service fee.

inviacom establishes long-term partnerships and constantly updates customers' network applications with new equipment and software, so they never have to worry about keeping pace with continuous technology advancements.

"There are no dead zones," says Howard. "Residents can sit on the deck of the pool or in the parking lot and use their iPads™ and Smartphones™. We have residents with anywhere from eight to 14 wireless devices in their apartments, many running off our inviacom system."

System Type

inviacom offers CCRCs turnkey campus-wide, high-speed wireless Internet networks in a no-capital investment, operational-expenditure (op-ex) model.

The payment model is like large cable providers—clients are billed monthly and inviacom assumes all capital costs. Capital-expenditure models are available on request.

inviacom assesses, implements, designs, engineers, installs, services, maintains, upgrades, and provides ongoing customer support for secure and reliable WiFi that transforms an entire property into a WiFi hotspot—edge-to-edge coverage of a campus with no signal drop-off.

inviacom installed its standard four individual, robust Internet networks at Croasdaile Village one each for residents, guests, administrative, and medical. It introduced two Internet signals from two separate carriers for redundancy: a fiber backbone from one carrier and a coaxial source from a second carrier.

"Plug-and-play methods using equipment from one manufacturer will not work," says Kevin Merrill, Business Development Director for inviacom.

inviacom keeps pace with the ever-changing advancements in wireless technology and deploys it for client applications. It has solid, established relationships with a wide variety of IT-equipment manufacturers, which allows inviacom to assemble the newest, best-suited equipment and software to match the unique requirements of each application. No other provider does this.

inviacom offers a basic wireless Internet service for residents, and the client pays a monthly service fee to inviacom, but any individual resident can request an ala-carte upgrade for higher download and upload speeds and receive a separate bill. At Croasdaile Village, 15 percent of its residents have upgraded to higher-speed wireless Internet, including retired doctors and professors who still download and upload large documents and files. The basic service is more than acceptable for 85 percent of the residents.

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Business Model

Croasdaile Village is a Continuing Care Retirement Community (CCRC), where residents can live independently in apartments or cottages in and explore the community-at-large, until such time that they may need to rely on the additional services provided—including assisted living, or in the nursing home on the property.

"It's important that residents making the transition from independent living to assisted living maintain the same level of connectivity," says Howard. "inviacom makes that possible."

Wireless Internet is the most requested amenity in senior living. Many residents own multiple digital devices that can quickly soak up limited bandwidth—phones, tablets, laptops, Smart TVs, and voice-activated assistants. More of the daily applications, functions, and records of CCRCs are online, and they require reliable, responsive wireless Internet, especially in the medical field. CCRCs require technology that exceeds what most ISPs provide in a typical capital-expenditure model, and Executive Directors have neither the time nor inclination to manage and maintain equipment and networks, often using antiquated copper- or coax-cable infrastructures.

This was the case, as stated, with Croasdaile Village, which adopted the most appropriate turnkey solution to meet its current needs and capacity, with the scalability to expand to accommodate future growth. Croasdaile Village recently built 58 houses wired for Smart Home technology, and the latest upgrade by inviacom was able to absorb that capability.

"As part of our expansion, we are putting charging stations in our cafes, dining rooms, pools—it's amazing where this is going," says Howard.

A trusted partner that can handle all aspects of IT-related issues allows Croasdaile Village to focus on its primary responsibility of resident care to provide a "lifestyle of wellness and overall enrichment, with access to long-term care for a diverse population of senior adults."

inviacom positions itself as a long-term business partner that releases clients of the burden of addressing and resolving continuous IT challenges. This hidden "cost of occupation" of employees and staff being diverted from their assigned responsibilities to resolve resident complaints, may not be calculable—but it is actual—and

it was immediately remediated after inviacom's blanket WiFi™ went live.

"I simply do not receive complaints about our wireless Internet," says Howard.

Implementation Approach

inviacom uses a four-stage implementation process to custom-design each blanketWiFi™ network. No two are alike.

Stage One: Site Survey

inviacom completed a site survey of the Croasdaile Village campus that inspected of every building, structure, facility, and room as well as foliage, trees, glass, concrete, steel, poles, wires—even open areas. This application had a 6.5-acre lake to consider, as reflected light interferes with Internet signals. inviacom also accounted for other wireless networks in the area.

Stage Two: Network Design

After the site survey, a four-to-six-week network- and software-design process virtually routed all cable, placed every rack, server, access point, router and wireless antenna on the premises, both indoors and outdoors on throughout the 110-acre campus. The design process includes a simulated installation. At this stage, inviacom expected that the system would function as designed.

Stage Three: Network Installation

inviacom-employed technicians accomplished the network installation—without subcontractors. They ran all Cat6 cable and installed all racks, servers, access points, firewalls, wireless point-to-points, and wireless antennae. inviacom engineered the Croasdaile Village network to the exact required specifications during installation. Their systems are designed so that every device can detect at least three access points and connect to the one that provides the strongest signal.

Stage Four: Network Launch

The network launch was a community-wide event. An inviacom client-relations team devoted three weeks with Croasdaile Village residents and staff during group and one-on-one sessions and connected every device in the facility to the new blanketWiFi™ system. inviacom created an individual profile for every resident and staff member with a unique user name and password to firewall every device and manage its specific download and upload speed.

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Outcomes

Due to inviacom's blanketWiFi, senior residents can freely engage in online social interaction that studies have proven to be integral to their mental and physical well-being. This is especially beneficial for those residents making the transition from independent living to assisted living. Guests can remain connected to the "outside" with no interruption to Internet service—further incentive to visit Croasdaile Village, which, naturally, helps to improve resident's the state of mind. Guests can also share their "outside world" with residents seamlessly and reliably.

Administrative can communicate via tablet-based applications more effectively with colleagues, management, and across departments to facilitate smoother communications and quicker response to resident requests and emergencies.

Medical personnel can access residents' electronic medical records in real-time, dispense and monitor prescription medication, schedule medical and rehab appointments—all from their own tablets.

Lessons Learned

Due to campus size, number of devices, and the variety of customers served—residents, guests, administrative and medical—Croasdaile Village required the interface of multiple Internet carriers and hardware manufacturers, combined with custom-built software, to implement a viable solution for this application. Plug-and-play approaches for similar applications are proven as largely ineffective.

Devices need to detect numerous access points to optimize connectivity to the Internet at maximum signal strength. Cell phones have the weakest antennae and are the most-used devices. Android devices quickly look for the strongest signal with minimal noise. Apple devices (which comprise most devices used at Life-Plan Communities) tend to hang on to an existing signal for as long as possible before switching to a new access point.

"The IT aspect of our industry is going to take over our operations," says Howard DeWitt, Executive Director, Croasdaile Village.

Advice to Share with Others

Customers respond to the operational-cost, custom-designed WiFi model because it is turnkey, maintenance-free, cost-effective, scalable—and it works.

Review the existing Internet infrastructure to determine its age and capacity to ensure it can accommodate present-day networks and equipment. Technology is changing rapidly enough to consider the replacement of any infrastructures that are approaching five years in service.

inviacom is an Internet provider that offers fully managed, campus-wide WiFi solutions that keeps pace with the ever-changing technology to provide residents with the level of connectivity and support they have come to expect. Relieving their clients of this responsibility, in turn allows them to focus on their primary function of offering a "lifestyle of wellness and overall enrichment" to their residents.

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