



High-Performance Wi-Fi Improves Elder Healthcare Services



“Wi-Fi 6 connectivity enables our residents and nurses to do more than they could before. They can now stay connected throughout the facility, and we’re able to focus on our core business. It will pave the way for us to do more for our residents in the future.”

WALT GANT,
DIRECTOR,
HACKENSACK MERIDIAN HEALTH



The Challenge

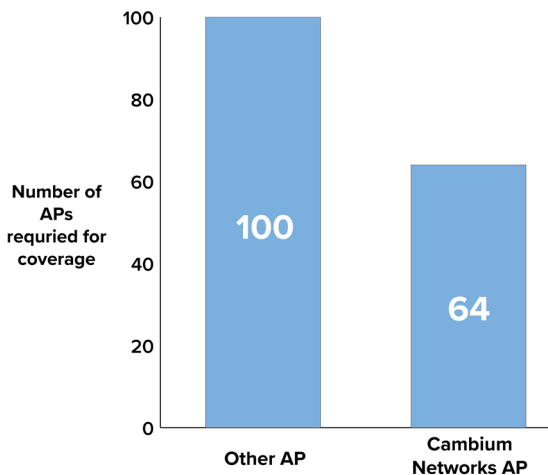
MANY ELDER CARE FACILITIES ARE STRUGGLING TO PROVIDE CARE. With significant shortages of nurses and caregivers, inflation driving increasing costs and the lingering COVID issues, facilities are challenged to provide security and comfort. For modern elder care facilities, connectivity is a fundamental building block for activity programs, healthcare services and business efficiency. Residents want the ability to connect with friends and family. Caregivers value monitoring and treatment scheduling. Operations needs reliable performance at reasonable costs.

Based out of New Jersey, Hackensack Meridian Health’s mission is to be a leader of positive change, and their vision is to offer human-centered, accessible and affordable care. The Villas, one of Hackensack Meridian Health’s newest assisted living facilities, needed a self-sustaining connectivity solution to support a high number of residents, employees and the latest devices. At the same time, the solution needed to be cost efficient to fit the budget.

The Solution

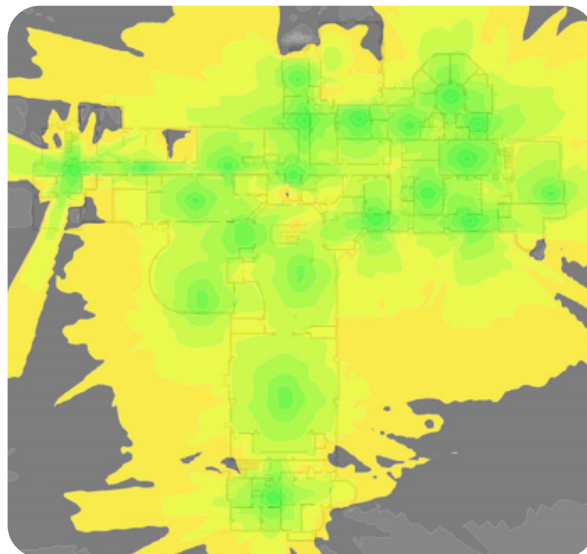
THE VILLAS, A HACKENSACK MERIDIAN ASSISTED LIVING FACILITY, completed in September 2021, is a brand-new \$30 million dollar state of the art facility with 130,000 square feet comprising of 110 rooms, 15 office rooms, a dining area, an indoor pool and other amenities. The nursing stations are the busiest locations that needed higher density connectivity. These areas needed a solution with Wi-Fi 6 capabilities that would deliver more simultaneous video streams and support more concurrent users. The solution also needed to enable future IoT initiatives, such as sensors and controls.

Future Technologies Venture, LLC planned the network design and acted as lead system integrator. They needed to provide a solution that would reduce costs, improve efficiency and be





backed by a trusted supplier. Other proposed options they considered required as many as 100 Wi-Fi access points (AP) or were not Wi-Fi 6 capable. Wide coverage and high performance were essential for the Villas since residents and staff needs required higher density and capacity.



The Results


THE CAMBIUM NETWORKS SOLUTION provided complete coverage and capacity with 64 APs – immediately reducing the hardware and associated installation costs by one third. The coverage and capacity were confirmed by using the Wi-Fi Designer software program from Cambium Networks which clearly maps the location and provides a heatmap view of the coverage strength.

Future Technologies installed Cambium Networks' Wi-Fi 6 APs and switches, all of which are managed under the cnMaestro™ Essentials wireless network management system. The installation is composed of:

- 58 XV2-2 Wi-Fi 6 indoor APs
- 4 XV3-8 Wi-Fi 6 indoor APs
- 10 cnMatrix™ EX2052-P switches



There are 13 spare units for installation should the facility need to extend coverage. The high-performance and high-efficiency Wi-Fi 6 APs bring more capabilities to the facility than before—



and the XV3-8 APs are strategically placed in high-density areas, including the dining and theater rooms.

By using the cnMaestro Essentials cloud management system, the entire network is monitored and managed from one screen and the service comes at zero operating expense. Future Tech designed the solution so the facility can self-maintain, and there is a sustainment contract for Future Tech to help the facility as Tier 2 support.

“We selected Cambium Networks for this project based on their end-to-end solution portfolio capabilities to meet the technical and commercial requirements of our client. Being able to reduce the total access point count by 35% and having a single pane of glass to manage the system really made a big difference in meeting these needs.”

Peter Cappiello,
CEO,
Future Technologies



ABOUT CAMBIUM NETWORKS

Cambium Networks delivers wireless communications that work for businesses, communities and cities worldwide. Millions of our radios are deployed to connect people, places and things with a unified wireless fabric that spans multiple standards and frequencies of fixed wireless and Wi-Fi, all managed centrally via the cloud. Our multi-gigabit wireless fabric offers a compelling value proposition over traditional fiber and alternative wireless solutions. We work with our Cambium certified ConnectedPartners to deliver purpose-built networks for service provider, enterprise, industrial, and government connectivity solutions in urban, suburban, and rural environments, with wireless that just works.

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