Technology and Senior Housing

As boomers transition to senior housing, keeping up with technology needs is crucial.

By Matthew Matlack / *Multifamily Broadband Council and Ruckus Networks*

Nearly five years ago, my mother moved into a senior housing facility. Despite the uncertainty of living in a new place, she was comforted by having a cellphone and a laptop that supported video calls. The ability to quickly and easily remain in contact with her family across the globe was reassuring and provided a level of familiarity that helped ease this transition.

Today, senior living facilities have the same technology demands as hotels. Residents require the ability to watch on-demand entertainment via wireless access on numerous mobile devices. Visitors expect a guest wireless network to be available for working professionals to conduct business or grandchildren to play games. Video surveillance cameras may be used indoors and outdoors to help maintain a high level of awareness. The need for technology in senior communities will continue to grow.

I recently worked with Grand Retirement Communities in Fayetteville, Arkansas, which made a technology investment in a robust wireless system. An adviser to the project, Rowland McKinney, said, "We found the solution to be tried and true, looking forward in the internet of things (IoT) management space. Senior living has a requirement that must be clearly understood. The choice of a solid partner network is key in helping us navigate Wi-Fi and IoT challenges of today and the future."

Besides planning for standard wireless connectivity for residents, administration and guests, being ready for future wireless innovation was a large consideration for the community. Leveraging the intelligence in a wireless network allows senior and assisted living communities to use several interesting applications, such as

- Sensors that detect what could have been undetected falls and send alerts to inform staff immediately
- Location services that give directions to visitors and identify where residents are at any given time
- Sensors that track valuable medical equipment and resources, such as wheelchairs, giving facilities a centralized way to track inventory in real time
- Door locks that can be automated during specific times of day or in certain areas of a building and opened by facial recognition or fingerprints to limit ingress and egress
- Building automation solutions, such as thermostats, monitored via wireless networks.

A secure wireless system can help residents with personal tasks, such as paying bills, calling for personal transportation from companies such as Uber and Lyft, or ordering from e-commerce sites. For residents with diminished capacity, individual permissions on the network can restrict or monitor access to certain sites as appropriate.

For residents receiving higher levels of care, medical records can be securely updated and automated in real time. This gives health care professionals immediate access to updated test results, dietary updates and key information to help nurses, doctors and specialists make informed decisions in the best interests of patients. In the past, caregivers waited for days, if not weeks, to hear about personal information. Electronic medical records can now be updated on several devices, such as phones, laptops and monitoring devices, and the information can be made centrally available. If a resident is waiting to move from one facility to another, real-time information enables administrators to make these decisions sooner. Emerging technology such as 802.11ax or Wi-Fi 6 brings increased performance to clients, especially in dense environments.

Wireless end-user devices will continue to proliferate. Today, many seniors use smart watches and smart home media devices such as Google Home or Amazon Echo. These devices can integrate with thousands of other home devices so a senior can easily control the thermostat, change the lighting, check the news and order an item online with a simple voice command.

Senior living communities can learn what their residents use a wireless network for by capturing data analytics. This can help identify trends and monitor usage per client. Seniors benefit from these innovations by staying connected to the world around them – a connection central to the comfort and happiness of a demographic that in the past has at times felt left behind. ❖

Matthew Matlack is a member of the Multifamily Broadband Council and enterprise account manager at Ruckus Networks. He can be reached at matthew.matlack@arris.com. MBC Executive Director Valerie M. Sargent also contributed to this article. For more information on MBC, please contact her at vsargent@mfbroadband.org or 949-274-3434 or visit www.mfbroadband.org.