

TOP 5 SENIOR LIVING

TECHNOLOGY

TRENDS FOR 2020



 **SENIOR HOUSING NEWS**

Top 5 Senior Living Technology Trends for 2020

The COVID-19 pandemic has made 2020 a year of upheaval for the world and the senior living industry. In a matter of weeks, U.S. senior living operators radically changed fundamental aspects of their operations to mitigate the spread of the virus — turning to technology in the process.

From telehealth to voice-enabled smart home platforms, artificial intelligence to the infrastructure supporting all this technology, senior living providers are acting fast to put new capabilities in place and ensure that existing systems are performing to their full potential.

In fact, urgency to leverage digital engagement is greater than ever, says CDW Healthcare Strategic Business Development Manager for Senior Care Ginna Baik.

In a year unlike any other for senior living, this white paper examines five key technology trends now at the forefront: telehealth, infrastructure, voice-enabled smart home technology with health monitoring, artificial intelligence, and security/safety.

CDW Healthcare and Senior Housing News hosted a roundtable event in March 2020 during which industry leaders shared their ideas about the top tech trends shaping senior living in 2020. This white paper is based on the thought leadership from that event.



Trend #1

Telehealth

Senior living providers have long seen the promise of telehealth as a way to reduce hospitalizations and provide more convenient and timely care for residents. But with the rise of COVID-19, telehealth has become a must-have technology.

“Virtual physician visits via video chats, for example, is going to be a significant trend moving forward,” Baik says.

Whether through video or audio, telehealth enables residents to connect with clinicians virtually, which is critical in maintaining social distancing and freeing up physical hospital space for the most urgent uses. Recognizing this, the Centers for Medicare & Medicaid Services (CMS) granted new flexibilities to promote the widespread use of telehealth. In addition, by enabling residents to use video chat or other telehealth capabilities, senior living providers have a better chance of getting residents evaluated by clinicians at the earliest onset of symptoms, increasing the odds of catching infections — including COVID-19 — early and arresting their spread.

“In the past, restrictions around telehealth reimbursement have stifled widespread adoption, but telehealth technology itself also has not always been friendly to the needs of senior living. For example, a lack of closed captioning is an impediment for older adults who have compromised hearing.”

- Dr. Kim Perry, Senior Vice President, Chief Medical Officer, Kindred Healthcare



That said, Kindred has been utilizing telemedicine successfully for years. One key for success is in how on-site caregivers or clinicians present the technology, says Dr. Kim Perry, senior vice president and chief medical officer for Louisville, Kentucky-based Kindred Healthcare. If patients or residents interact with someone who is enthusiastic about the technology, presents it in a way that is not intimidating, and emphasizes the convenience factor in not having to visit another facility, that tends to work well.

“The way it’s presented, I think, is extremely important,” Perry says.

Going forward, telehealth is poised to become increasingly seamless as the technology becomes more user-friendly. Google, for example, is already testing ways of using Google Glass for telehealth and telemedicine, says James Lee, Google’s head of sales and partnerships for Glass.

Google, Google Nest Mini and Google Glass are trademarks of Google LLC.

Trend #2

Technology Infrastructure

The average age of a senior living community across 31 of the largest U.S. markets is 21 years, according to data from the National Investment Center for Seniors Housing & Care (NIC). So, it's no surprise that many communities have outdated technology infrastructure — and now it's abundantly clear that no provider can afford to ignore this issue or take half-measures to address it.

As senior living operators rushed to implement technologies in response to COVID-19, they quickly ran up against infrastructure limitations.

"It's important to make sure your wireless and your bandwidth are in check," Baik says. "It becomes even more important that the foundational connectivity and distribution of that WI-FI is done correctly with the right kind of investment."

Building out a technology backbone can be challenging in older buildings even in the best of times, but now there are significant additional roadblocks. For example, visitor limitations can make it difficult or impossible to get into a building to lay new cable. There are some other options, including "line of sight" connectivity options that don't require fibre optics, or utilizing tech that creates cellular hotspots.

"Our CDW Healthcare team starts by first assessing and helping our customers with today's needs, and then we help them plan out what's feasible in the next two to three months and beyond to ensure they have the infrastructure in place that will appropriately meet the needs to residents and associates now and also further down in their journey," Baik says.



Infrastructure aside, the widespread adoption of technology among those who have not yet moved into senior living will become a driving force for the future.

“ There’s so much opportunity to do things that have never been done before. We need to change the conversation. ”

-Simona Valanciute, CEO of San Diego Oasis (a non-profit educational program for adults 50+ who want to continue to learn and be productive throughout life)



A Telehealth Jumpstart

On the heels of the COVID-19 crisis, CMS made a slew of changes to enable easier access to telehealth and Medicare-reimbursement for services, including:

- Expanding telehealth coverage to all beneficiaries
- Waiving Health Insurance Portability and Accountability Act (HIPAA) penalties for providers that use apps such as FaceTime or Skype for telehealth
- Allowing for Medicare coverage of audio-only visits
- Allowing more than 80 additional services to be provided via telehealth, including initial nursing facility and discharge visits

– Catching Up –

Many providers will relate to the situation of Continuing Life, which operates seven continuing care retirement communities (CCRCs) in California. Some of the company's buildings date back to the early 1990s and 2000s, so they were not built to support today's technology needs, and are difficult and expensive to retrofit. Meanwhile, investments in tech lagged other areas over the years, in part because the company wanted confidence in the software platforms before sprinting forward.

"It wasn't necessarily our biggest focus in the past, and suddenly it is, because the operations teams want systems in place to provide the highest level of service to residents through solutions such as mobile EMR, telemedicine, plant maintenance systems," says Clint Marsh, director of marketing and technology innovation.



Even before the COVID-19 crisis, Marsh was focused on building up Continuing Life's infrastructure to expand network capabilities.

“We're committed to expanding our capabilities to provide an even better experience for residents.”

-Clint Marsh, Director of Marketing and Technology Innovations, Continuing Life

About six months ago, Continuing Life hired Cori White as director of IT and information security to help spearhead the tech infrastructure expansion, and with her leadership and a company-wide commitment to the effort, Marsh is optimistic.

"We're committed to expanding our capabilities to provide an even better experience for residents— so, we're moving quickly to make it happen," he says.

Trend #3

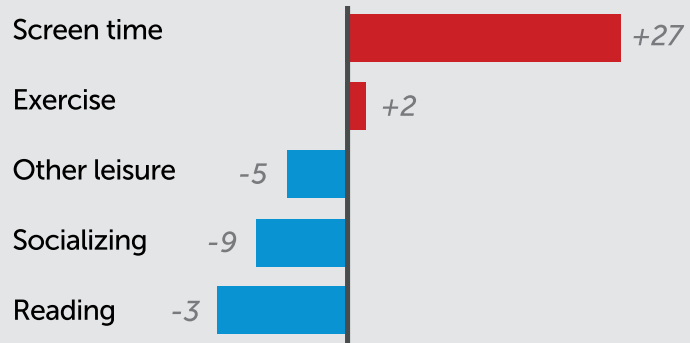
Voice-Enabled Smart Homes with Health Monitoring

One unfortunate effect of COVID-19 was social distance and in some cases, confinement among senior residents, as communities closed communal dining areas and other shared spaces. In this environment, smart home technology — already a hot trend in recent years — gains even more importance.

Those 60 and older now spend more than half their daily leisure time — 4 hours and 16 minutes — in front of screens.

For older Americans, leisure time looks different today than it did a decade ago

Change in daily time use 2005-2015 (minutes) for people 60 or older



Note: Based on non-institutionalized people. Source: Pew Research Center analysis of 2003-2006 and 2014-2017 American Time Use Survey (IPUMS).

Particularly with voice-enabled options, residents can easily control temperature and lighting to maintain a comfortable setting. They can harness smart home tech to more easily connect with family and friends through digital platforms. And entertainment can be accessed as easily as telling a virtual assistant, "Play some Frank Sinatra."

Smart home technology also is more sophisticated about monitoring residents' health. This can be done via sensors that capture information like body temperature, when someone uses the restroom or gets out of bed. Even something as simple as a morning voice check-in can eliminate the need for staff members to do more labor-intensive and intrusive wellness checks. And from a health care perspective when it comes to limiting the contraction of virus, flagging signs of infection early by seeing changes in health indicators or behaviors is mission-critical.

Meanwhile, as part of its sweeping moves to create new flexibilities as a result of COVID-19, CMS has expanded Medicare coverage of remote patient monitoring, including for those with chronic conditions that are not due to the coronavirus.



Over the last 20 years, the percentage of **people 65 and older** who are internet users increased from 14% to 73%, and **53% now own a smartphone.**

Source: Pew Research Center

"It is all about getting ahead as much as possible by predicting needs and protecting the residents," Baik says.

Introducing smart home technology is a goal for many senior living communities,

though those that have implemented the technology have to weigh the costs and benefits of smart home programs and consider what is most cost effective and necessary.

Answering these questions is a pressing issue, because turning resident apartments into Smart homes is not simple or cheap. Providers may need to charge residents for certain smart home capabilities. But what residents tend to most value — features that support greater independence — is sometimes at odds with the safety and security features that adult children value most highly.

Providers can start by identifying key goals that they want to accomplish with the help of smart home technology. And providers should also keep in mind that the distinction between “lifestyle” features and “health and safety” features is not necessarily clear.

For example, the ability to turn the lights on with a voice command might not seem like a health care feature, but if it means that a resident can navigate to the bathroom in the middle of the night and prevent a fall, that is a huge safety win, Baik notes.



Google Makes Senior Living ‘Smarter’

Google announced in May 2020 it would be giving roughly 1,000 of its Nest Hub Max devices to residents of seven Merrill Gardens senior living communities in Washington state, as a means for them to connect with family and friends while quarantined as a result of the COVID-19 crisis.

The company is also rolling out an experience for those residents allowing them to access a preloaded list of contacts to streamline their video call activity.

Trend #4

Artificial Intelligence

In addition to smart homes with health monitoring features, senior living providers are introducing wearables for residents and staff, as well as other technologies that capture myriad data points. Artificial intelligence (AI) is how this data can be transformed into meaningful information that drives more efficient, effective operations.

Take a smart thermostat as an example. Through the power of AI, it can learn what temperatures are most comfortable for a particular older adult, and also recognize when someone is forgetting to adjust the thermostat when the temperature fluctuates. By automatically adjusting, the thermostat might not only be keeping a resident comfortable, but prevent that person from becoming dehydrated. That in turn prevents a slew of potential negative health outcomes — all without any staff intervention needed.



“AI has the opportunity to not be an additional step, but rather to be a part of how you live your life. In regards to managing the care that comes to you”

-Ginna Baik, Strategic Business Development Manager for Senior Care, CDW.

In a similar way, AI is being harnessed on the business side to crunch data and inform decisions about when to take particular actions or where to allocate resources.

“We are truly, on both the residential and operation side, trying to lay that foundation,” Continuing Life’s Cori White

says. For example, she wants to increase data warehousing and analytics so that the IT team can pass along insights to Marsh about where and how to deploy marketing.

“All of this data is at our fingertips,” she says.

Kindred Healthcare is pushing AI for a tricky and important purpose: identifying when a patient would benefit most from converting to hospice care. When patients die without receiving hospice care, that can compromise the quality of their final days. It’s also a cost issue from a provider standpoint, if patients are not being treated in the most appropriate setting with payments tied to that level of care.

“We’ve had 17% of our patients die at our facility without any hospice,” Perry says. “That’s high. To me, it’s not acceptable.”

She would also like to see hospitals using AI more frequently to identify which patients would benefit most from being in a Kindred facility in the first place.

Trend #5

Security and Safety

COVID-19 has led to the ramp-up of technology adoption in senior living, but many providers were already pursuing ambitious implementation programs to meet the next generation of consumers and attract and retain the best talent prior to the pandemic. In the rush to tech, maintaining safety and security is a paramount concern that cannot be overstated.

"From my standpoint as the director of IT and information security, once we provide that device for residents, we have to ensure the security of that device." Continuing Life's White says. "How do we ensure that and make sure we're protecting the residents?"

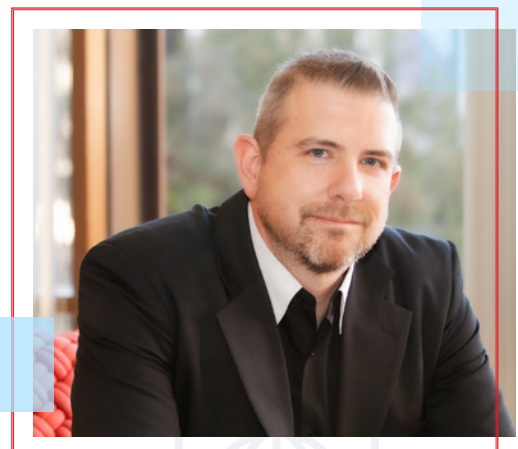
Utilizing enterprise systems that are compliant with relevant laws and regulations such as HIPAA, rather than cobbling together platforms with consumer tech, is one best practice. For example, Aiva Health offers a voice-powered personal care assistant designed specifically for assisted living settings. It includes voice assistant fleet management, centralized content control and enterprise security and communication features, according to Enterprise Director of Sales Jessica LeBouf.

But safety and security is not only a matter of data protection; there's a human component as well. Although incoming senior living residents are increasingly tech-savvy, there is still a pressing need for education and training so that they know how to use technology smartly and safely.

White shares the story of a resident who was in tears, unable to connect to the internet even after multiple visits to a consumer retailer's tech support. The issue, White discovered, was simply that a device was not plugged in correctly, and the issue took her about two minutes to resolve. This might not seem like a safety and security issue in terms of data being stolen or computer systems being compromised, but there's no doubt that this resident's tech issues compromised her feeling of security.

James MacRae, innovations project manager with Masonic Homes of California, says the industry needs to continue look outside senior living for ideas.

"As technology is always changing and evolving we need to engage the tech industry, think outside the box and see if other solutions for other industries would work for the senior living industry," he says.



-James MacRae, innovations Project Manager
Masonic Homes of California

CONTACT

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