THE WELLNESS REVOLUTION
SHAPING SENIOR LIVING

info@seniorhousingnews.com | 312.268.2420
seniorhousingnews.com

PHOTO COURTESY OF HILTON
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>About Senior Housing News</td>
</tr>
<tr>
<td>3</td>
<td>Key Takeaways</td>
</tr>
<tr>
<td>4</td>
<td>The Business of Wellness</td>
</tr>
<tr>
<td>6</td>
<td>Wellness Begins with Environment</td>
</tr>
<tr>
<td>11</td>
<td>How Hospitality is Pushing Wellness Forward</td>
</tr>
<tr>
<td>17</td>
<td>The Person-Centered Approach to Mind, Body and Spirit</td>
</tr>
<tr>
<td>28</td>
<td>The Wellness Revolution is Here to Stay</td>
</tr>
</tbody>
</table>
ABOUT SENIOR HOUSING NEWS

Senior Housing News (SHN) is the leading source of news and information covering the senior housing industry.

With a national reach of more than 30,000 professionals, SHN boasts a readership that includes senior housing operators, developers, banking institutions, real estate investment trusts, private equity and service providers catering to the industry.

SHN provides a cutting-edge and targeted platform unlike any other publication, giving you the opportunity to reach decision-makers every day.
The word on everyone’s lips today is one that senior living is in a unique position to provide: wellness.

No matter the business sector, wellness is a hot topic. In technology and health care, in restaurants and hospitals, the concept is everywhere. It’s in senior living too. That’s because the areas of a resident’s life that senior living aims to address are all wellness-based.

For the health of their businesses and the future of their residents, it’s time for senior living providers to embrace the wellness challenge and lead the charge. Wellness is not an ancillary piece of the senior living business. It is the business. Senior living providers need to do it better. This report shows how they can.

**In these pages, senior living providers will learn:**

- Seniors need whole-person wellness — a focus on multiple, interrelated areas of a person’s life
- Baby boomers demand more attention on wellness than do members of the Greatest Generation
- Senior living environments are being re-defined as spaces to promote wellness, impacting site selection, building design and technological infrastructure
- Big-name hotels are setting the pace for wellness, and senior living can and must learn from hospitality’s innovative practices
- Person-centered offerings in dining, fitness and health care must be the norm
- The most promising technologies for enhancing wellness
Wellness is big business, and business is good.

As reported by the Global Wellness Institute, wellness is a $3.7 trillion industry and growing. From 2013 to 2015, for instance, wellness tourism grew 14% to $563.2 billion — more than double the growth rate of overall tourism in that time.

All over the world, people are spending big to achieve wellness. Though different sources cite anywhere from four to 12 dimensions of wellness, there are five that are most commonly addressed in senior living: the emotional, mental, physical, social and spiritual.

Put these and other dimensions of wellness together and you get the key concept of wellness today: whole-person wellness. It requires a multi-faceted, integrated approach, one that acknowledges the interconnected relationship between different areas of the body, along with the mind and spirit.

If the idea of combining emotional, mental, physical, social and spiritual needs sounds similar to the mission of senior living, that’s right on the money. Senior living providers are already embracing wellness, and seeing the business benefits.

For example, wellness offerings increase resident satisfaction and improve quality of life. That translates to longer length of stay, leading to more stable occupancy and a healthier bottom line for senior living providers.

Lutheran Senior Services, which operates 21 locations in Missouri and Illinois, has achieved an 11% reduction in move-outs to higher levels of care among participants in its “Project Wellness.” New Jersey-based Juniper Communities has extended length-of-stay through Connect4Life, a program that has slashed hospitalizations among high-acuity residents, lowering costs of care.

Source: Global Wellness Institute, “Build Well to Live Well — Wellness Lifestyle Real Estate and Communities,” 2018
These results suggest that wellness-focused senior living providers can strike valuable business arrangements with health systems and payers, which are on the hunt for partners to help them improve outcomes while lowering costs for their patient or beneficiary populations. Consider the recent $1.35 billion acquisition of HCR ManorCare’s operations by nonprofit health system and insurance company ProMedica, which believes it can leverage the platform to help better manage seniors under its care.

Furthermore, senior living residents demand wellness. A 2009 survey of 1,042 senior living residents — conducted by members of ProMatura Group, LLC and the American Seniors Housing Association — revealed that “nonphysical attributes of their communities had a significantly greater impact on their satisfaction than the community’s physical attributes.”

A 2018 International Council of Active Aging survey of 4,063 senior living residents found that wellness programs significantly improve a resident’s quality of life. The impending wave of baby boomers entering senior care — the U.S. Census projects a 105% increase in people over 65 from 2015 to 2060 — will only increase that focus.

“No one wants to be defined by their health needs, their health problems or their functional limitations,” Robert G. Kramer, founder and current strategic advisor at the National Investment Center for Seniors Housing & Care (NIC), recently told Senior Housing News. “We have to deliver both quality of care and quality of life.”

Yet even these findings don’t tell the full wellness story. After all, the wellness story is just beginning, and this report shows how wellness will help senior living residents and providers not just survive, but flourish.

“That would be the aim of … good senior care: the aim to live, live, live until you die — that you’re dancing when you die,” says Mary Tabacchi, a Cornell University professor emerita with the Cornell School of Hotel Administration and a member of the 2017 Cornell Institute for Healthy Futures roundtable.

“That would be the dream of most people,” Tabacchi says. “They don’t want to sit around and die slowly.”

DEPRESSION IS A GLOBAL ECONOMIC KILLER

A 2016 World Health Organization study estimated that the global economy loses $1 trillion annually in productivity due to depression and anxiety disorders, while the AARP Public Policy Institute released in 2018 results of a study that showed an annual $6.7 billion Medicare expense as a result of social isolation.

Students Love Wellness Programs

94% of IL and AL residents are very satisfied or satisfied with overall quality of life

IL or IL/AL properties in ICAA/ProMatura Wellness Benchmarks

87% of life plan/CCRC residents are very satisfied or satisfied with overall quality of life

Life plan, CCRC properties in ICAA/ProMatura Wellness Benchmarks

That would be the aim of … good senior care: the aim to live, live, live until you die — that you’re dancing when you die.

That would be the dream of most people: they don’t want to sit around and die slowly.

Mary Tabacchi, professor emerita with the Cornell School of Hotel Administration
Whole-person wellness doesn’t start with the person — it starts around the person. That means developing communities and spaces within communities designed to address each resident’s wellness goals and needs.

From multimillion-dollar standalone wellness centers to wellness-focused fitness offerings in senior housing, all the way to big-name hotels buying wellness retreats to expand their brands, real estate developers are capitalizing on wellness in a big way. In 2017, the wellness real estate industry represented $134 billion in sales, up 6.4% annually since 2015. Global Wellness Institute projects that sector to expand to $180 billion by 2022.

These are new environments that deliver customizable, person-centered amenities designed to help residents and guests thrive. “Environment” here has two meanings. The first is a physical space designed based on wellness principles. The second is the human environment — the people within the community with whom the person in question interacts.

These two types of “environments” are now being considered in senior living. Whether building standalone wellness facilities or adding wellness-specific areas to existing properties, here is a look at how senior living providers are building wellness into their environments.

**Physical spaces are vital for wellness delivery**

A 2016 report by architecture firm Perkins Eastman defines a wellness center, also known as a Center for Healthy Living (CHL), as “a new building typology that supports seniors through all the dimensions of wellness.” The report adds that these centers “help bridge the gap between the senior living and health care sectors” with a focus on whole-person wellness.

Whether a standalone structure or part of a larger community such as a continuing care retirement community (CCRC), the wellness center is becoming a critical component of the modern senior care offering.
“The purpose of the healthy living center is to, number one, create a health-based system, and two, to create a navigation system that organizes the services around the person, traverses with them through the continuum and collects data along the way so that each person is able to have a more holistic journey through that continuum,” says Steve Shields, CEO of Action Pact Holdings LLC., a senior living consulting, development and design company.

Action Pact joined the Liberty Hospital system to develop and open Norterre, a $60-million multigenerational wellness community now open in Liberty, Missouri. Norterre opened in phases, starting in February 2018, and its first phase was its 65,000-square foot CHL called the Aurora Health and Wellness Center.

This would be the third-largest CHL in the Perkins Eastman study, which studied 14 facilities at an average measurement of 36,776 square feet. Like the term “wellness” itself, these 14 facilities share common principles but differ greatly in their specifics, ranging from 8,000 square feet to more than 129,000. They provide a range of fitness, health care, dining and arts and entertainment offerings, many with an educational element.

These and others show the range of approaches providers are taking to deliver on the concept of wellness. What they have in common is an attention to the impact that the physical environment has on wellness delivery.

“Every operator I think has a different view of what their core vision and mission is, but at the crux of that is an environment of wellness, wellbeing and vibrancy for the residents,” says Mark Shaver, Welltower’s senior vice president of strategy. The real estate investment trust (REIT) views wellness as having four main components: nutrition, hydration, safety and cognitive engagement.

That focus on “environments that promote wellness” was the basis for Welltower changing its name in 2015 from Health Care REIT, Inc. Communities that embrace wellness offer the best solution for an aging population to live well, says John Olympitis, Welltower’s vice president of business development — “not,” he says, “isolated in one’s home, away from the congregant benefits of senior living.”

Whether a community calls itself a wellness center or not, the importance of building wellness into a senior living environment is mandatory.

Every operator I think has a different view of what their core vision and mission is, but at the crux of that is an environment of wellness, wellbeing and vibrancy for the residents.

Mark Shaver, senior vice president of strategy at Welltower, Inc.
Developers target multigenerational communities to deliver wellness

When Action Pact and Liberty Hospital developed the plan for Norterre, the founders figured the first phase should be a CHL. They figured right. In its first 45 days open for business, membership for the Aurora Health and Wellness Center grew to 3,000 people, with 1,500 to 2,000 per week participating in classes. Participant ages run from 12 to 105, with the average participant aged 42.

That drastic age range is central to the Norterre offering, as is the use of the word “multigenerational” instead of “intergenerational,” Shields says. As Shields explains it, “intergenerational” is now used to describe senior living communities that find ways to integrate non-seniors at low numbers, and perhaps not permanently.

“Multigenerational,” he says, refers to a community where all ages are truly mixed, and programming equally accounts for their varied needs.

“This is not a senior living community, but what we all call a ‘senior living community’ is contained within it,” Shields says. “I love CCRCs. I think they’re great. But it is a segregation of sorts.”

To Shields, being multigenerational means satisfying some of the social and spiritual aspects of wellness that a CCRC does not always touch.

“When an independent living resident comes down to lunch [at Norterre], they’ll be eating with all ages,” Shields says. “It is therefore not a removal. It is multigenerational. And that is not a nuance. That is a dramatic model shift. The power of that will not be visible until people can see it. ... It will look different, feel different, live different.”

“Multigenerational” refers to a community where all ages are truly mixed, and programming equally accounts for their varied needs.
We had the opportunity to design [Capital Region] to meet the changing needs of the senior population. We are just trying to incorporate other aspects of wellness above what you normally would see when entering a skilled nursing facility.

Diane Vernon, vice president of business development for FutureCare
Wellness centers, or senior living communities with a focus on wellness, seem to pop up by the day. These take the form of standalone facilities, additions to existing properties or elements in new, larger communities. **Upcoming development includes:**

### Watercrest at Kingwood, from Integrated Property Management
**Kingwood, Texas**

The 174-unit independent living community has announced a massive expansion: 145,117 additional square feet, with 73 more IL units and 24 assisted living. The expansion, date TBD, includes a wellness center.

### The Domain in Austin, from Senior Resource Group
**Austin, Texas**

Senior Resource Group is opening a 230-unit IL, AL and memory care community, which will include a wellness center, theater, library, restaurant-style dining and other wellness amenities. Due open in June 2019.

### Seven-acre community from MedCore Partners and The National Realty Group
**Atascocita, Texas**

A 186-unit IL, AL, memory care community will include a fitness and wellness center, bistro, theater and beauty shop. Due open in March 2020.

### Independent living from MedCore Partners and The National Realty Group
**Georgetown, Texas**

A 314-unit IL community will include a fitness and wellness center, a salon and spa, a dog-friendly walking trail and other wellness amenities. Due open in August 2020.

### Watermark at Napa Valley, from Watermark Retirement Communities
**Napa, California**

Wellness center included in a 195,000-square foot mixed-use community situated on a high school campus. Due open in 2020.

### Zen-inspired 55+ community from The Kendal Corp
**Healdsburg, California**

The Kendal Corporation and the San Francisco Zen Center are partnering to build a zen-inspired, 55+ community. Due open in 2022.
HOW HOSPITALITY IS PUSHING WELLNESS FORWARD

For hotel guests who want to work out in the privacy and comfort of their hotel rooms, the days of pumping out push-ups on the carpet are gone. As are the days of not knowing how to get an outdoor run in an unfamiliar city. Or needing to juggle your schedule to participate in yoga classes.

These wellness perks and more are now found in many of the world’s top hotels. Most of these hospitality leaders didn’t have to stretch their core competencies or risk diluting their ability to deliver a great hotel experience.

Instead, they created strategic partnerships with leaders in other industries — fitness, yoga, spas, dining — to deliver to their guests yet another luxury, personalized experience. In some cases, they are even giving guests the opportunity to create the offering itself.

A look into the hospitality industry offers valuable lessons to learn about wellness delivery. Here are some of our favorites.

“...We know that no matter how determined people are about making healthy decisions while at home, the ability to replicate those choices is often not as accessible as it should be while traveling...”

Ryan Crabbe, former Hilton senior director of global wellness, in a 2017 interview with Adventure Sports Network
Hospitality Trend: Strategic partnerships and acquisitions

From the U.S. to Canada, from the Caribbean to the Mediterranean, hotel brands worldwide are teaming up with other wellness industries to deliver the best to their guests. In 2015, Mandarin Oriental Hotel Group partnered with the Mayo Clinic for its first in a series of wellness and healthy living initiatives.

The hotel developed the Mayo Clinic Healthy Living Programme at its location in Bodrum, Turkey, and in 2017 hosted the Mayo Clinic Healthy Living at MO in Washington, D.C. Both programs offer multi-day packages focused on personalized health assessments, exercise and fitness classes, education sessions and healthy eating, with guests receiving a personalized wellness plan.

And in 2016, Park Hyatt added two new wellness partnerships. Park Hyatt New York teamed up with New York City meditation studio MNDFL to bring a “meditation in residence” program to hotel guests. Park Hyatt also partnered with Dr. Frank Lipman, founder of the Eleven Eleven Wellness Center in New York, to bring his “Be Well” wellness program to the Park Hyatt hotels in New York, Chicago and Washington D.C.

The Hyatt brand has also gone beyond partnerships. In 2017, Hyatt Hotels & Resorts acquired two wellness brands: Exhale, a boutique fitness classes and spa services company with 25 locations throughout the U.S. and the Caribbean, and Miraval Group, a luxury spa with its flagship location in Tucson, Arizona.

In 2014 and 2015, the Shangri-La Hotel in Toronto announced two wellness partnerships: one with Lululemon to bring hotel guests an in-room yoga training video, with mats provided, and another with iRun magazine that built personalized, scenic running routes throughout Toronto based on the guest’s skill and comfort level as a runner.
Hyatt CEO Mark Hoplamazian calls these efforts an expansion into “adjacent spaces” — areas that extend Hyatt’s brand and are core to the company’s global growth strategy.

“We recognize the business opportunity within the [billion-dollar] wellness tourism category and understand the rising demand for wellness offerings among our targeted, high-end travelers,” Hoplamazian said in a statement in 2017.

**Why this matters for senior living:** Along with touching on multiple dimensions of wellness, these partnerships let hotels meet guest needs in a professionalized offering without actually needing to expand their own capabilities, while the acquisitions give these providers access to new business opportunities.

---

**Tech partnerships:**

**Cal-a-Vie health spa and Muse, the Brain-Sensing Headband**

**What it does:** This headband is equipped with electroencephalogram, or EEG, sensors, which detect brain activity and serve as a biofeedback tool. The user wears the headband while meditating, along with headphones, all of which attach to a handheld device. The sensors read the user’s brain activity during meditation and translate them into sound, which the user hears through the headphones. When the user is calm and relaxed — when the meditation is working — the sound is pleasurable. When they are anxious or restless, it is not. They can then use those sounds to redirect their own meditation efforts to help calm themselves. Cal-a-Vie’s nutritional director introduced it because stress can cause overeating.
Hospitality Trend: Fitness in the resident room

In 2017, Hilton rolled out its personalized wellness platform, Five Feet to Fitness. Available at nine U.S. Hilton hotels, Five Feet to Fitness is a specialized fitness-centric hotel room that places workout equipment in the individual hotel room itself, from stationary bikes to weights to yoga.

A touchscreen kiosk lets users personalize their workouts with more than 200 exercise tutorials in over 25 classes.

Westin Hotels & Resorts also offers room-based, personalized fitness. In 2017, it partnered with tech-based exercise bike Peloton for “Rise & Ride with Westin and Peloton.” The program lets Westin guests at nearly 50 locations connect with each other for more than 4,000 live-streaming biking and exercise classes.

**Why this matters for senior living:** As seniors lose mobility, their worlds shrink. Creating exercise options in resident rooms makes these rooms feel expansive rather than constrictive.

Along with the physical and spiritual dimensions of wellness, adding fitness to resident rooms also address the social and emotional dimensions. As Peloton co-founder and COO Tom Cortese explained at the 2017 PSFK Conference, the company views itself as an “interactive media company.”

“We want folks to want to work out,” Cortese explained. He calls Peloton a product that delivers an “immersive, entertaining and interactive fitness experience.”

“When you ask an obsessed Peloton rider what they love so much about Peloton,” Cortese added, “they’re not going to talk about the software or the bike itself. They’re going to talk about their instructors and the actual class that motivates them to ride hard 45 minutes every single day.”
Hospitality Trend: The resident’s starting point

In Vista, California, luxury resort and wellness spa Cal-a-Vie has spent 32 years delivering wellness to its guests. To do so today, the spa first creates a starting point for each person: a physical assessment.

During a three-, four- or seven-day stay, Cal-a-Vie’s team of personal trainers — the majority of whom have degrees in exercise physiology or kinesiology — give guests a comprehensive physical evaluation that lets them leave the resort with a deeper understanding of their bodies, health and fitness abilities.

The spa’s health offering is significant, including:

- More than 100 health-related classes, including strength training, flexibility, aerobic capacity and Pilates
- Blood work by an on-site phlebotomist
- HDL / LDL blood cholesterol testing
- Urine and saliva sample tests
- Gut health tests
- Nutrition programs and recommendation for meal plans

“We’ve always had a very comprehensive program that is centered on fitness, nutrition and our spa treatments,” says Debbie Zie, Cal-a-Vie’s general manager. “We consider all of these components of our program equally important, and none less effective than another.”

Why this matters for senior living: Cal-a-Vie’s staff empowers their guests — some of whom are in their 80s — to make healthy choices long after they leave. And while a senior living resident might not be moving out of senior care, he or she can still seek to live as independent a life as possible. That means knowing how to make the right choices to care for one’s body.
Hospitality Trend: Resident-led programming

The Charlotte Marriott City Center is more than a hotel — it is an innovation incubator where guests get to point the hotel brand in new wellness directions. Launched in 2016, the wellness incubator M Beta is a series of innovations and experiments in hospitality, with guests serving as the arbiters of addition.

The program lets guests experience and then vote on creative new deliveries of standard hotel service, everything from a mobile app for check-in to guest-driven room furniture configuration to immersive dining experiences built around the guest to on-demand, screen-driven stationary bike programming.

Why this matters for senior living: Hotel residents are made to feel at home, but senior living residents really are at home. A senior living provider that can develop wellness programs and services driven by resident requests and recommendations can create experiences that truly serve each individual.

(M Beta) allows us to be much more nimble as a brand and to have a stronger ability to introduce new programs at other hotels in our system. It’s about collaboration and co-creating with our guests.

Matthew Carroll, vice president of global brand management, Marriott Hotels, from 2016 Hotel Business interview
In a world in which the personalization of goods, services and experiences is expected, the consumer demands on senior living to deliver person-centered wellness offerings have never been greater.

Fortunately, senior living’s ability to deliver this personalization has also never been greater.

This personalization touches the three biggest areas of wellness — the mind, the body and the spirit.

Senior living providers deliver this personalization through a combination of methods. Most notably, they:

- **Establish a resident’s baseline** — the psychological or the physical — to tailor an environment, care plan and treatment around that resident’s specific goals, desires and needs.

- **Educate residents about health**, diet and fitness, so that they are empowered to help themselves as best they can.

- **Listen to residents to learn their likes and dislikes**: what they want to eat, what they want to learn, what they want to do, how they want to live.

From pre-move-in psychological assessments to nutritional cooking demonstrations and telehealth, wellness is extending to every area of senior living. Providers who think about wellness in terms of each resident’s mind, body and spirit are ahead of the game.
The Mind: Senior wellness begins in the brain

Whole-person wellness means that to be truly well, a person must improve every piece of his or her pie.

“You go from a hospitality business, which was assisted living and senior care, now into health care, and there is some turbulence along the way,” says Dr. Paul Nussbaum, co-founder of WellQor, a new company launched in the past year to conduct comprehensive psychological services and analysis to older adults entering senior care. The services focus on a senior’s brain-health lifestyle.

Nussbaum, board-certified in clinical psychology and geropsychology with a specialty in neuropsychology, says that WellQor is driven by the gaps in the senior living intake process. He says that proper diagnosis of seniors entering senior living is lacking in the U.S., and that without a proper diagnosis, proper treatment is difficult to impossible.

“For example, practically, you just can’t set up a memory care program and put older adults in there who you think have a memory problem,” Nussbaum says. “You have to have a good diagnosis, because you don’t want to put, for example, people with Alzheimer’s in the same program as people with Parkinson’s. In my experience, which is all across the country, that still is a big problem.”

You don’t want to put, for example, people with Alzheimer’s in the same program as people with Parkinson’s. In my experience, which is all across the country, that still is a big problem.

Dr. Paul Nussbaum, co-founder of WellQor
WellQor’s mission is to become ongoing partners with seniors and their communities, so that seniors can receive proper treatments and properly pursue their wellness goals. The company currently works with 160 senior living communities in eight states. Nussbaum sees one of WellQor’s prime values as fixing areas of a person that don’t respond to medicine.

“At the end of the day, the thing that’s most important … is to do the right thing for older adults, which, in the mental health arena, is just not happening right now,” Nussbaum says. “We need as a country to do a better job. [There is] a lot of anxiety, a lot of depression, a lot of cognitive problems, a lot of loneliness. And we don’t have medications to handle these things.”

You go from a hospitality business, which was assisted living and senior care, now into health care, and there is some turbulence along the way.

Dr. Paul Nussbaum, co-founder of WellQor

A December 2017 study by the World Health Organization (WHO) found that mental health problems are under-identified by both health care professionals and seniors. The WHO research shows a correlation in older adults between depression and declining physical conditions, and finds more than 20% of adults aged 60 or over suffer from a mental or neurological disorder, the most common being dementia and depression.

“You empower someone with information and education, then you empower them with the tools they might need to fill up their gestalt,” Nussbaum says. “That’s going to lead to better outcomes.”

The three steps of WellQor’s process for improving brain-health lifestyle:

Step 1: Proper assessment
In a diagnostic review, the WellQor team gathers hundreds of data points about the senior, followed by a cursory mental status examination lasting 30 to 60 minutes.

Step 2: Proper treatment
A treatment is recommended directly from the results of the assessment.

Step 3: Proper environment
Lastly, the WellQor team works directly with the leaders of the senior living community to determine the best type of environment that the senior requires.
The Body: Teaching seniors to care about nutrition

From DNA-customized diets to a focus on non-GMO ingredients and organics, Americans of all ages are increasing their demands for wellness-based food and nutrition. With its massive population to which it delivers three meals a day, senior living is in a unique position to execute and expand on healthy eating.

Faced with an impending health-conscious baby boomer population, senior living providers are focusing on a dining experience that includes modern trends such as farm-to-table food, on-site “fast casual” eateries — characterized as fast, healthy and transparent in preparation, like Chipotle — and meatless and vegan menus.

This puts a new emphasis on the age-old adage, “you are what you eat.” These healthy eating initiatives cater to the younger senior’s demands for both healthy eating and greater choice. But some providers are also spending more time teaching their residents about food ingredients and the interconnected nature of diet, nutrition, fitness and health.

At The Mather, a life-plan community in suburban Chicago, the dining team collaborates with the fitness team to discuss with residents their related needs in both areas. The Mather then customizes meals to each resident’s request, and empowers the chefs to educate the cooks and servers about food prep and ingredients, so that the staff can then educate the residents.

“I think more and more, (senior living residents) are going to be looking for a healthier, cleaner list of ingredients,” says The Mather’s executive chef Jeffrey Muldrow.
The Spirit: Use food to create social engagement

At NoHo Senior Arts Colony — an active adult community in Los Angeles built around its residents’ shared interest in art — nonprofit EngAGE is in the midst of a study on the impact that participation in the arts can have in eliminating isolation and loneliness among older adults.

“Our study is about how you create the opposite effect of that,” says Tim Carpenter, CEO and founder of EngAGE in Burbank, California, which provides whole-person art-based programming to seniors living throughout the state, including at NoHo. “There is no pill for isolation or loneliness.”

To eliminate loneliness, NoHo’s focus on the arts is followed by food and fitness, all with an educational twist. The community offers healthy cooking classes, and those begin at the farmer’s market, educating residents not just how to eat and cook healthy, but how to shop healthy.

To Carpenter, wellness is about creating healthy behaviors. EngAGE does that by building programming that encourages people to change the way they live. EngAGE ties together dining and nutrition with another dimension of wellness: the social.

“I think a lot of people go to farmer’s markets, one, to buy healthy fresh food, and two, because it’s a place where interesting, like-minded people hang out,” Carpenter says.

NoHo then attaches the shopping lessons into cooking lessons, and attaches the cooking lessons and the subsequent meals into social events.

“We definitely use food as ... a reason to come down and play,” Carpenter says. “It’s really about trying to create a sense of buzz around the right type of behavior.”

We definitely use food as a reason to come down and play. It’s really about trying to create a sense of buzz around the right type of behavior.

Tim Carpenter, CEO and founder of EngAGE, Inc.
Major tech players are on the forefront of wellness, with senior living providers poised to benefit as a result. Heavy hitters include:

- **Amazon**, which has built a “health & wellness” team within its Alexa division geared to senior living
- **Samsung**, whose Health Care Vertical Team works on health tech solutions, including virtual reality for seniors
- **IBM**, whose IBM Watson Health department powers a range of health care tech in areas including oncology and automated care management
- **Facebook**, which in 2014 paid $2 billion to acquire virtual reality company Oculus VR

That’s just the consumer-facing products. It doesn’t account for whatever innovations will come from Amazon, Apple, Google and other tech companies that develop new health care and wellness systems for their own employees.

Whether entertaining a senior or helping her live safely, new tech products are already changing the way wellness is delivered in senior living.

**The technological backbone of today’s wellness environment**

Building a wellness environment brings technological demands.

From the personal internet needs of entertainment and lifestyle (the emotional, social and even spiritual aspects of wellness) to the health- and comfort-based internet needs for health care and fitness (the physical piece of wellness), community-wide Wi-Fi in the modern senior living community is a must.

That means installing a technological backbone that lets residents and staff easily use their smart devices anywhere on campus. There are two components. The first is cabling that facilitates wireless coverage. Norterre uses a 500-megabyte internet line to create campus-wide wireless internet, and then has a separate, private internet network that runs its nurse-call system.

Next is campus cellular service. These two elements — the Wi-Fi and the cellular — lay the groundwork for potentially the next 10 years of technological innovations, and help facilitate not just smart units but smart communities.

One senior living provider working toward smart communities is Big Rock Senior Housing, which owns two CCRCs in Florida and has four communities that will break ground in 2018 and 2019.
Big Rock’s existing properties opened in November 2017 and April 2018. They are fully Wi-Fi-connected and utilize LTE/4G cellular technologies to boost cellular signal in the building. Big Rock doesn’t install landlines in resident rooms, viewing them as obsolete. They partnered with Boca Raton, Florida-based Whoop Wireless to design and install its Cellular Distributed Antenna System, or DAS, to ensure strong cellular service across the entire campus.

The older of their two communities is Villages of Windsor in Boynton Beach, Florida, a 22-acre CCRC managed by Atria Senior Living. For a community this size, a comprehensive technological backbone costs roughly $1 million. Big Rock Vice President of Operations Sean Nealon estimates $450,000 for the cellular and $200,000 to $300,000 for the cabling.

That delivers an enterprise-grade network that lets residents, staff and family members use their tech with ease. This isn’t just about accommodating tech needs. Because so much of modern wellness is delivered through technology, senior living providers need the infrastructure that can support not just today’s wellness technology, but tomorrow’s.

**Campus-wide Wi-Fi matters for wellness**

Connectivity helps drive many of the modern wellness initiatives that are technology-rooted. Norterre, for instance, wants its assisted living residents who wear a fall-monitoring system to be able to travel the campus without worrying that word of their fall won’t be captured due to being in an internet dead spot.

From an entertainment perspective, Norterre wants residents to be able to watch Netflix on their iPads wherever they go. Norterre’s nurse-call system runs through secure Wi-Fi.

Likewise, all equipment in the fitness room at Big Rock’s Villages of Windsor is from New Jersey-based Technogym, which calls itself “the leading company in the fitness and wellness sector.” All Technogym equipment — from treadmills to stationary bikes to weights — collects health and fitness-related data during a resident’s workouts, which is then shared with their personal trainers.
Villages of Windsor also has movie theater screening rooms for resident entertainment, broadcasting exclusively in 4K, the highest current level of pixelation.

Micah Smith is the services account executive out of the Atlanta office of Pivot Technologies Solutions. He currently works with Big Rock Partners on all technology areas. If a community that lacks the comprehensive backbone wants to embed Alexa into the walls, or add some yet-to-be-imagined wellness-centered technology that might crop up in the next 10 years, that process could take months, Smith says.

“Sean and those guys could do that within 24 to 48 hours,” he says.

“The individual has to drive wellness,” Nealon says, “but we want to help with that. We want to assist with that lifelong goal of healthy, successful aging, and doing it in a modern way.”

How smart technology can deliver wellness environments

Big Rock already views its two existing communities as technologically outdated. That’s because they aren’t yet smart communities, which the four new communities will be. Those will have the Amazon Alexa system built into the walls and ceilings, which will make all of the apartments fully voice-activated.

That’s music to Amazon’s ears: in May 2018, CNBC learned via an internal Amazon document that the tech giant has built a team within its Alexa division called “health & wellness.” The team’s job will be to tailor Amazon Echo speakers and the Alexa voice assistant to the health care sector, making it easier for senior living providers to outfit resident rooms — and later, full communities — with smart technology.

Like every other area of life, wellness is becoming smart. Beds, canes, clothes, flooring, lights, scales, silverware, toilets, window panes — all of these items come with “smart” versions, joining the ubiquitous smartphone and the ever-more-common smart TV as standards in American life. Wellness-centered smart rooms are the next step, with technology that will guide a resident’s entire interaction with his or her physical surroundings.

New Jersey-based Juniper Communities, for instance, is developing smart suites, with two already in use. They utilize several smart elements, including door locks, lights, thermostats and television.

“It’s pretty customizable to whatever the resident would want and need,” says Vickie Stotler-Smith, national director of sales and marketing at Juniper, which offers the full continuum of care across its portfolio.

Depending on the options the resident wants, the rooms cost $1,000 for Juniper to develop, though that is just for the supplies within the room, not the infrastructure. Juniper is exploring both Amazon Alexa and Google Home as the in-room personal assistants.
Virtual reality delivers new experiences and connection

When most people think of virtual reality, they probably think of a headset that transports the wearer to another location. When Facebook purchased Oculus VR, Facebook founder and CEO Mark Zuckerberg said as much.

“Oculus’s mission is to enable you to experience the impossible,” Zuckerberg said in a statement in 2014. “Their technology opens up the possibility of completely new kinds of experiences.”

Oculus’s mission is to enable you to experience the impossible. Their technology opens up the possibility of completely new kinds of experiences.

Mark Zuckerberg, CEO and founder of Facebook

These new experiences are now being developed specifically for seniors, aimed at helping the aging population solve problems of lack of mobility and increased isolation.

That is the power of virtual expeditions.

Kyle Rand co-founded VR expedition platform Rendever after watching his grandmother deteriorate mentally and physically when she moved into senior living following a second cancer diagnosis. A developer by trade, Rand set out to help energize and activate seniors stuck in their senior living rooms.

During his team’s research, they learned about the strong correlation between social isolation and both depression and cognitive decline. Further, they found that there was as high as a 50% rate of reported isolation in senior living communities.
We look at VR as this amazing, innovative technology, but that initially was only used for gaming, for kids — things that don’t necessarily focus on social good. But when you think of it from a high level, you can put on a headset and be anywhere in the world, and you can be doing anything.

Kyle Rand, co-founder of Rendever

He now develops and sells virtual reality platforms focused on delivering both group and individual experiences to seniors. These experiences have multiple benefits for seniors. They let them visit places they could never otherwise go, or places where they have not been in decades. And they let them share these experiences with their fellow residents, sparking conversation, nostalgia and the deep bonds forged with travel and shared experiences.

“We look at VR as this amazing, innovative technology, but that initially was only used for gaming, for kids — things that don’t necessarily focus on social good,” Rand says. “But when you think of it from a high level, you can put on a headset and be anywhere in the world, and you can be doing anything. What better population than seniors, who have had a lifetime of experiences and are now at the point in the aging process where, due to mobility issues, health issues, whatever it is, they’re stuck in a smaller setting and their access to the world has shrunken. We realized this was the perfect application.”

One of Rendever’s mottos is “When your residents are happy, you’re happy.” That’s what the company aims to deliver: the emotional and spiritual side of wellness. The experiences include travel to faraway sites or visiting the street or even house where one grew up.

And because it’s virtual reality, the travel experiences have an added element of impossible perspective. You don’t just visit the Christ the Redeemer statue in Rio — you sit on the statue’s shoulder, 98 feet in the air. You don’t just go to Mardi Gras in New Orleans — you sit on top of parade floats and toss beads into the street.

The evidence behind virtual reality and wellness

In 2017, MIT student Charles Lin completed his thesis in conjunction with MIT Age Lab and Benchmark Senior Living, in which he studied more than 60 assisted living residents who used an expedition-based virtual reality program from VR-company Rendever to combat their depression, compared to fellow residents who watched the same programming on a flat-screen TV. Among the results:

- After two weeks using the platform, residents using the VR experienced an overall improvement in their health
- Residents with VR felt improvements in their social and physical well-being
- Residents with VR became significantly less likely to become nervous
- Residents with VR showed significantly better results compared to the TV group in physical well-being, overall health and satisfaction with the technology itself
- The VR group had a lower depression score than the TV group

We look at VR as this amazing, innovative technology, but that initially was only used for gaming, for kids — things that don’t necessarily focus on social good. But when you think of it from a high level, you can put on a headset and be anywhere in the world, and you can be doing anything.
Rendever’s platform currently uses all Samsung hardware, while at Atria at Foster Square near San Francisco, residents are taking virtual expeditions through Google VR. These residents have visited the Great Wall of China, Machu Picchu in Peru and even the International Space Station.

VR is being used in health care, too. AppliedVR in Los Angeles is a consumer-grade virtual reality system designed to treat pain, helping seniors and others during rehab stints, surgeries or anxiety over chronic pain. Iris Vision in Pleasanton, California, uses VR goggles to augment sight for the hard-of-seeing.

“Often we write off new technology and something like VR as being for younger people, but if you can get a senior to try it, the response is even better most times than with the younger person,” says Josh Sackman, co-founder of AppliedVR. “It feels real and provides real benefit. The experience truly is emotionally transformational, and shouldn’t be something that is seen as too futuristic.”

An example of a senior using the SWORD Phoenix system from SWORD Health, which delivers in-home, digital rehab with an artificial intelligence-powered digital therapist. The view on the left shows the image that the user sees on his screen. (image via swordhealth.com)
In 2017, the Washington Post analyzed data collected by data-driven trends website FiveThirtyEight.com to project the age of the oldest person on Earth through the year 2100. In 1955, the oldest person on Earth was 113. Today, the oldest person is 117. By 2050, the Washington Post projects the oldest person to be 120; by 2100, the oldest person will be 125.

That list, along with the U.S. Census Bureau population projections, paint a picture of just how old the world will continue to be, and just how stark seniors’ wellness needs will be.

The technologies and methodologies that will deliver wellness to these people are, in that respect, something of a mystery. From fully smart, voice-activated communities that give a comprehensive reading of a room’s physical properties down to the molecular level to robot caregivers to greater implementation of telehealth to a deeper understanding of nutritional needs — the future of wellness in senior living is wide open.

Yet whatever it looks like, the dimensions of whole-person wellness and the provider’s ability to care for humans will remain at the core.

“Wellness — there are a lot of components to it, but if you feel you’re a part of something and you feel like you’re connected to your neighbors, the likelihood of engaging in these programs is much higher,” says Carpenter of EngAGE.

“A lot of times, the reasons people move into these places is the loss of a spouse. That’s a lonely, scary place to be. There’s no instruction manual on how to do this. No one hands [a senior] a pamphlet to say, ’This is how it’s done.’ That’s what we’re there for.”

Baby boomers demand wellness
— and they will be alive a long time to do so
For more senior housing research, visit the Senior Housing Industry News Resource Library.