

Getting Old Needs a New Look

Covid-19 has exposed the lethal vulnerabilities of nursing homes and assisted-living facilities. Can better design make aging safer?



The pandemic has exacerbated issues like social isolation in U.S. nursing homes and assisted-living facilities. But problems with the living situations of older Americans long predate the coronavirus.

Photographer: Erin Clark/The Boston Globe via Getty Images

In at least one way, the United States's tragic response to the coronavirus hasn't been an outlier: Just like in the rest of the world, the consequences of the pandemic were amplified inside living facilities for older adults.

As of August 13, at least [68,000 residents and workers in long-term care facilities](#) in the U.S. have died from the coronavirus, according to *New York Times* research, a number that comprises more than 40% of the nation's total. That percentage that's been matched or exceeded by other countries across the globe. In Europe, half of all Covid-19 deaths happened in nursing homes and long-term care facilities, according to the [World Health Organization](#). In Canada, which has been [far more effective at containing the disease](#), [82 percent of the country's deaths](#) have been concentrated among these facilities.

The vulnerability of nursing homes was clear from the earliest stage of outbreak in the U.S., when the [disease swept through the Life Care Center of Kirkland, Washington](#) in February, claiming dozens of deaths. At [Holyoke Soldiers' Home](#) in Massachusetts, at least 74 residents — a third of the facility's population — died of Covid-19 in April. The summer resurgence of infections has [found its way into care facilities in Texas, Florida, and Arizona](#), bringing the number of cases in nursing homes nationwide [above its previous peak in May](#).

For the entire multibillion-dollar ecosystem of senior living in the U.S. — including the more than 15,000 nursing homes, nearly 29,000 residential care communities, and about the same number of [assisted-living facilities](#) — the pandemic is exposing a deadly dilemma at a challenging time. “We weren't prepared for Covid,” says Dr. Robyn Stone, co-director of LeadingAge LTSS Center at University of Massachusetts Boston. “Nobody was, including the nursing homes.”

For years, experts have warned that a “silver tsunami” of aging Baby Boomers would force a senior living reckoning in the U.S.: As this giant generation exits the workforce, Social Security, Medicare, and other safety-net programs for the elderly are being strained, even as millions of older Americans are desperate to avoid the [grim, medicalized model of long-term care](#) that awaits those who lack the resources to age in place or move into upscale assisted living. Covid-19 is adding a new pressure to change, fast. “Right now, people may be leery of nursing homes, but the demographics are pushing in the opposite direction,” Stone says. “You'll start to see so much growth and demand for these services.”

This presents a stark challenge for those seeking to reinvent senior living mid-pandemic, and seemingly on the fly. In the last decade, design trends have been pushing a more progressive, upbeat vision of senior living, one that encourages more independence and social connectivity. Matthias Hollwich, architect and co-founder of New York-based Hollwich Kushner and a key proponent of this shift via his work and book [New Aging](#), has advocated for creating spaces that emphasize interaction, integrating care facilities with other buildings and larger communities, and creating building standards that specifically support the comfort and health of the elderly.

But the deadly impact of the coronavirus is forcefully pushing back in the opposite direction. “The virus is antithetical to the feeling we try and create, of being part of a large residential community,” says senior project manager Anthony Vivirito, an architect at [The Architectural Team](#), a Boston-based firm that specializes in designing skilled nursing, independent, assisted-living, and memory care communities. “That’s definitely the challenge. How do you create a safe environment, and how do you preserve this sense of community and belonging?”

The industry was caught flat-footed, Vivirito says, but is quickly trying to catch up. Existing facilities and soon-to-open projects adopted quick and often painful emergency measures, like banning visitors and communal meals and activities. Some set up contactless private visitation suites. [Perhaps the most thoughtful design rapid response](#) came from MASS Design Group from Boston, which outlined design solutions that balanced infection control and social interaction. Among their suggestions: integrating more outdoor events and grouping residents of large facilities into “villages” of 10 or fewer for dining and social interaction to limit the risk of infections.



Each Green House Project home has only 10 to 12 residents, a model that has proven to be effective at controlling Covid-19.

Photographer: Nicholas McIntosh/Green House Project

The advantages of thinking smaller can be illustrated by the [Green House Project](#), a national organization founded in 2003 that has created a network of 300 intimately scaled residential alternatives to nursing homes. Every Green House home has 10 to 12 residents, with each resident having a private room and bathroom. Senior director Susan Ryan [points to research](#) showing better health outcomes, similar median costs, and a better Covid response associated with this kind of mode, compared with traditional institutional nursing care; from February 1 to May 31, [Green House homes were 95% Covid free](#), with just a single death.

She worries that the industry could take the wrong message from the coronavirus crisis. “I’m afraid of more regulations that will hinder social community space and keep people safe at all costs, and forget the people in the process,” Ryan says.

How did institutional eldercare in the U.S. end up so vulnerable to the virus? Blame overcrowded facilities, [chronic lack of testing and protective equipment](#) for residents and staff, and [vast gaps in the quality of care](#) meted out to people of different means. Even before Covid-19, senior living faced a severe affordability and equity crisis. According to stats from A Place for Mom, a senior care referral company, in 2018, median national monthly housing costs were \$2,552 for independent living, \$3,942 for assisted living ([a](#)

[69% increase since 2004](#)), and \$5,003 for memory care. [Researchers at Harvard's Joint Center for Housing Studies](#) found that more than a third of older people are cost-burdened when it comes to housing, an all-time high. Deep racial inequities around home-ownership, income, and affordable housing access exacerbate these issues.

Industry [deregulation](#) is also playing a part, according to Richard Mollot, executive director of the nonprofit Long-Term Care Community Coalition. Many of the federal-level rules — strengthened by the 1987 Nursing Home Reform Act, parts of the the Affordable Care Act, and the Impact Act of 2016 — “aren’t self-implementing and have been falling apart under Trump” he says, adding that “the few guardrails have been severely undermined; regulators are told ‘don’t penalize, and try to avoid it, and when you do, [make it the lowest fine amount possible](#).’”

But advocates for improvements in how older Americans are living also see hope that the pandemic could force positive changes. Stone, for example, sees potential in the adoption of tele-medicine, video chats and remote means to connect seniors to medical services, loved ones and peers. Improved technology can support aging in place, promote independence and cut costs.

Others in the industry believe rethinking the development model of nursing and assisted-living facilities can bring about improved outcomes. One example comes from Chicago, where a collaboration between Evergreen Real Estate Group and the Chicago Housing Authority (CHA) will convert the former Ravenswood hospital, vacant since 2002, into a 193-unit senior housing project on the city’s northwest side. The \$81 million project, which required nearly a dozen funding sources, came together by combining two models of care in one. The facility will have 74 one-bedroom independent living apartments for CHA residents, as well as 119 units for participants of the [Illinois Supportive Living Program](#), which provides support services to low-income seniors.



In Chicago, the city's public housing authority is transforming the long-vacant Ravenswood hospital into an affordable senior housing project.

Rendering courtesy Evergreen Real Estate Group

Combining different living arrangements in one project allows the CHA to keep rents low – 30% of monthly income (supportive living works on a similar formula, based on income percentage and asset). In effect, the project offers some of the advantages of continuing care retirement communities, where residents can age in place and move seamlessly to different modules with more advanced care. But those can start at \$4,000 and get up to five figures depending on the level of care – out of the reach of low-income seniors.

This novel approach excites the CHA, says David Block, director of development at Evergreen, because it gives low-income seniors a non-nursing-home option. The CHA is the city's biggest landlord for those over 60, housing 23,000-plus seniors in CHA apartments or subsidized units, but it still runs into supply problems, which leads to older residents staying in standard public housing units long after their health made them unsuitable.

Other new projects emphasize spreading economic benefits to surrounding communities and building better connections with host cities. In downtown Evanston, a northern suburb of Chicago, Condor Partners promises that it will hire half of the employees for its [forthcoming Trulee Senior Living project](#) from Evanston itself as part of a model to create more community around residents. Developer Michael McLean says committing to local workers will help anchor the building in the community and provide a better qual-

ity of life for everyone, with lower commute times for workers and more familiarity between residents and staff. “I believe the senior industry, along with the rest of the world, is going to become more local,” says McLean. “There may be those who want to retire in a golf course community, but I think there’s going to be much less of that. Some grandparents just went four months without seeing their family. That’s a long time.”



John Knox Village in Pompano Beach, Florida, features a nursing residence designed around Green House principles: Each floor of the six-story building holds a pair of 12-person “homes.”

Photo courtesy Green House Project

Vivirito of The Architectural Team sees the future of eldercare being more service oriented, to allow people to remain in their homes longer. That’s in keeping with the post-retirement desires of the vast majority of older Americans — [some 90% say they prefer to age in place, according to AARP](#). It’s not hard to conclude that the best way to fix nursing homes may be to avoid them entirely, by extending more services and resources to older people who want to remain in their homes for as long as possible. But aging in place has its own challenges, namely high cost, an acute shortage of trained caregivers (industry reps say the nation is “[on the edge of a crisis](#)”), and a shortfall in “universal design” upgrades that help older people remain in their homes (just 3.5% of all U.S. homes [had basic accessibility features](#) in 2011, the latest year data is available).

Then there's the massive geographic mismatch that threatens to maroon tens of millions of aging Boomers [in car-centric suburban communities](#) that are uniquely ill-suited to the transportation and care needs of the frail elderly. With [public transit revenues and funding both getting hammered by coronavirus-related factors](#), suburbs will find it even more difficult to provide mobility services equal to that task.

The enormity of the problem suggests that what's really needed to help improve quality of life for older Americans isn't just better design, but a funding model that can accommodate changing expectations of aging *and* new needs for space and safety that will become the norm. In the pandemic era, the true dimensions of the silver tsunami are only now becoming clear.

"Candidly, I feel like the developers and architects, we're literally figuring this out in real time," says Vivirito.

(Corrects number of Green House Project homes in eighth paragraph.)