



At this Community, Residents Blink to Control Just About Everything

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At the Leonard Florence Center for Living, residents can control just about everything around them through a series of blinks.

The community is located in Chelsea, Massachusetts and run by the Chelsea Jewish Foundation; it currently has 10 Green House-style skilled nursing residences with 10 bedrooms each. Two of the Green Houses are built for people living with amyotrophic lateral sclerosis (ALS), and one is specifically equipped for residents living with multiple sclerosis (MS).

On these three floors, wheelchair-bound residents of all ages can control everything with an on-and-off switch—lights, televisions, window shades, air conditioning, phones—using only their eyes.

The minds behind this innovative community believe its technology may have a future in more skilled nursing facilities, or even assisted living communities where seniors struggle with mobility. The demand for these high-tech communities, no matter how you look at it, is high—and the results are life-changing, according to the ALS patient and current Green House resident who helped the project become a reality.

A chance encounter

The idea to build “neurological” skilled nursing beds originated about 10 years ago, when Chelsea Jewish Foundation administrators considered how their organization could positively contribute to the future of skilled nursing.

“We were asking ourselves how we’re going to care for people in skilled nursing settings in the future,” Barry Berman, the Chelsea Jewish Foundation’s CEO for the past 40 years, tells Senior Housing News.

At first, the [Green House model](#) of skilled nursing—which groups about ten residents with private bedrooms and bathrooms around a central, communal living area—caught Berman’s attention. The organization jumped on board and planned the Leonard Florence Center for Living, which would also become the first urban Green House skilled nursing facility in the country.

Simultaneously, Berman and his colleagues began looking into which populations, besides seniors, would benefit from a Green House living arrangement. They determined that the model could also benefit patients—senior or otherwise—with ALS and MS.

Berman, an ALS novice at the time, decided to go to a symposium to learn more about the progressive neurological disease. There, a chance meeting changed the course of the project.

“Right there in the lobby was Steve Saling,” Berman says. “I think the stars were aligned.”

Saling, a landscape architect by trade, was attending the symposium to learn what lifestyle options would be available to him once his ALS progressed to the point where he could only move his eyes voluntarily. At the time, Saling was using a cane to walk but could still drive, Berman remembers.

The duo talked, and then collaborated over the next three years or so to design a smart house in which residents would be able to use their eyes to control anything with an on-and-off switch.

“We had to design a house that was eye-movement only,” Berman explains. “Doors, air conditioning, window shades, televisions, phones, the elevator—anything with an on-and-off switch, the residents had to be able to control.”

At times, the prospect seemed as unlikely as it was innovative, but Berman pressed his team on through its completion.

“I just told them, ‘If we can put a man on the moon, we can do what I need you to do,’” Berman says. “Everyone listened, and we moved forward.”

From dream into reality

To make the dream a reality, the Leonard Florence Center for Living ultimately opted to install PEAC, an automation solution from Promixis, throughout its ALS and MS Green Houses.

Using PEAC, which stands for “Promixis Environment Automation Controller,” residents can move their eyes to control an iPad or tablet that manipulates their environment, Mike Ferrick, the executive director at the Leonard Florence Center for Living, tells SHN.

“If one of our residents with ALS was living in a different community, they’d depend on the staff there to do everything for them—they may have to wait an hour or so to go downstairs, for instance,” Ferrick says. “This technology allows residents to be as independent as possible.”

Senior living residents with limited mobility may benefit from using this technology as well, according to Saling.



Steve Saling

“It is designed especially for the disabled, but will be helpful as the next generation of tech-savvy elders come of age,” he tells SHN via email.

Whatever the residents’ age, however, PEAC technology gives previously immobile individuals a newfound independence, thereby easing some burden on caregiving staff.

“[The technology] has the real potential to reduce the demand on caregiver staff,” Saling says.

Still, although PEAC technology is 99.99% reliable, it should never be exclusively used on any life safety device because of that 0.01% chance for error, Saling says.

“Otherwise, it can pretty much control anything that runs on electrical current and is controlled by a wide variety of wired and wireless signals,” he says.

Overwhelming demand—and costs

Some days, operating 30 neurological beds doesn't seem like enough.

"The demand for the rooms is so great that we don't even allow individuals to come see them when they call us," Berman says.

When there is availability, the Leonard Florence Center only reaches out to ALS patients who have recently contacted them, Ferrick explains. That way, they help limit any false hope.

"We don't give tours to people unless we're really serious about being able to take them," he says.

With the obvious demand, the Leonard Florence Center hopes to eventually build more neurological beds—but their operational cost can be staggering. The PEAC automation system alone costs approximately \$15,000 per room to install, and there are ongoing expenses to maintain the system, Saling explains. The high price tags may explain the technology's limited adoption elsewhere.

"PEAC has been adopted by a handful of long term-care facilities, but not nearly enough," Saling says.

In fact, in operating the two neurological Green Houses, the Chelsea Jewish Foundation loses about \$500,000 a year. The organization relies on "generous donations" to keep the rooms available to "a very large Medicaid population," Berman says.

"Without philanthropy, none of this would exist," he explains.

The PEAC automation system has changed Saling's life so profoundly that he believes the technology should become standard equipment in 21st century skilled nursing facilities where ALS patients live.

"It is my prosthetic central nervous system," he says. "I can't imagine life without it, but sadly, most can."