TECH & SCIENCE

Disease Stole Their Independence, But This High-Tech Home Is Giving It Back

Blink-activated technology.

http://aplus.com/a/steve-saling-als-residence-tech

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Steve Saling, a Boston-area landscape architect, was diagnosed with amyotrophic lateral sclerosis (ALS) in 2006. Saling still had full function of his body a year later, but knowing this wouldn't always be the case, he wanted to learn more about his options.

Once degenerative diseases like ALS or multiple sclerosis (MS) progress, many are unable to stay in their homes. Few houses are designed with disability accessibility in mind, and the patient might need more assistance than a family member or home care can provide. There's the option of going to a nursing facility, which provides access to trained staff, but they generally offer stark, hospital-like conditions and provide the patient with little freedom to come and go as they please.

It wasn't a very promising scenario for Saling.

As it turns out, the best option for him was one that didn't even exist yet. At a 2007 symposium, Saling met Chelsea Jewish Foundation CEO Barry Berman, who was researching ways to improve the quality of life for those with degenerative disease in assisted living.

That chance meeting led to a partnership as the two designed a facility that blended the medical and emotional needs of the residence with forward-thinking technology that gives them back more independence than they ever thought possible.

Instead of being left in bed like at most other facilities, Saling residents on ventilators are able to travel and enjoy the community. The ALS Residence Initiative

Few of us know what it's like to lose control of our own bodies. We take for granted our ability to speak, walk, eat, and get dressed on our own. ALS and MS have stolen the ability to perform such basic tasks from nearly half-a-million Americans.

Because people with such an extreme lack of mobility are difficult to move and may also require constant use of machinery like a ventilator, they are homebound and stuck in bed more often than not, keeping them isolated and lonely.

Together, Saling and Berman designed a place that was very different. The first ALS residence hall, named after Saling, opened in 2010 at the Leonard Florence Center for Living. Residents have around-the-clock access to trained medical professionals in a safe environment, but they would also have comfortable, homey accommodations and the freedom to go outside, which allows them to remain active members of the community.

But that's not the only thing that makes it different.

Steve Saling demonstrating the computer interface that allows him to do everyday tasks, like calling elevators, by using the slightest eye movements. The ALS Residence Initiative

The most impressive part of the home is the cutting-edge technology that allows residents with very limited mobility to navigate the home and do things for themselves, unassisted.

All of the features in the residence that can be controlled are accessed through a computer interface by PEAC Automation. Sensors allow tiny movements — like a blink of an eye or a facial twitch — to open doors, control the lights, and even operate the thermostat. The independence that these features give the residents is incredibly empowering and greatly increases their quality of life.

The technology may have been invented for this particular facility, but it is available to be integrated into other facilities for those with reduced mobility. The system can use the existing wiring in many situations, which makes it more affordable to install.

Learn more about the incredible technology that allows those with ALS and MS to live better than ever before here:

https://youtu.be/uWblDLRQPmw

Consider making a donation to the ALS Residence Initiative and help improve the lives of those living with ALS by improving living conditions across the country.

(H/T: STAT)