



PennState Health



Penn State Health: Breaking Down Barriers to Patient Care through Virtual ALS Treatment

Penn State Health is a multi-hospital health system serving patients and communities across 29 counties in central Pennsylvania. The system includes Penn State Health Milton S. Hershey Medical Center, Penn State Children's Hospital and Penn State Cancer Institute based in Hershey, Pa.; Penn State Health St. Joseph Medical Center in Reading, Pa.; and more than 2,000 physicians and direct care providers at 127 medical office sites. The health system's mission is to enhance the quality of life for its patients through improved health, professional preparation and the discovery of knowledge. In 2018, it launched a direct-to-consumer urgent care telehealth service called Penn State Health OnDemand. After the launch of this program, the health system strategized other virtual service lines that would help it meet its mission, and decided on a teleALS program.



Understanding the unique challenges and needs of ALS patients

Amyotrophic lateral sclerosis (ALS), or Lou Gehrig's disease, is a chronic, progressive nervous system disease that affects nerve cells in the brain and spinal cord, causing loss of muscle control. Treatment cannot reverse the damage of ALS, but it can slow its progression. This treatment often requires an integrated team of providers including neurologists, physical therapists, occupational therapists, speech pathologists, behavioral health counselors and respiratory therapists.

Patients with ALS often have an issue with mobility, so traveling long distances routinely for care is burdensome for patients and their families. "The travel to the clinic for most patients is an all-day venture," says Chris LaCoe, Vice President of Operations at Penn State Health. "By the time you get the patient ready, get them in the car, travel to Hershey, and sit in the clinic all day going from provider to provider, everyone—especially the patient—is exhausted."

To enhance the quality of life and care for ALS patients, the health system decided to implement a teleALS program to centralize all aspects of care into a single virtual appointment.

"The whole concept behind our ALS telehealth program is to break down barriers for patients who have to travel long distances," says LaCoe. "We want to bring the care into the home."

Building a teleALS program to break down barriers

Oftentimes when launching a new telehealth program, having the support and guidance of a physician champion can greatly impact the program's success. Penn State Health had a physician champion for its teleALS program in neurologist Dr. Zachary Simmons, director of the Penn State ALS clinic, who was already doing some virtual patient treatment using video conferencing software. "Telehealth is a way to use technology in a way that doesn't depersonalize our patients, but at the same time gives us an opportunity to extend care when they're unable to travel either due to lack of resources or physical limitations," says Dr. Simmons.



While Penn State Health had its video conferencing system in place, it was not scalable and the health system wanted to expand this care to more patients.

In 2018, Penn State Health worked with Dr. Simmons to implement Amwell's technology into its teleALS program.

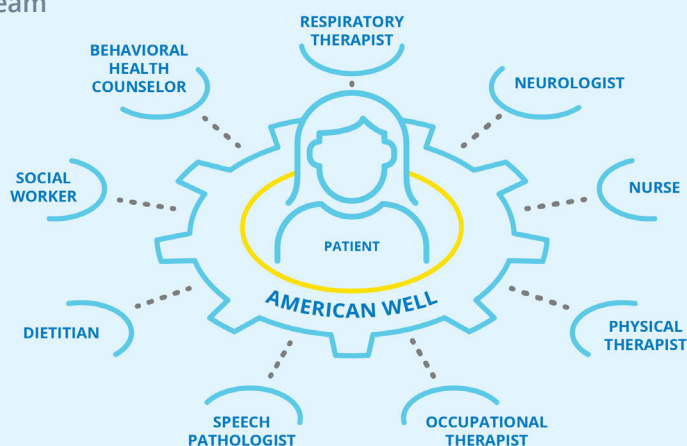
Conducting a teleALS visit

After an ALS patient is seen in person at a Penn State Health location, their provider will identify if they are eligible for virtual follow-up. If they are eligible and willing, a virtual follow-up appointment is scheduled before they leave the clinic. Prior to the visit, the patient receives an automated test email to make sure there are no technical issues.

During the visit, patients are at home on either a tablet or computer, and usually have someone there with them, whether it be a caregiver, husband, wife or other family member. "The goal is to simulate what happens when the patient comes in for a visit in our out-patient clinic," says Dr. Simmons. "The only difference is the patient is at home and we see them on a video monitor."

Penn State Health's multidisciplinary team for ALS treatment typically includes a:

- Neurologist
- Nurse
- Physical therapist
- Occupational therapist
- Speech pathologist
- Dietitian
- Social worker
- Behavioral health counselor
- Respiratory therapist



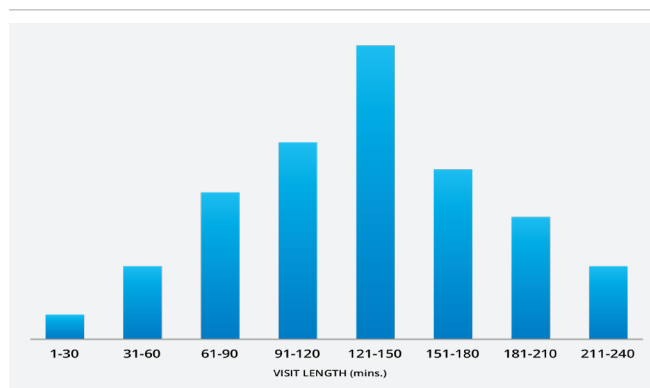
A Multidisciplinary Approach to Virtual ALS Care

Because ALS treatment involves multiple providers, in-person care requires that all these providers be in the same location to care for a patient. This is especially difficult for Penn State Health, which cares for ALS patients in partnership with The ALS Association Greater Philadelphia Chapter. With in-patient care, patients also end up having to wait between provider appointments, which contributes to the burdensome experience.

Through Penn State's teleALS program, providers can treat patients from wherever they are located. "We have nurses from The ALS Association using iPads to connect with patients, which has greatly enhanced care," says LaCoe. Because the telehealth technology is also used with the Cerner EMR, these providers can better coordinate care remotely.

ALS virtual visits can vary greatly in length, from 30 minutes to four hours depending on how many providers are seeing the patient. The average length of a teleALS visit is typically two hours. No matter the visit length or number of providers, a teleALS visit only requires the scheduling of one unique appointment. Using the "invite a guest" feature within the Amwell platform, different providers can join and exit the visit at their allotted times. This not only creates a seamless experience for the patient, it also limits patient wait times between appointments.

TeleALS Visit Lengths



Early results: a convenient, low-barrier patient experience

In a little over ten months, Penn State Health has conducted more than 98 virtual ALS visits. Those 98 visits have saved patients more than 8,374 miles of travel, in addition to the incidental costs associated with a visit—gas, food and lodging.

"The majority of our patients are within a 50-mile radius, but we also have those in a 200-mile radius," says LaCoe, "Overall we have received excellent feedback and patient satisfaction is high with respect to the convenience, communication, and privacy that the teleALS program provides."

In addition to helping better care for ALS patients, the teleALS program has also begun to free up needed space for new patients or patients whose medical needs require them to be seen in person. "We're starting to fill appointment slots with higher acuity patients, which has helped our neurologists to maximize their time," says LaCoe.

Moving forward, Penn State Health hopes to expand the teleALS program to care for more patients, especially those who are located far away from care.

"Understanding how truly limited ALS patients are due to this disease, and how much strain and pressure it puts on them just to get in and out of a car and to the appointment itself," says LaCoe, "it's heartwarming to know that we are improving outcomes while at the same time not forcing them to face these barriers every time they need care."

ALS Patients Often Must Travel Long Distance For Care

