

**Examples of Physical and Occupational Therapists
Using Telehealth to Serve People with Disabilities
Requiring Complex Rehab Technology**

July 2021



www.clinicantaskforce.us

Examples of Physical and Occupational Therapists Using Telehealth to Serve People with Disabilities Requiring Complex Rehab Technology

Introduction

“Examples of Physical and Occupational Therapists Using Telehealth to Serve People with Disabilities Requiring Complex Rehab Technology” describes real-life clinical encounters using telehealth by Physical Therapists (PT) and Occupational Therapists (OT) during the provision of complex rehabilitation technology (CRT) to people with disabilities. The examples were chosen to demonstrate the current breadth of telehealth being used in clinical practice and underscore the need for PTs and OTs to be permanently recognized by the Centers for Medicaid and Medicare Services (CMS) as authorized telehealth practitioners once the COVID-19 pandemic Public Health Emergency expires.

Physical Therapists and Occupational Therapists have learned through experience during the pandemic that telehealth is an important option to provide essential services to patients in many situations related to the provision of seating and wheeled mobility equipment, specifically CRT. CRT includes individually configured manual and power wheelchairs, seating and positioning systems, and other adaptive equipment. The examples below have been provided to demonstrate the actual experiences of physical and occupational therapists throughout the United States using telehealth to improve the lives of people who are non-ambulatory, and are applicable in other areas of practice as well.

During the COVID-19 pandemic, the provision of PT and OT via telehealth was allowed by CMS through the issuance of public health emergency waivers. Telehealth is recognized by practicing PTs and OTs as a valuable service-delivery option for many reasons, including protection for medically fragile patients, access to health services for people with limited transportation options, more timely interventions to prevent further medical complications, enhancement of in-clinic services by allowing the therapist to see the patient in their home environment, and empowering the patient and caregivers through direct education.

These examples are provided by the Clinician Task Force (CTF) and the National CRT Remote Services Consortium. The CTF (www.cliniciantaskforce.us) is a nonprofit organization of more than 80 physical therapists and occupational therapists from across the United States who are recognized as leaders in the field of CRT. The organization advocates for best practice, evidence-based methods in the service delivery of CRT wheelchairs, seating and accessories, and for appropriate access to appropriate wheeled mobility and seating for non-ambulatory consumers to promote positive outcomes. For questions or additional information please contact CTF Executive Director Cara Masselink, PhD, OTRL, ATP at cara.masselink@wmich.edu.

Example 1: Telehealth Enhanced Patient Safety in the Home Environment and Caregiver Collaboration

The patient is an adult female with a neurological diagnosis, living in a group home. She was falling out of her current wheelchair when staff would try to bring her to appointments. The group home staff were highly concerned for her safety and could not transport her safely; they would have had to request a stretcher/EMS transport to get her into the clinic. For this reason, the group home staff requested a telehealth visit.

During the telehealth visit, the PT was able to do a virtual evaluation and equipment trial for the patient. The clinician was virtual, while the patient, their family/caregivers, and the CRT supplier were in person at the group home. The supplier brought a demo tilt-in-space manual wheelchair for the patient to try. The PT and supplier were able to specifically choose options that enabled maneuverability within her home setting, because the PT could visualize her bedroom, bathroom, and living areas. This also enabled the patient to receive services sooner as the PT did not have to do an evaluation, then a home trial, and then wait for specifications from the supplier. Staff was also able to see and be educated on how to use the equipment correctly with the PT's instruction - they were very grateful! These staff members would not have been able to join for a clinic visit.

This situation was successful because of the ability to use telehealth to ensure accurate recommendations of the wheelchair and seating equipment, and educate the staff on the safe and proper use of the equipment with the patient. Without the ability to use telehealth, the patient likely would have experienced increased delays in getting mobility equipment, a period during which she would have remained bedbound. This delay may have led to possible health consequences and/or hospitalization. Telehealth also reduced healthcare costs by negating the need for special transport.

Nicole Laberge, PT, ATP
Minnesota

Example 2: Telehealth Improved Integration and Training of Complex Equipment

This female, adult patient had a diagnosis of Amyotrophic Lateral Sclerosis (ALS). She had weakened quickly and was unable to be transported from her home in an assisted living facility to the clinic. The team decided on a telehealth visit in which the PT was virtual, and the patient, supplier, caregiver/family were in person at her residence to address her power wheelchair (PWC) concerns.

The patient had recently received an Ability Drive, a high-end technology for driving a power wheelchair with eye gaze, but was having difficulty using it to drive the PWC independently. The telehealth visit allowed the team to adjust, train, and program and resulted in her learning to drive her PWC and control all available power functions independently. The fact that everyone could meet together at one appointment virtually saved time, costs, and also gave independence back to this patient. The patient was ecstatic to have everyone present and engaged, and her satisfaction and safety were maximized through the use of telehealth services.

Without the use of telehealth, the patient would have remained dependent on others to assist her in driving her PWC. Due to difficulty maneuvering a PWC, she may have been restricted to bed, incurring all the known health risks (such as pressure injuries) of being bed bound.

Nicole Laberge, PT, ATP
Minnesota

Example 3: Telehealth Facilitated Customization of Equipment Recommendations

This patient was an adult with severe spinocerebellar degeneration that resulted in quadriplegia. Due to pain with transportation, inability to transport her PWC, and the distance from the patient's home to the clinic, the patient requested a telehealth visit for the wheelchair evaluation. At this visit, the PT was virtual, while the CRT supplier was in-person with the client.

The patient presented as a long-term user of power mobility with very specific seating needs to maintain independence with their active lifestyle around their home and neighborhood. They have specific requirements to consider when replacing the wheelchair along with ideas to maintain level of function with a progressive condition. During this evaluation, both home environment and PWC function were addressed to maintain independence with PWC use. Transfers between the patient's bed and PWC provided the PT with important observations on PWC dimensions they needed to stay within to ensure the patient had space to safely transfer into the new equipment. The patient was observed to constantly use power seating functions to change positions during the evaluation; however, his condition had progressed and the patient demonstrated difficulty maintaining left forearm position on the armrest (which was needed to access the PWC's functions). The patient could not reposition their forearm consistently without someone helping, so an armrest with additional support was recommended to maintain independence with PWC use. Additionally, the recommended armrest was trialed in the home environment, to ensure that it did not inhibit movement throughout the home. New head array switches were also incorporated into the PWC, and were confirmed to fit and be feasible in the home environment to meet this patient's specific needs. This patient described being grateful for the opportunity to utilize telehealth for this purpose.

Without telehealth services, this patient's progressive condition and particular needs would likely have required multiple clinical visits with trials in the home to ensure that the recommended equipment would enable independence with PWC use. Without the home trials of equipment, it is possible that the recommended equipment may not have worked as intended, and the patient may have lost the ability to drive their PWC and independently reposition themselves. Without this function, the patient was at risk for pressure injuries and falls, and increased burden on the patient's family.

Lorri Bernhardt, PT, MPT, ATP
Tennessee

Example 4: Telehealth Enabled Clinician to See Patient Function in Familiar Setting

A female adult patient with a neurological diagnosis and cognitive impairments was seen via telehealth with the CRT supplier in-person and the PT virtually. Telehealth was chosen because the patient's behavior, attention span, and ability to participate greatly improved in her familiar, comfortable environment at home with her caregivers.

Initially, the team was preparing to recommend a K0005 ultralightweight manual wheelchair. However, after the PT observed the patient interact in the home environment, the recommendations changed to a tilt-in-space manual wheelchair. By seeing the patient engage in activities of daily living, including communication, in her home with her augmentative communication device, the PT was able to determine that a K0005 manual wheelchair would

not provide the necessary positioning to support her posture or to use the communication device.

Without the telehealth visit, the PT may not have seen the patient socially interacting with her speech device, or performing at her baseline status. In a K0005 manual wheelchair, her posture would have been compromised, resulting in an inability to communicate her needs. This would have resulted in a loss of independence.

Lorri Bernhardt, PT, MPT, ATP
Tennessee

Example 5: Telehealth Enabled Pressure Injury Healing Without Surgery

An adult patient with a neurological diagnosis lives in a very rural area of Wyoming. The patient was being treated by a local physician for their pressure injuries, but the wounds continued to worsen. The closest facility to get pressure-mapping and a therapy evaluation was several hundred miles away, so the patient requested a telehealth visit. During the visit, the PT was virtual, and the patient was at their home.

The patient presented with chronic bilateral ischial pressure injuries (wounds on their bottom). With the patient, the PT did an inspection of their wheelchair cushion. This revealed air in the fluid pad, and a breakdown of the foam. To accommodate for these changes in the cushion, the patient had been using a "neck pillow" on top of cushion to offload ischial pressure. Furthermore, the patient had significant left pelvic obliquity that was impacting their position on the cushion.

In the first session, the PT recommended a new flopad for the cushion. At the second session, modifications were completed to cushion. Phone follow-up less than 2 months later revealed that the patient's pressure sores were healed for 2-3 weeks with no further issues.

Without the telehealth services, this patient would have needed surgical fixation for the skin pressure injuries.

Cindy Smith, PT, DPT, ATP for Wesley Thornton, PT, DPT
Colorado, Wyoming

Example 6: Telehealth Addressed Positioning at Home to Improve Body Function and Identified Further Medical Needs

The adult, female patient with a neurological diagnosis was seen via telehealth, as requested by her because she had concerns about her position when in her bed, recliner, and wheelchair. These concerns were specific to her home environment and home equipment that could not be specifically addressed in the clinic setting. The patient and their caregivers/family were in-person, while the PT was virtual.

This patient's concerns were about her skin integrity and need for better head support. The PT assessed her position in her recliner and made recommendations for head positioning that improved her swallowing, breathing, line of sight and pain. Her head position was then assessed in her wheelchair and the PT was able to educate and train her husband to adjust the headrest for improved positioning as her needs changed. Finally, her position in bed was

assessed and appropriate supports for side lying and also for lying on her back were recommended.

This patient's skin over bony areas was assessed and an open area was identified. A referral was made for her to see a physician who specializes in skin pressure injuries to prevent worsening and she will need to come into the wheelchair and seating clinic for services to identify the correct seat cushion for her wheelchair.

Without the use of telehealth, the accuracy of the recommendations for her head positioning and bed positioning would have not been as specific to her situation, placing the client at risk for aspiration when swallowing and decreased respiratory efficiency, potentially leading to pneumonia. Additionally, the referral for further medical care would not have been made. This would have resulted in delayed care, with a more significant skin pressure injury to heal.

Faith Saftler Savage, PT, ATP
Georgia

Example 7: Telehealth Integrated with In-person Visits to Comprehensively Meet Client Needs

An adult, female patient with a neurological diagnosis was seen at home by patient request for a wheelchair evaluation. This patient had very specific goals and needs for her environmental access. She had a number of caregivers that assist her and numerous technologies she used that would have been difficult to bring into the clinic. The first appointment was completed by telehealth with the therapist remote and the patient in her home.

During the telehealth session, the PT observed transfers for the bed, toilet, shower, and vehicle. The accessibility of her home for function was noted, as well as the patient's variety of technologies she had to utilize. Her specific needs were identified, which led the team to provide trial equipment to be prepared for an in-person clinic visit with the patient, caregiver, PT, and CRT supplier. This second appointment was completed in the clinic, and the third/final appointment was completed at the home for specific programming and adjustments to ensure independence in her home environment and training for her caregivers.

Without telehealth, the patient's current technology and equipment may not have interfaced well with the recommendations, and the patient's independence in their home would likely be limited. Additionally, her caregivers would not have been trained adequately, resulting in increased risk of falls and injuries.

Faith Saftler Savage, PT, ATP
Georgia

Example 8: Observation of Client Positioning in the Home via Telehealth Enabled Wound Healing

An adult patient with a neurological diagnosis required a telehealth visit. The healthcare team decided on a telehealth visit rather than in-person, as the client needed a bed and shower chair evaluation, which could not be done at a facility. For this visit, the clinician was virtual, while the patient and their caregiver/family were in-person.

The patient had been attending an interdisciplinary wound clinic for a buttock wound. The wound was slowly healing after CRT equipment modifications, but there continued to be evidence of recurrent new damage that was inexplicable by wheelchair assessment. The clinician observed the patient's positioning in their current bed and shower/bath chair, as well as transfers. Both pieces of equipment were able to be addressed in the initial visit and now skin is actively healing.

This telehealth visit revealed two other areas that impacted wound healing, in the patient's night-time position and the use of the shower commode chair seat. Without telehealth, the client's skin pressure injuries may not have healed.

Cindy Smith, PT, DPT, ATP
Colorado

Example 9: Telehealth Identified Fall Risk with Current Seating and Positioning Equipment

A male older adult presented with a past history significant for cerebrovascular accident (CVA). He participated in a telehealth visit for his wheelchair assessment by recommendation of his OT and his wheelchair supplier, as he lived alone and was unable to find transportation to come to the clinic in person. He was also fearful of navigating a hospital setting because he was immunosuppressed and had a history of respiratory complications. During this visit, the OT was virtual while the CRT supplier was in-person with the patient and caregiver/family.

This patient was using a power wheelchair (PWC) as primary means of mobility, but reported "it's not working for me". Due to his speech deficits from his CVA, it was hard for him to articulate specifics of what was not working. The telehealth visit allowed the OT to see his current PWC and specifically how it was not working in his home, and document objectively what he needed and why. Through observation, the OT saw that the patient had been falling out of the current wheelchair because of his abnormal spasms, muscle tone, and poor postural support. The current wheelchair could not be modified to address this, so recommendations for a new wheelchair were identified which improved his safety and function. Telehealth made it possible.

Without a telehealth visit, the patient would not have been able to adequately describe his barriers to mobility in his home. The patient would be at high risk for falls, which would likely lead to injury and potentially hospitalization or institutionalization.

Terri Oxender, OTR/L, ATP/SMS
Kentucky

Example 10: Telehealth Addressed Seating and Positioning within Client's Physician Ordered Activity Restrictions

An adult male patient with a Stage 4 skin pressure wound required a mobility device, but had sitting restrictions of 30 minutes twice daily. Due to these restrictions, he was unable to be transported to the clinic, or endure the evaluation. The healthcare team decided a telehealth visit would best meet his needs. The OT was virtual, while the supplier and family/caregivers were in-person with the patient.

The patient was medically fragile at the time and unable to stand or ambulate into the clinic without multiple rest breaks. He was seen in the home due to his wound and inability to physically access the building as a result of severe deconditioning from cardiac complications, prolonged hospitalization, and his wound. He was assessed in his home and areas in the home were identified that needed modification prior to receiving the wheelchair. At the time of this writing, the equipment has not been received yet.

Without telehealth, the patient's home may not have accommodated a wheeled mobility device well. This would place the patient at risk of injury and/or falls using the device. Telehealth provided the OT with the ability to maximize the use of the recommended equipment.

Terri Oxender, OTR/L, ATP/SMS
Kentucky

Example 11: Telehealth Geographically Expanded Clinician Expertise in Seating and Positioning

A patient with a neurological diagnosis requested a telehealth visit, with the supplier in-person and the OT virtual.

The patient had no transportation and could not be serviced by anyone in his area due to limited clinicians in the area with little to no seating and mobility knowledge. Local clinicians were unable to assist the patient and his needs. The patient was seen for the seating and mobility evaluation, trials, fitting, and post-fitting follow-up by telehealth.

Without telehealth, the patient likely would not have received an appropriate wheelchair. Inadequate wheelchairs are known to lead to skin pressure injuries, falls, and other complications.

Myra L. Vasquez-Romero, OTR, ATP
Texas