

**Clinician's Guide to Use of  
Telehealth for CRT Service Provision**

**January 2021**

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In March of 2020, the COVID-19 pandemic affected everyone in various ways, including people with disabilities who needed access to skilled therapists and suppliers to obtain the Complex Rehab Technology (CRT) they rely on for daily living. The early impact of COVID-19 hindered access to clinics, therapists, and suppliers who provide CRT. However, with the approval of telehealth services for physical therapists (PTs) and occupational therapists (OTs) access improved. Many lessons were learned about the positive outcomes that can be obtained through the proper use of telehealth services in the provision of CRT. These positive outcomes underscore the need for federal and state policy makers to take action to make permanent the availability of telehealth from PTs and OTs on a national basis.

The Clinician Task Force (CTF) is a nonprofit organization of leading PTs and OTs representing 37 states who are experts in evaluating people with disabilities to identify medical and functional needs which require CRT products and supporting services. Our members practice in a wide variety of settings, including outpatient rehabilitation, private practice, educational settings, and community-based programs. CRT includes individually configured manual and power wheelchairs, wheelchair seating systems, and other adaptive equipment.

We are the only professional clinical group focused solely on CRT and our mission is to provide clinical based expertise to inform and promote public policy, best practices, and positive outcomes regarding people with disabilities who require CRT. People needing CRT have disabilities such as, but not limited to, amyotrophic lateral sclerosis (ALS), cerebral palsy, multiple sclerosis, muscular dystrophy, spinal cord injury, and traumatic brain injury. They often require CRT on a full-time basis to complete activities of daily living, to promote independence, to allow community access, and to manage and reduce their long-term health care costs.

The following document was created by the CTF to serve as a guide to therapists and other stakeholders when using telehealth to address the CRT needs of their consumers and to assist policy makers. This should not replace clinical judgement within local and state laws but can be used as reference to assist clinicians. We appreciate the input and guidance from the stakeholders of the CRT Remote Services Consortium composed of consumer groups, suppliers, manufacturers, and therapists providing CRT.

Respectfully,

Cathy Carver PT, ATP/SMS

Clinician Task Force

[cliniciantaskforce@gmail.com](mailto:cliniciantaskforce@gmail.com)

[www.cliniciantaskforce.us](http://www.cliniciantaskforce.us)

## EXECUTIVE SUMMARY

### **Clinician's Guide to Use of Telehealth for CRT Service Provision**

Rehabilitation professionals have explored Complex Rehab Technology (CRT) service delivery programs using telehealth technologies. Unfortunately, the lack of reimbursement and supportive legislation limited the use of telehealth in CRT provision prior to the onset of the COVID-19 pandemic of 2020. During this Public Health Emergency, the use of telehealth was approved for Occupational Therapists (OTs) and Physical Therapists (PTs). It quickly became apparent that the benefits of telehealth to the consumer are many and extend beyond the confines of a pandemic. As experts in the provision of CRT, the Clinician Task Force was poised to develop a Guide to using telehealth properly to address the needs of consumers requiring access to wheelchair and seating services. It is the expert opinion of this organization and its members that best practice in the provision of CRT is to conduct evaluations, assessments, fittings, and training in-person with a CRT Team consisting of, at minimum, the evaluating PT or OT and the CRT supplier. However, there are known exceptions and limitations in which telehealth can and should be considered as an option when the CRT Team cannot be together in-person. This document is not intended to be comprehensive nor take the place of individual clinical judgement. Rather, it is meant to be a general guide for the clinician trying to determine if using telehealth is appropriate, and, when it is appropriate, provide general guidance throughout the process for a more successful encounter.

The **Clinician's Guide to Use of Telehealth for CRT Service Provision** is a document that includes the background of its development and context for use. It provides helpful considerations for preparing for a telehealth visit to achieve better outcomes. The RESNA Wheelchair Service Provision Guide (WSPG) (Arledge et al., 2011) was used as an outline for organizing the document. The assumption is made that reference to the WSPG by RESNA addresses the best practice for each area to be addressed in CRT provision of care. This document seeks to apply the use of telehealth in each of those areas including looking at a consumer's current CRT equipment, activity and participation, body functions and structures. Applying the use of telehealth to CRT equipment trial and recommendation is included. Tips on what to include in documentation along with standard documentation requirements are listed. Using telehealth in the follow up fitting, training and delivery is discussed with guidance for use of telehealth. Information is included regarding other ways telehealth can be used to perform outcomes measures and in addition to any other opportunities that may exist for clinical follow ups. Case examples (see Appendix A) of common scenarios are provided to show how these guidelines can be applied. A

Decision Tree (see Appendix B) is included as a basic guide for clinicians, suppliers, or others in determining the best utilization of telehealth. We hope this document and supporting resources are helpful in providing skilled assessments for people needing CRT. Ideally the CRT Team is present in-person with the consumer from evaluation to delivery. But when medical circumstances or other barriers to an in-person encounter arise, using telehealth can allow for a consumer's needs to be met.

# Clinician’s Guide to Use of Telehealth for CRT Service Provision

## INTRODUCTION

Rehabilitation professionals have explored Complex Rehab Technology (CRT) service delivery programs using telehealth technologies. “Telehealth is the use of information and communication technologies (ICT) to deliver health-related services when the provider and consumer are in different physical locations” (Brennan et al., 2010). These technologies may be used to deliver preventive, evaluative, consultative, therapeutic, and monitoring services. Medicare defines telehealth, telemedicine, and related terms generally, to refer to the exchange of medical information from one site to another through electronic communication in order to improve a patient's health.

The lack of reimbursement and supportive legislation prevented effective use of telehealth in CRT provision until the onset of the COVID-19 pandemic of 2020. With this pandemic, healthcare delivery was severely impacted, and it was realized that access to provide and be reimbursed for services via telehealth was inherently valuable for rehabilitation professionals, including physical therapists (PTs) and occupational therapists (OTs).

Additionally, it became apparent that the benefits of telehealth to the consumer<sup>1</sup> could be many, beyond the confines of a pandemic. Medically fragile (at times referred to as “high-risk”) CRT consumers can remain in their own environments, reducing risk of exposure to pathogens and burden of travel. Those not near a specialty clinic offering wheelchair and seating services<sup>2</sup>, as in rural areas, can be seen by a skilled clinician<sup>3</sup>, improving product recommendations and outcomes, and reducing potential medically adverse effects of travel. Consumers near a wheelchair and seating clinic<sup>4</sup> still may not be able to attend in-person appointments due to having unreliable transportation. Telehealth provides the clinician with an added benefit, as well. Consumers can be directly observed in their homes or other

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<sup>1</sup> Consumer refers to the person with a disability in need of CRT equipment.

<sup>2</sup> Wheelchair and seating services describes the service provided by the skilled therapist that includes a thorough evaluation of a person’s mobility needs, posture and environments to recommend the appropriate wheelchair and/or seating equipment for a consumer. This service includes visits for modifications to existing CRT equipment and the final fitting and functional training with new CRT being provided.

<sup>3</sup> Clinician and therapist are used synonymously in this document to refer to a physical therapist or occupational therapist who has the skills and experience of evaluating someone who needs CRT and documenting the medical need to a funding source and following up for proper functional use of the CRT.

<sup>4</sup> This refers to the physical location where wheelchair and seating services are provided. Clinics are typically in outpatient therapy clinics (some are hospital based) or school settings or other locations.

primary environments and accessibility issues or training needs can be addressed that may not be apparent during a clinic visit. Consequently, use of telehealth or remote services became a viable option to address the needs of people with disabilities who require CRT. Due to the benefits for both the rehab professionals and the consumer, the use of telehealth or remote services became a viable option to address the needs of people with disabilities who require CRT.

This Guide was created by the Clinician Task Force (CTF), a non-profit organization composed primarily of OTs and PTs who practice, serve, and provide education to and advocate for individuals requiring seating and wheeled mobility products and services. The group consists of clinicians who practice in a wide variety of settings, including outpatient rehabilitation, private practice, educational settings, and community-based programs. It is the stance of this organization and its members that clinician best practice in the provision of CRT is to provide evaluations, assessments, fittings, and training in-person with the CRT Team present (at minimum with the evaluating therapist and CRT supplier<sup>5</sup>) with the consumer, whenever possible. However, there are known exceptions and limitations in which telehealth can and should be considered as an option when the CRT Team cannot be together in-person.

The purpose of this document is to provide general guidance to clinicians and other members of the CRT Team in the application and use of telehealth in this area of practice. The Wheelchair Service Provision Guide (RESNA) was published in 2011 and is currently under review for revision. However, the outline of that document was used to compose this document for consistency.

## **CONSIDERATIONS**

When the therapist and supplier of the CRT Team are unable to be onsite together (i.e., in-person with the consumer), the use of telehealth can be a resource to bring the team members together, if certain criteria are met.

The following are *considerations* for the team in preparing for a successful telehealth visit/encounter:

1. The experience and skill level of each team member must be considered. Communication about expectations for the visit and how to capture various aspects of the assessment must be addressed between the supplier and therapist(s), dependent upon who is onsite and who

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<sup>5</sup> Supplier is the term which refers to the professional employed by the company who sells and services the wheelchair and seating equipment (CRT).

will be remote. A lack of skill and/or experience may warrant a change of plan or team members, as comfort with telehealth tends to depend upon these factors.

2. Determine which telehealth platform will be used and ensure it is HIPAA compliant and permitted by employers and CRT companies alike.
3. Determine if audio and video capabilities are available and reliable. Determine a back-up plan in the event of internet failure or lack of internet access.
4. Ensure all documents are signed and completed by the consumer consenting for services provided via telehealth, according to individual employer and state regulations.
5. Confirm compliance with state licensure laws for PTs and OTs, especially if telehealth services will be crossing state lines.
6. Determine if the consumer's insurance covers telehealth services and identify required copays.
7. Verify that family or caregivers can be present to ensure that the consumer has physical assistance for transfers or other mobility, as necessary, especially if the therapist will not be the team member present in the home.
8. During the visit the remote participants will be reliant on the position of the video feed. Thus, placement of the device is pertinent, and someone must be responsible to adjust position of the video equipment during the visit to maintain line of sight.

This document offers guidelines for provision of services when telehealth is being utilized during the wheelchair service delivery process.

### **PERSONAL PROTECTIVE EQUIPMENT**

Team members who provide wheelchair and seating services in any setting are obligated to maintain a commitment to the health and safety for all parties involved. The potential for transmitting contagious pathogens exists in all settings and proper personal protective equipment (PPE) must be utilized (see Appendix C).

### **REFERRAL**

The referral for wheelchair and seating services is necessary to allow the OT or PT to be involved in the assessment process. A referral can be initiated by the consumer, MD or other medical team member, PT or OT, or supplier. Once the referral has been received, further discussions with the consumer are necessary to determine if the visit will be with the CRT Team in-person or if telehealth services are

warranted. A Decision Tree (see Appendix B) has been developed as a basic guide for determining the best utilization of telehealth. A referral is not needed for the CRT supplier, but the consumer should agree with the chosen company.

### **ASSESSMENT OF NEED**

The topics listed below will be addressed specific to the application of telehealth. Refer to the RESNA Wheelchair Service Provision Guide for details regarding completing a standard wheelchair assessment. Several portions of the assessment may be difficult to complete through a telehealth platform. Competence and skill level of team members, cohesiveness of the team and involvement of caregivers are key to a successful visit. If any team member is uncomfortable or if it is determined that the consumer's needs cannot properly be addressed via telehealth, a transition or deferment to in-person may be necessary to secure the best outcome.

### **Current Complex Rehab Technology Used for Mobility in Various Environments**

A benefit of telehealth is the ability of the clinician to observe consumers in their own primary environments. Thorough observation of the use of CRT in these environments, mobility needs not met by current equipment can be identified and training needs can be assessed. Safety concerns or need for environmental modification can also be identified. The consumer can be referred to additional services or the current plan of care can be modified and extended to address identified needs. In-home observation provides a comprehensive review of the overall needs that may be overlooked in a clinic setting.

### **Activity and Participation**

Demonstration of how the consumer performs self-care, activities of daily living, and functional mobility in their own specific environments can ensure accurate recommendations for new CRT equipment and more thoroughly support justification. Participation of additional caregivers or family members, who may not be able to be present in the clinic, can provide valuable input regarding how the consumer performs ADLs or how their current equipment impacts their independence.

### **Body Functions and Structures**

If there is no mat table available at the consumer's location, consider using any available firm surface, a bed or a wheelchair that allows full recline and leg elevation. If the consumer is unable to reposition



themselves independently, a caregiver can be asked to assist. If the clinician is remote, they will provide verbal and visual instruction to caregivers to allow visualization of range of motion (ROM) and a general strength screening. It is important that the supplier is not expected to perform these assessments as this does not fall within their standards of practice (RESNA).

## **EQUIPMENT RECOMMENDATION AND SELECTION**

Product trials can occur at the consumer's home or at the supplier's facility/office to assist with product recommendation. It is generally recommended that the supplier be with the consumer in-person for equipment trials, as the equipment specialist. It may also be appropriate for the manufacturer representative to be present in-person or remotely for additional product counsel. The clinician can be present remotely, using observational skills, interview, or instructional guidance to complete and document objective measures during these trials for additional justification of medical necessity.

As previously noted, one advantage of using telehealth is the clinician's ability to observe how a consumer functions within their own environments. So, using telehealth for equipment trial can allow observation and documentation of the specific impact of that equipment on their activities and participation. Specific features or components of the trial equipment can be more thoroughly and specifically medically justified. The team can also identify pertinent training needs, like propulsion or driving skills, or potential barriers to be addressed.

### **Documentation**

Specific to telehealth, when the clinician or supplier is remote, a minimum of the following should be documented, in addition to standard data:

1. The reason telehealth was chosen.
2. The location of all present team members and the consumer.
3. The address and phone number(s) where the patient is physically located at the time of the telehealth visit. \*
4. The consumer's agreement to participate and who was present with the consumer.
5. Any regulations specific to his/her insurance and licensing needs.
6. The use of PPE and other considerations.
7. The type of telehealth platform used, and any precautions reviewed.
8. Other specific considerations, as applicable.

*\*This will allow for accurate deployment of Emergency Medical Services should the patient have an adverse event during your session.*

## **FITTING, TRAINING AND DELIVERY**

### **Fitting**

In most cases, it is assumed that the supplier will deliver the needed items and equipment to the consumer and the therapist joins remotely via telehealth, with other team members as needed. The therapist will serve to guide the supplier throughout the process of adjustments, as it is done in-person.

### **Training and Delivery**

Training on the care, maintenance and use of the CRT equipment will be done by the supplier. This may include, but is not limited to, programming the electronics, turning the chair on and off, battery maintenance and assembly and disassembly of the equipment. Functional training, such as transfers, positioning, pressure relief program and wheelchair skills with the CRT equipment and any medical considerations will be performed by the clinician, remotely. If further functional training needs for the consumer or caregiver(s) are identified at the conclusion of the initial fitting visit, the clinician can maintain an open telehealth plan of care.

## **CLINICAL FOLLOW-UP**

For the clinician, telehealth can be an effective tool for consumer check-ins and review of consumer use of CRT equipment, if funding for this type of follow-up is available. This benefits the consumer by offering a safe way to check in with the clinical team and identify functional training needs or safety concerns. If maintenance and repair needs are identified during this follow-up visit, the consumer will be advised to contact the supplier directly.

## **OUTCOME MEASUREMENT**

Outcome measures are useful in objectively documenting the need for CRT equipment. When doing telehealth, some options for outcome measures include the Functional Mobility Assessment (FMA), 10-meter walk, Timed Up and Go (TUG), Wheelchair Skills Test (WST), Five Times Sit to Stand (FTSTS), Functional Reach, or pain scales. Some tests, like the FMA or WST, can be completed via interview

format. Others listed must be physically performed and may require prior planning and communication amongst team members for accurate completion.

## **CONCLUSION**

This Guide is intentionally broad and is not intended to replace clinical judgment related to specific consumer needs. The committee that developed the Guide represents the various stakeholders in the wheelchair service provision process. They developed the Guide using a review of the literature and best practice concepts, as expressed by content experts. This document identifies and recommends steps that may be used when telehealth or remote services are used in the process of providing CRT services and ensures that all stakeholders understand the various components in high quality wheelchair and seating service delivery, regardless of the setting or funding. Recommended best practice is that the CRT Team meet in-person with the consumer. However, when the consumer cannot be seen in-person due to a determined reason, the CRT Team may decide to use telehealth/remote services to meet the consumer's CRT needs.

## References

- Brennan, D., Tindall, L., Theodoros, D., Brown, J., Campbell, M., Christiana, D., Smith, D., Cason, J., & Lee, A. (2010). A blueprint for telerehabilitation guidelines. *International journal of telerehabilitation*, 2(2), 31–34. <https://doi.org/10.5195/ijt.2010.6063>
- Arledge, S., Armstrong, W., Babinec, M., Dicianno, B.E., Digiovine, C., Dyson-Hudson, T., ..... & Stogner, J. (2011). RESNA Wheelchair Service Provision Guide. Retrieved from the RESNA website <https://www.resna.org/Resources/Position-Papers-and-Service-Provision-Guidelines>

## Authors

Cathy Carver PT, ATP/SMS; Erin Michael PT, DPT, ATP/SMS; Theresa Berner OTR/L, ATP;  
Barbara Crume PT, ATP; Penny Powers PT, MS, ATP; Faith Savage PT, ATP

## **APPENDIX A – CASE EXAMPLES**

### **CASE EXAMPLE 1 – USING TELEHEALTH FOR CRT EVALUATION**

#### **Brief Description**

Tom is a 68-year-old man with a diagnosis of Multiple Sclerosis who currently uses a Group 2 power wheelchair (PWC) with a captain's seat. The PT performed the evaluation for this PWC five years ago in-person in a clinic setting, therefore is familiar with him. Tom depends on his wife to assist with reporting his needs due to cognitive deficits. He was referred for evaluation for CRT due to increasing weakness, poor positioning, and declining condition of the chair.

#### **Decision to Use Telehealth**

The Wheelchair and Seating Clinic was closed due to COVID-19 restrictions. Since Tom is known to his PT, it was decided that telehealth could be used to determine his mobility needs. However, all parties agreed that if, at any point, a member of the CRT Team decided that an adequate assessment could not be attained via telehealth, he would be seen in-person when the clinic reopens. Key factors in using telehealth for Tom were his high risk for COVID-19, his change in function, the therapist's familiarity with his medical condition and other important considerations related to the technology recommendation, such as medical history, equipment history, and the clinic being closed.

#### **Clinical Findings During the Telehealth Visit**

Tom was seen for two separate telehealth visits: one visit took place at the supplier's office and the second at Tom's home. A mat table was available at the supplier's office, which provided a proper surface for the mat evaluation. Tom requires assistance for transfers and movement of lower extremities, so his son was present and able to assist. Under the guidance of the PT, his son moved Tom's lower extremities through the available ROM. A mild decline in ROM from previous evaluation was observed but was determined to be functional for seating. Tom was able to independently demonstrate active ROM of his upper extremities, trunk, and head/neck. Tom's strength was assessed via observation of function. He needed assistance transitioning from supine to sitting on the edge of the mat. He demonstrated the ability to maintain sitting with hands free at the edge of the mat without falling for only two minutes. General functional strength was documented based on observation of these movements and his ability to move through active ROM at his upper body.

At the supplier's office, Tom did a trial in a Group 3 front wheel drive (FWD) PWC. His trunk posture was fair with a tendency to lean to the left side. He demonstrated good skills driving the chair in an open environment. A Group 3 FWD PWC with increased positioning options was brought out to his home. This was important to see his specific environment and identify current driving and safety issues he was having.

Tom resides in a single-family two-story home. His bedroom and full bathroom are currently on the second floor and he has difficulty going up and down the stairs. His wife is investigating options to modify the home. He has a ramp to enter the home. His current Group 2 PWC is unable to safely negotiate the transition at the bottom of the ramp. With the Group 3 chair, Tom demonstrated the ability to navigate the ramp safely. Tom's wife reported that it is hard for him to stand up from his current power wheelchair for transfers, especially as the day progresses, due to fatigue. Tom was able to test power anterior and posterior tilt and power seat lift during this visit, providing valuable input on the medical necessity of these seat functions.

### **Telehealth Lessons Learned**

Tom was seen in two different locations for the telehealth visits. The visit to the supplier's office allowed for the use of a mat table that was not present at his home. It also allowed for review and trial of several CRT power wheelchairs, since the supplier had demonstration (demo) chairs stored at his facility. It would have been difficult and time consuming to transport multiple trial options to Tom's home.

Based on observation of the home environment, more pointed data was acquired. Important details regarding the changing status of his transfers and ramp access were gathered. This may not have been realized at the supplier's office or in a clinic setting. It was helpful for the clinician to see Tom driving the trial wheelchair at home to identify barriers and further justify the upgraded power base and seat functions. The PT was also able to provide feedback on home access and transfer training in real time.

### **Outcome of Visit**

The experience of the PT and the positive relationship with the supplier helped justify the use of telehealth and led to positive outcomes. The combination of two visits allowed the PT to perform a comprehensive assessment for recommendation of an upgraded device and to educate the consumer and his family on the equipment and how to maximize his independence. Moreover, it was confirmed that he was safe to drive in his familiar environments, despite documented cognitive impairments.

## **Potential Outcome Without Telehealth**

Tom's PWC was in poor condition and his function was declining. Without the use of telehealth, the process for getting a new PWC would have been significantly delayed. This would put him at greater risk for falls, injury, and other comorbidities associated with poor mobility, such as inability to shift weight for pressure relief, postural changes and becoming bedbound.

## **CASE EXAMPLE 2 - USING TELEHEALTH FOR FITTING OF CRT EQUIPMENT**

### **Brief Description**

JRC is a 56-year-old male patient who presents with ALS (amyotrophic lateral sclerosis) with symptoms beginning two years ago. He was referred to the Wheelchair and Seating Clinic to address his mobility and postural needs. He purchased a Group 2 PWC privately and has been using this PWC for all his activities of daily living within his home and for community related outings, but it was no longer meeting his needs. At evaluation, a Group 3 heavy duty PWC with four power seat functions was recommended. The PWC was approved and set for delivery.

### **Decision to Use Telehealth**

The consumer, due to his diagnosis, is medically fragile and is at high risk for infection. The delivery of his new PWC was scheduled during the COVID-19 pandemic. Due to the rapid progression of ALS, JRC could not afford to wait until it was deemed safe to attend the Wheelchair and Seating Clinic in-person. Thus, the delivery and fitting occurred via telehealth with the supplier at the home and the prescribing clinician attending remotely.

### **Clinical Findings During the Telehealth Evaluation**

JRC and his wife were trained in the care and maintenance of his new CRT equipment. He was transferred into the PWC via mechanical lift by his wife and adjustments were made to optimize his support, function, and performance. Following the programming of the joystick drive parameters, he was able to perform basic wheelchair skills safely and effectively with power mobility. It was noted that JRC would require additional skills training to maximize his independence. His wife and he agreed to continue skilled telehealth services for training in his home and yard. At completion of the session he was able to fully utilize and maneuver the new PWC and seating functions in his home and would be able to translate those skills to additional environments when it was safe to resume community activities.

### **Telehealth Lessons Learned During the Fitting**

Completing the initial fitting at JRC's home allowed timely and safe delivery of JRC's CRT equipment. It also created an optimum opportunity to see him use the CRT PWC within his home environment. The clinician and supplier could provide education and cues to both the consumer and his caregiver that were directly relevant to his main environment of use. Lastly, pertinent training needs were identified, and this training could continue within his home environment. This allowed sessions to be specified to that environment and his specific needs. This is an opportunity that would not have been afforded to JRC if the delivery took place in the Wheelchair and Seating Clinic.

### **Potential Outcome Without Telehealth**

ALS is a rapidly progressive neuromuscular disease with terminal prognosis. Objectively, JRC lost strength, endurance and functional mobility and the ability to participate in Mobility Related Activities of Daily Living (MRADLs) from the initial meeting to the final fitting. It is likely that he would have been bedbound without the timeliest intervention that telehealth provided. Some complications from being restricted to bed include pulmonary compromise, pressure injuries, and contractures that can be life threatening to someone with ALS.

## **CASE EXAMPLE 3 - USING TELEHEALTH FOR MODIFICATIONS**

### **Brief Description**

Arielle is a 16-year-old with diagnosis of congenital severe brain injury with resultant cerebral palsy and scoliosis. Her cognition is good, but she is nonverbal and uses an Alternative Augmentative Communication (AAC) device. She received her manual tilt-in-space wheelchair with custom contoured seat and back cushions and head/neck support two years ago. Her mother contacted her supplier because Arielle had grown, recently received a new soft thoracic lumbar sacral orthotic (TLSO) and was no longer comfortable in her wheelchair. Due to this discomfort, she was spending more time in supine on a floor mat or in bed.

### **Decision to Use Telehealth**

The decreased use of her wheelchair due to discomfort created urgency, due to the risks associated with the inability to sit or change positions. However, the reduced ability to tolerate the wheelchair also impacted Arielle's ability to transport safely to the Wheelchair and Seating Clinic. Considering this and

the therapist's inability to visit the home, a telehealth visit was scheduled with the supplier present and the therapist, who had completed her original evaluation, recommendations, fitting and training, present remotely.

### **Clinical Findings During the Telehealth Visit**

Observation of her posture in her wheelchair, revealed that she would extend her right hip and scoot her pelvis forward. The backrest was no longer properly in contact with her back because of postural changes. Her AAC device mount was pressing into her right lateral lower leg due to right hip abduction. The PT instructed the mother to manually check the position of her pelvis in the custom seat and use her hands to check for pressure distribution on Arielle's buttocks. The supplier and she noted that the lower edge of the TLSO was pressing into the seat cushion, which the therapist stated may be causing her forward pelvis position. The head/neck support was misaligned partly due to poor pelvic positioning in the wheelchair, but also due to growth.

The PT guided the mother through range of motion (ROM) testing with Arielle in supine on a floor mat. Directions were also provided on the use of a goniometer and how to read results. The camera was positioned so the therapist could visually observe the mother's hand placement and Arielle's leg movements, along with the position of the goniometer. It was determined that right hip flexion had notably reduced, since previous evaluation.

The PT requested that her mother demonstrate how they were supporting Arielle's supine positioning, while on the mat. It was observed that she was positioned with reduction of her spine curvature, and soft pillows were used to support the lower legs. Thus, neither hip position was corrected within her available range of motion; instead, both hips were in extension and windswept to the right. This is, likely, contributing to loss of hip ROM. The team noted that the additional loss of hip ROM was creating a mismatch between the cushion and Arielle's anatomy. The therapist recommended opening the seat-to-back angle to accommodate this. The supplier then completed this modification.

The PT instructed her mother on how to position and hold her head in alignment, while the supplier adjusted the head support mounting hardware to achieve optimal support. Overall, Arielle was noted to be more relaxed and comfortable sitting in her wheelchair and making better contact with the back and head supports at the end of the visit.



## **Telehealth Visit and Lessons Learned**

Two factors created unanticipated challenges at the beginning of Arielle's visit: background noise and reduced lighting. Reducing background noise by changing locations in the home and adding additional light to the room were key to improving the clinician's ability to assess the consumer and communicate with the full team.

Due to the complexity of Arielle's medical condition and postural needs, the therapist's and supplier's levels of experience and having a caregiver present were also pertinent to the success of this visit. If this visit had occurred in the Wheelchair and Seating Clinic, the PT would not have had the opportunity to observe how Arielle was positioned at home in supine or recognized this significant training need. A follow-up visit was coordinated for a home therapist to complete an in-person visit to provide positioning education and training and modification of supine positioning devices.

## **Outcome of Visit**

Her mother was incredibly pleased with the modifications made and stated she was relieved that the modifications were able to be completed in such a timely manner. The FMA was provided during the visit and then retested at two weeks post visit via phone. The mother's responses showed significant improvement in Arielle's level of comfort, ability of the equipment to meet her health needs and capability to utilize her wheelchair for daily activities and mobility in her home.

## **Potential Outcome Without Telehealth**

Arielle would have continued to be uncomfortable in her wheelchair with inability to sit with her pelvis back in the seat. An unnecessary request may have been made for her to return to the orthotist to modify her TLSO or the family may have tried to adjust the equipment themselves. They likely would not have recognized the necessity to improve pelvic position first. Most importantly, Arielle would have continued to spend more time in supine without postural correction, leading to further contracture of her lower extremities and asymmetry of her pelvis and spine.

## **CASE EXAMPLE 4 - TELEHEALTH NOT RECOMMENDED**

### **Brief Description**

Peter is a 38-year-old man with a diagnosis of cerebral palsy residing in a group home setting. He currently utilizes a manual tilt-in-space wheelchair and complains of discomfort after sitting in the

wheelchair for 30 minutes. His caregivers report he is constantly leaning to the right and they are unable to reposition him to sit upright. Peter has access to skilled PT and the PT reports that she has attempted to improve his posture. She has been unsuccessful and referred him to a wheelchair and seating clinic.

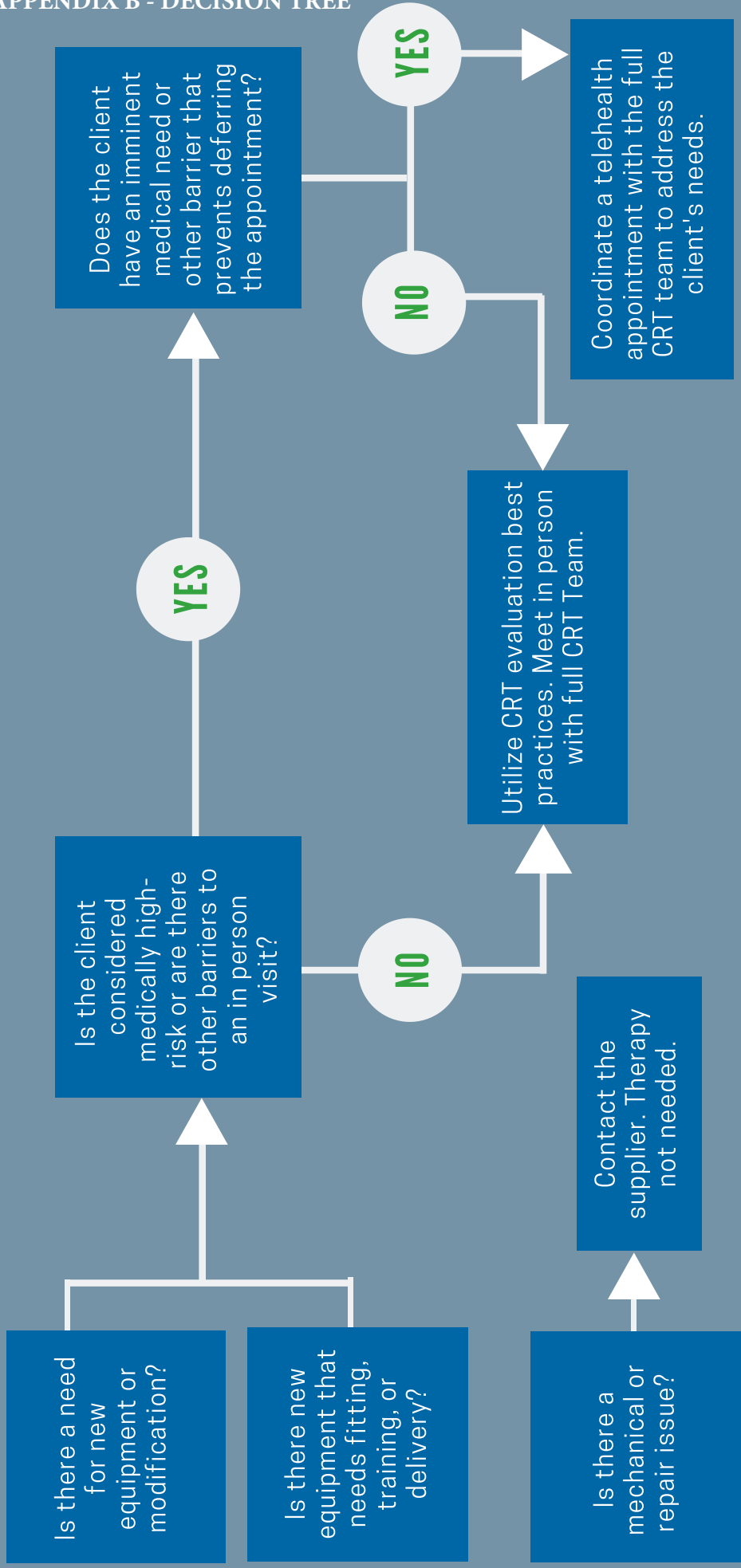
**Reason(s) Telehealth Was Not Recommended**

The Wheelchair and Seating Clinic was closed due to COVID-19 restrictions. The therapist has been using telehealth to support outpatients affected by this closure and reached out to Peter's PT to review his case and treatment options. The PT in the group home reported that Peter has multiple ROM limitations in his trunk and severe postural deformities. Due to the severity of his deformities and unfamiliarity of the therapist in the Wheelchair and Seating Clinic with Peter, it was determined that telehealth could only be successful with the group home PT serving as the hands during the assessment for the PT in the wheelchair and seating clinic. The group home PT was not comfortable with this format and declined this option. Peter will be seen at the wheelchair and seating clinic when it reopens to ensure the best possible outcome.

## CLINICAL GUIDE FOR USING TELEHEALTH WHEN SERVING CLIENTS NEEDING CRT

Best practice is to care for your client in person when determining their Complex Rehab Technology (CRT) needs. However, protecting their health and safety is also critical. When in person visits are not available, other options such as telehealth can be considered. Use the chart below to help determine if your clients with complex needs should be seen in person or if other options may be more appropriate.

### APPENDIX B - DECISION TREE



Have questions or need assistance? Reference full "CRT Telehealth Service Provision Guidelines" at [www.ClinicianTaskForce.com](http://www.ClinicianTaskForce.com) or contact the Clinician Task Force at [cliniciantaskforce@gmail.com](mailto:cliniciantaskforce@gmail.com).

## APPENDIX C – PERSONAL PROTECTIVE EQUIPMENT

Our awareness of transmission and infection is heightened as a result of the COVID-19 pandemic of 2020. Below are recommendations on the use of Personal Protective Equipment (PPE):

1. Preemptive screening has been incorporated in both the clinical and service delivery settings. The goal of the screening is to identify potential high-risk scenarios including COVID-19, Influenza, and childhood diseases like mumps and measles. Screening and infection control have evolved since the 1980's for HIV, MRSA, C-diff. Screening and the adoption of "barriers" are essential to provide service safely for all involved. Social distancing of six feet is recommended whenever possible, considering those pathogens are transmitted via airborne particulates.
2. The most common PPE includes masks, face shields, goggles, gloves, gowns, and shoe coverings. Identification of modes of transmission of the pathogens drives the recommendation for the PPE. These items protect an individual from contact with blood, body fluids and airborne particulates. When the patient/consumer and the service delivery personnel/clinical staff wear PPE, optimum protection is initiated. Infants, young children, some intellectually disabled and autistic individuals, as well as those individuals with respiratory impairments, cannot wear masks or face shields. Heightened awareness of potential for transmission is recommended when working with those individuals.
3. Clinical settings receive direction regarding PPE and infection control policies and procedures from OSHA (Occupational Safety and Health Administration) in conjunction with the CDC (Centers for Disease Control and Prevention), The Joint Commission (TJC), and state and local Departments of Health. Suppliers with their Safety Officers take their direction from Community Health Accreditation Program CHAP and American Community Healthcare Association (ACHA), which also receive direction from write in full OSHA and the CDC.
4. All employers are required to provide PPE for their employees. Basic PPE (masks and gloves) and hand sanitizer are considered to be minimum provisions. Access to handwashing is essential but not always accessible in the community or home settings. We recognize that the consumer and their caregiver(s) may not have the minimum PPE, and this is a challenge for providers in both the clinical and home settings. The ability to provide masks, gloves, and hand sanitizer to the consumer and their caregivers may be required for the safety and well-being of all involved.