

CEREBRAL PALSY

Telerehabilitation treatments for children and youth with Cerebral Palsy (CP) and their families...

| What research is available?

There are 11 studies on different available telerehab-treatments.

| How strong is the research behind these treatments?

Seven studies are of high research quality, while 4 studies are of low research quality.

Telerehabilitation is an emerging and a rapidly growing field. More high-quality research is on its way. We are dedicated to update the available information with the most recent findings.

| Who provides these treatments?

These telerehab-treatments are provided by different specialists including:

- Occupational therapy (OT)
- Physiotherapy (PT)
- Speech-language pathology (SLP)
- Multidisciplinary teams of different professionals (e.g., OT, SLP)

| What is the involvement of the clinician in these treatments?

Clinicians are mainly actively involved in these telerehab-treatments. In other words, they are present and engaged with you and/or the child in every therapy session.

| How are these treatments provided?

In most cases, telerehab-treatments are provided through videoconferencing by using different platforms (e.g., Skype, Zoom, or other video calls options).

| Who receives these treatments?

Telerehab-treatments are provided mostly directly to the children with CP alone. Fewer treatments engaged both the child and their parent together in their approach. No treatments engaged the parents alone.

| What are the goals of these treatments?

All of the telerehab-treatments focus on improving child-related outcomes including:

- Child's...
 - Upper and lower extremity motor functions (e.g. ability to move arms and legs)
 - Visual perception (e.g. ability to perceive different visual depths)
 - Dexterity (e.g. ability to manipulate small objects such as coins, zipper, pencil).
 - Bimanual hand function (e.g. ability to perform a task that requires the use of both hands)
 - Strength
 - Bilateral coordination
 - Reaction speed
 - Mobility
 - Speech functions
 - Physical activity

| Does it work?

Yes! Telerehab-treatments are shown to work for children and youth with CP and their families.

For instance, telerehab delivered by occupational and physical therapists, a multidisciplinary team, and speech-language pathologists were shown to be **more effective** in improving numerous skills and abilities among parents and children than when family receives:

- No treatment
- Face-to-face comparable treatment
- Usual care

It is important to note that no studies showed that the telerehab-treatments were less effective (than other interventions) or detrimental.

| Are there any side effects/risks?

If your medical and rehabilitation team have cleared you and/or your child to engage in telerehabilitation, there are no specific associated risks or side

effects. Your rehabilitation professional will help you and your child to perform the therapy safely and effectively.

However, it is important to relay any concerns and/or questions to your rehabilitation professional because telerehabilitation is a relatively new approach and it is different from the traditional face-to-face method. For instance, sometimes, technical issues (e.g., access to suitable technology such as a computer or a smart phone, internet connection, the platform that is used) might come up. We encourage you to discuss these and other issues with your rehabilitation specialist to promote best results and optimize your therapy sessions.

| How many treatments are necessary to make progress?

On average, improvements were noted following telerehab-treatments that were provided for 30-60 minutes, 3-5 days per week, for about 10 weeks.

However, every child's needs and progress journeys, as well as parents' resources, preferences, and availabilities are different.

In collaboration with your rehabilitation professional, you can determine the duration and frequency of tele-treatments that are most optimal and suitable for you and your child.

| Is this appropriate for me and my child?

Telerehab could be a great option for certain interventions that are feasible to be delivered and received virtually.

Children with CP aged anywhere from about 2 to 18 years old, and their families, can benefit from telerehab. However, every child's needs, family's resources, and progress journeys are different.

We encourage that you discuss the appropriateness of telerehabilitation with your health professional.