

Being able to drive a powered wheelchair provides children with physical disabilities with:

- independence
- chances to explore and learn about the world
- opportunities to travel over longer distances
- ability to move more quickly using less energy
- chances to join in with friends and activities
- opportunities to become involved in wheelchair sport
- assistance with cognitive development.

Things that need to be taken into account when considering powered mobility

The 'right time' to try out a powered chair

No two children are the same so it is a good idea for this question to be carefully discussed with everyone involved with the child, including the child's family, therapists, teacher and, in some cases, their paediatrician.

Some things that can be considered:

- Some children use a walker to enjoy the feeling of walking but this does not let them join in many activities.
- Other children may use a walker well indoors but may be very slow over long distances - they may not be able to keep up with class activities once they start school, or be left behind when their family goes to the park with other children.
- Some children may be able walk, or use a manual wheelchair, but get very tired or even sore hours later. Using a powered wheelchair may help slow 'wear and tear' on their joints and muscles. Using a power wheelchair may mean they have more energy to do other things.
- Even with practice, some children may not have developed enough strength or skills to use a manual wheelchair over longer distances, inclines or rough ground.
- Children may have a condition such as Muscular Dystrophy, where they are starting to have falls when walking and may need help to move safely.
- Some children may walk in the future but may need some sort of mobility in the meantime.
- Often children can have lots of choices for how they can get around and use all of them!

Will a child be able to drive a powered chair?

Novita therapists believe that the best way to answer this question is to let the child try, by using one of Novita's special 'trailing chairs'. Although computer simulators have been designed to test the way that the child could control a chair, most experts in the world agree that there is no substitute for the real thing.

Before this happens, some other things will have to occur:

- First the child will have a physical assessment to look at the way they sit and the sort of support they may need. It will be very hard to drive if they have to put all their energy into maintaining their sitting balance.
- A medical information form may need to be filled in by your child's doctor.
- Parents are welcome to talk to their child's team about the way their child will control the chair. Things that they will need to look at include:
 - the level of arm control of the child
 - whether the child is left or right handed
 - how the controller will be used - although chairs are most commonly operated by the hand - (see T-bar control to the right), they can also be controlled using foot, head (see head switch control to right) , chin or mouth controls.



In more complicated cases, a referral to attend the Powered Mobility Clinic for a 'come and try session' may be suggested. The therapists from the Powered Mobility Clinic can assist to determine the best set up for your child's trial chair.

- If the child does not have good control, time may need to be spent trying out different sorts of controllers – the child will need lots of chances to practice. For example, this can be done when a child:
 - uses switches to play with toys
 - uses a communication board or device
 - uses a computer.



The child will have to master some specific skills if a trial is to be successful.

- As well as using a switch well, the child will need to:
 - understand what *stop* and *go* mean
 - follow simple instructions
 - show that they are learning to pay attention to tasks without losing concentration
 - be able to plan what they want to do.
- The child will also need to be:
 - attentive
 - motivated
 - persistent.
- The child will need the necessary visual skills.
- The child needs to be 'developmentally ready' - this means that they need to be ready in other areas, such as their:
 - social development
 - communication development
 - play development.

Where all of the above aspects have been considered it is more likely that the child will have all the skills necessary to move on their own in a power wheelchair with practice and training.

Disclaimer: General information only. You should consult with the relevant professional before using it with a particular child.

What are trialing chairs?

- Novita has a number of powered wheelchairs that can be loaned for trialing (trying out). These can be booked by Novita physiotherapists for a maximum of a school term. Depending on how many people want them, there may be a waiting list for the chairs.
- Each chair can be adjusted to provide whatever seating support is needed for the child.
- The chairs can be operated by a variety of controllers and will be set up with the best controller for the child.
- If the child does not need special seating, it may be possible to find a recycled (second-hand) chair to use for a trial.
- The chair can be set up for the child in the best setting for the try out to take place.

What does a trial involve?

The trial will give the child as many opportunities as possible to learn the skills involved in driving a powered wheelchair. Trials involve the following parts:

1. Training

Children who are very young, or have complicated needs, learn best by trial-and-error in a safe location. Training can include the following:



- Practicing skills such as starting, stopping and keeping going or changing directions.
 - Being given the freedom to explore & play with fun motivating and age appropriate activities.
 - Playing games, such as retrieving a toy, crunching leaves or playing 'follow the leader'.
 - The trainer providing very few commands about directions at the beginning of the training.
 - The trainer using simple phrases such as 'Let's go' and 'Follow me' rather than phrases such as 'Go forward' and 'Turn right'.
- At the beginning of the training allowing the child to **direct** the play activity & where to go, only providing minimal verbal instructions.
 - The trainer using questions such as 'Where do you want to go?' or "let's play over here" or "turn this way" that encourage the child to think and solve problems that involve moving about in the chair.
 - Encouraging the child and their parent to think about some of the other things that will become important once they have a motorised chair, such as:
 - 'How will I transport the chair?'
 - 'Will it stay in one place?'
 - 'Is there room to drive it at home?'
 - 'Will it be used indoors, outside or both?'

If your child has mastered the basic skills required and you and your team have decided to go ahead with ordering a chair, your therapy team will help you to explore all these issues before a final decision is made.

If a child is older, does not need supported seating and can use a regular joystick (the driving handle used to direct the wheelchair speed and direction), they may learn to control the chair fairly quickly. If this is the case, the trial will then involve some training in *safe wheelchair driving practices*. These may include:

- Watching out for opening doors.
- Keeping to the left.
- Understanding how to approach kerbs.

- For more information read the document titled *Powered Wheelchairs - Safe Driving Suggestions* found on the [Factsheets page of the Novita website](#).

2. Assessment

At the end of the trial, the child's ability to control the chair through a number of tasks will be scored. The amount of 'hands-on' help and/or spoken instructions required will be considered. The final score will help the therapists, child and family to decide whether:

- *a wheelchair is ordered* – this decision is usually made if the child can manage the chair with close supervision or even occasional physical assistance
- *more work needs to be done* – this decision is usually made if the child still needs lots of 'hands-on' or physical help and instruction – the assessment results will show where the problem areas are.

It is important to remember that if a child does not do well in the first trial, another trial can always be arranged at a later date.

Parents and carers comments following a powered wheelchair trial

- "I feel that every child with the ability to access powered mobility must have that choice. It opens up the environment for them, giving them independence" (School Support Officer).
- "I feel it has given [my child] new found freedom, which has also given her confidence to make her own choices about where she wants to be. It has also enhanced her other life skills like communicating and understanding of her environment" (Grandparent).
- "It is the best thing we have come across, it has changed our lives, and [my child] is so much happier" (Parent).
- "Great, very successful and [the student] had independence of mobility for the first time. Looking forward to when she has her own chair" (Teacher).

Related Information on the Novita Website:

- [Leisure and Recreation](#) (Webpage)
- [Powered Wheelchairs - Safe Driving Suggestions](#) (Factsheet)
- [Mobility](#) (Webpage)
- [Equipment](#) (Webpage)
- [My Wonderful Driving Story by David](#) (Factsheet)

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