

INTRODUCTION

Hi and welcome to the Cerebral Palsy Foundation's ParentWise Podcast series. I'm Robyn Cummins.

In this podcast, occupational therapist and seating consultant, Natalie Carden explains the benefits of powered mobility for children with a disability and gives you hints about how to investigate powered mobility options for your child.

WHY POWERED MOBILITY?

Hi. I'm Natalie Carden. I work with children, adults and their families each day to match each individual's needs with the right powered mobility options.

If your child finds walking exhausting, particularly over long distances, has painful joints when walking or is unable to walk, they may benefit from using powered mobility.

Powered mobility refers to a powered wheelchair or other powered device, for example, a switch adapted tricycle or cart. A powered wheelchair consists of a motorised base, seating components and a control system. The control system can be used with just about any body part or positioned at the rear for the parent or carer to control. A powered wheelchair can be used in conjunction with other 'manual' forms of mobility such as crutches or a walker, or on its own.

Some parents worry that a powered wheelchair will make their child look 'more disabled' or they'll stand out too much. In fact, most families I've worked with have discovered that when a child uses their chair they appear more confident, in control and more able to express their personality.

What's perhaps most important about powered mobility is that it can provide the opportunity for children to participate in a wider range of activities of their own choice, to build confidence and self esteem through achievement and greater independence. Having the ability to choose where to go, rather than being taken there or left there, is something that people with independent mobility often take for granted.

For a child with a disability, powered mobility can open up a whole new world of skills to be mastered, opportunities to choose, journeys to take and paths to follow. It is a positive experience that's well worth a try.

~ ~ ~

Powered mobility is a powerful sensory experience. Introducing powered mobility into a child's life can have many benefits, including:

- increasing opportunities for participation in social, educational and leisure activities
- promoting growth and development of cognitive and perceptual skills
- promoting and building independence in daily living activities
- building social and emotional skills such as self confidence and self esteem.

Now, I'll explain these terms in more detail.

When developing mobility, children will move about in their environment, exploring objects, learning by testing things out, using trial and error to find out how an object acts when they knock, swipe, push, squeeze, drop or step on it.

This exploration helps us build cognitive skills, such as, memory, problem solving, decision-making and the planning of movement. Perceptual skills are the skills that assist us to interpret information from our senses, like those we use to judge the distance to the ground or that between two objects. They are also the skills we use to sense where our limbs are in space and how to operate items such as a joystick or a switch without looking at it.

Children with no mobility may have had limited opportunity to explore and learn about their environment first hand. Without these opportunities, their skills may not have developed at the same pace as their more mobile peers. Research has shown that immobile children often become less interested in moving the longer they don't have it, which can be called learned helplessness. It is recommended that some form of self-initiated mobility be introduced around the time when the child would normally have been developing their own mobility.

Learning to operate a powered mobility device gives children with no or limited mobility the chance to engage in this process too – they will learn to use the right amount of speed, direction, timing and pressure to control their wheelchair to explore objects, places and activities, first hand.

In children with no previous mobility, the introduction of powered mobility appears to promote a general interest in moving in any way possible, which reflects the strength of the impact it has.

In children with restricted mobility, powered mobility can assist to reduce fatigue and to maintain mobility independence over time by reducing excess wear and tear on joints. For example, a powered wheelchair could be used by a school child for long trips, like to and from the outer playground or to and from school and a walker could be used in the classroom. This would allow the child to reach the playground in time to join the games being played instead of arriving late and missing out. It would allow the child to conserve their energy for schoolwork, rather than using all their energy to move from A to B. This means better use of social, meals and class time. If extra exercise is required, it can be accessed in the regular ways that children do this, such as swim, dance or gym classes.

The right blend of powered and manual mobility can be planned with your occupational or physiotherapist.

Mobility can impact on many other aspects of life and that's why it's so important to find the solution that's right for your child and their development.

HOW DO WE ACCESS POWERED MOBILITY?

So, how do you go about helping your child to access powered mobility options?

Research includes examples of children with cerebral palsy as young as 20 to 24 months successfully using different kinds of powered mobility.

In the past, therapists would look for certain cognitive indicators that showed a child was ready for powered mobility. Nowadays, it's more likely that if your child has the motivation to move, the therapy team will be able to assess their powered mobility needs and determine a suitable access method.

It is recommended that parents start thinking about their child's mobility and powered mobility options before they start school, because it can take a lot of time and cost to organise the equipment needed.

An occupational therapist or a physiotherapist can start the process toward prescribing powered mobility for your child.

They will discuss the considerations related to powered mobility, including: medical history, social support, physical, cognitive, behavioural and sensory status. They will provide a physical evaluation and then some equipment trials.

The therapist will look at your child's needs, what difficulties they may have with movement, or hand function for example, and what types of equipment such as a joystick, single switch or multi-switch systems, may be appropriate. A joystick may be placed in many places such as the centre of a tray, under the chin or on a footplate. Switches too can be placed almost anywhere the child needs them such as in a head support, at the elbow, chin, knee or foot. If your child requires support for maintaining an upright posture, for controlling movement or for comfort, postural seating may need to be built into the powered wheelchair.

During the prescription stage, it is important to ask the therapist about including options that may assist with other activities of daily living or leisure activities. It is essential that equipment such as a communication device, drink holder or keyboard be considered in the design.

Special equipment such as, a fishing rod holder, a mount for a musical instrument or an umbrella clamp can also be added to support your child's interests and to personalise their chair. This can be really important for self image, as is the choice of colour.

In my disability service, we like to think of the powered wheelchair as being equivalent to a person's legs. As such, powered mobility devices need access to areas that the child needs to go, like the playroom, the dining table, school and the park. Your occupational therapist will assist you with practical aspects, such as what access is needed for home, school or the community. You may also need advice on how you can transport the chair, as most don't come apart and are heavier than the manual options. Your therapist will also assist you to access government or community-based funding as needed.

The occupational therapist can evaluate each environment and make recommendations for modifications in advance. So, start early and take time to think through the options.

WHAT HAPPENS ONCE WE GET POWERED MOBILITY?

Just as it can be a trial and error process to work out which powered mobility system will work for your child, it can take up to 12 to 18 months for them to learn to use the system and control the chair accurately – this is similar to the time it takes for a child to learn to walk securely enough for them to be able to run. So when supporting a young child to learn to use powered mobility, make sure they have plenty of unstructured playtime to explore and learn how it works, with no confusing instructions to interpret. It is important to use encouragement and language that reinforces what the child has done. Such as, 'Wow you've turned around', and, 'Good stopping'. This contributes to the child's understanding of cause and effect and helps them to learn how to do it again!

An occupational therapist can provide parents and children with a home program tailored to the particular skill level of the child. The program will provide guidance on how to set-up practice sessions and what to include. The program will also provide guidelines for how to supervise a new user of powered mobility. The therapist will help you to create goals for you to measure how your child is progressing. Depending on skill level, it may involve using the powered wheelchair in various environments or situations.

Most of all, powered mobility can give your child a great sense of achievement and the means to show people exactly what they've got!

CLOSE

Thanks for listening. We hope you've found these strategies and ideas useful.

You can download or listen to more episodes in the ParentWise Podcast series at the Cerebral Palsy Foundation's website - www.cpfoundation.com.au