



# MEET W.C. - MOBILITY MAGIC

REHAB CASE STUDY

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Working in pediatric seating clinics in Cincinnati, Ohio, and Dallas, Texas, over the course of my career as an occupational therapist and ATP has provided me with an opportunity to evaluate a variety of children with diverse diagnoses. Most recently, I was able to work with some amazing CRTS®s and therapists in rural settings outside Atlanta, Georgia, while working for a complex rehab supplier.

In my role as education, training and accreditation manager, I was given the opportunity to assist many school based therapists in some of the most rural areas of the state as part of the seating and wheeled mobility evaluation and assessment team. Our complex rehab equipment company would assist with equipment trials, handled by our CRTS®s, for power mobility evaluations for the families who did not wish to make the drive “into the city” for their seating and wheeled mobility assessments.

There were advantages to evaluating these children with their school system therapists, many of whom were the only therapist the child had ever known. We were also able to meet in a setting familiar to the child and his or her family. We were able to better assess not only the environment the equipment would be utilized in, but could begin educating the families on the use, care and maintenance of the equipment from the first day of the assessment. Working closely with our manufacturer representatives allowed us to bring equipment to these rural areas for trials. It was rewarding to follow many of these children from their first independent mobility experiences to their second or third wheelchair. The team worked cohesively with the children and their

**BEFORE THAT, THE FAMILY CARRIED W.C. OR USED A COMMERCIAL STROLLER FOR HIS MOBILITY. W.C. COULD NO LONGER BE CARRIED EASILY DUE TO HIS WEIGHT. BY THE FAMILY'S CHOICE, HE HAD NOT RECEIVED ANY SURGICAL INTERVENTIONS AND NOW NO LONGER FIT INTO THE COMMERCIAL STROLLER.**

parents providing ideas and goals for the equipment, the school therapist performing the mat evaluation and contributing valuable input, the CRTS® providing the equipment for trials in an overfull van and myself problem solving ideas for additional support or positioning and, when needed, with access to the mobility device being trialed.

## ROAD TRIP

One day one of our rural school therapists, in a town about an hour and a half north of Atlanta, contacted us about evaluating a 5 year old who was new to her program. He was born an identical twin and had arthrogyrosis. W.C.'s family had received a Convaid Cruiser for him when he was 3 years old from a local DME supplier who did not specialize in complex rehab equipment. Before that, the family carried W.C. or used a commercial stroller for his mobility. W.C. could no longer be carried easily due to his weight. By the family's choice, he had not received any surgical interventions and now no longer fit into the commercial stroller. The early childhood therapist had made some splints and provided a range of motion program, but W.C. still had contractures in his lower extremities and was non-ambulatory. The family was told the Convaid Cruiser was the best mobility option for him. The early intervention therapist and the family were not made aware of all seating and mobility options. The family told me that, at that time, the Convaid Cruiser met their needs as they rarely left the house with W.C.

W.C.'s needs changed when he started school. He would try to scoot on the floor at school, but this was not functional mobility. The school therapist wanted to explore power mobility, but the family wasn't aware of this technology and wanted to learn more before any equipment was trialed. The

therapist had the family come to one of the first grade classrooms where another child who had cerebral palsy was independently using a power wheelchair to access the classroom, the lunch room and even participate in recess outside. This child was only one year older than W.C. and the family agreed to the assessment and equipment trial which was set up for the following month.

### THE FIRST POWER WHEELCHAIR

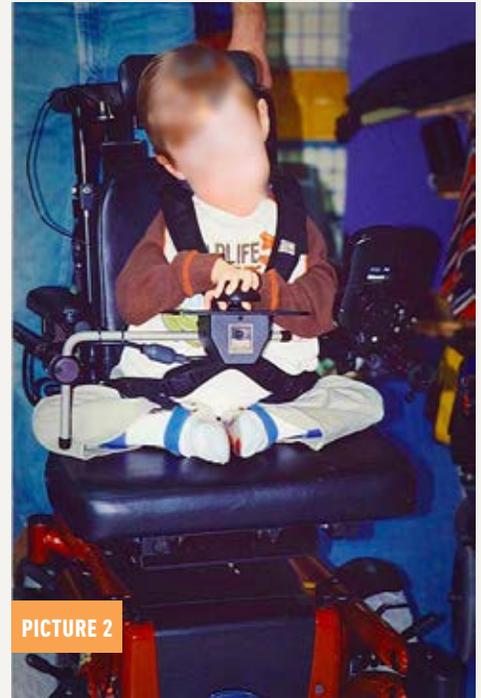
The morning of our first equipment trial, the CRTS® packed his van with two power wheelchair options and some seating systems that could interface with these bases. W.C.'s hips were fixed in abduction, flexion and external rotation. His knees were flexed with fixed contractures and skin webbing present. His upper extremities also had fixed contractures, with his elbows in flexion. This position provided minimal stability and function for him as long as items were placed in midline. The therapist had suggested a midline mount joystick as W.C. was most stable with minimal distal movements.

Fortunately, we were able to adjust the seating on a power wheelchair and take W.C. out to the large school parking lot for his first trial (See Picture 1). His mom was there and the school let his twin brother out of class to see him try the power wheelchair. W.C. was able to drive all over the parking lot with his brother

chasing behind him. At that moment, their mom commented to the team that she never thought she'd see the day where W.C. could outrun his brother. For his first power wheelchair, a Stealth Products mushroom joystick with midline mount was



PICTURE 1



PICTURE 2



PICTURE 3



PICTURE 4

selected, with custom planar seating on top of an Invacare TDX -SP base (See Picture 2). The funding process required multiple submissions to Georgia

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Picture 1: Wheelchair used for trial for assessment  
 Picture 2: First power wheelchair  
 Picture 3: W.C. continued to grow and change  
 Picture 4: W.C. in second power wheelchair

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Medicaid because his current Convaid Cruiser was only two years old, he did not have a 'change of condition' and had not 'outgrown' his current equipment. Finally, when a video was provided with another appeal, the recommended equipment was approved.

### THE SECOND POWER WHEELCHAIR

Except for the usual batteries and some minor tweaking, the power wheelchair worked well for W.C. He was able to use the wheelchair at home and at the school independently. He enjoyed recess like the rest of his peers in his first grade classroom. When W.C. had entered 4th grade, it was time for a second power wheelchair. Due to his growth, and increased difficulty using the joystick

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with his hands, alternative controls were considered (See Picture 3). The contractures in his elbows made access and control of the joystick increasingly difficult. The team met to discuss the options. A head array was one option considered. Mom told us how W.C. could control a video game controller and wondered if one was available for

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anterior trunk support needed to be adjusted to provide him the stability he needed to access the driving method.

### THE MAGIC IN MOBILITY

From the first trial in his power wheelchair, the family, therapist and school noticed how W.C. changed from a quiet and shy child to a child who would interact; enjoy discovering new places he could access and even volunteer to participate in the flag ceremony at the school. W.C. and his twin brother have been able to explore their neighborhood together. Through the efforts of the team, with feedback from W.C. and his family, we were able to provide the best outcome and help W.C. discover the magic in independent mobility.

a power wheelchair. Our CRTS discovered that an adapted video game controller was available and a trial was set-up. W.C. decided using his chin to drive gave him the best access to control the wheelchair (see figure 4). During the trial he was able to drive the demo wheelchair using this driving method all over the school and even out the door to the playground. The Quickie QM 710 base was chosen with custom planar seating and a Bodypoint Monoflex anterior trunk support. The base was chosen for its maneuverability indoors and outdoors. Upon delivery, the

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