

Pictures Speak Louder than Words: Making a **CASE** for a *Standing Wheelchair*

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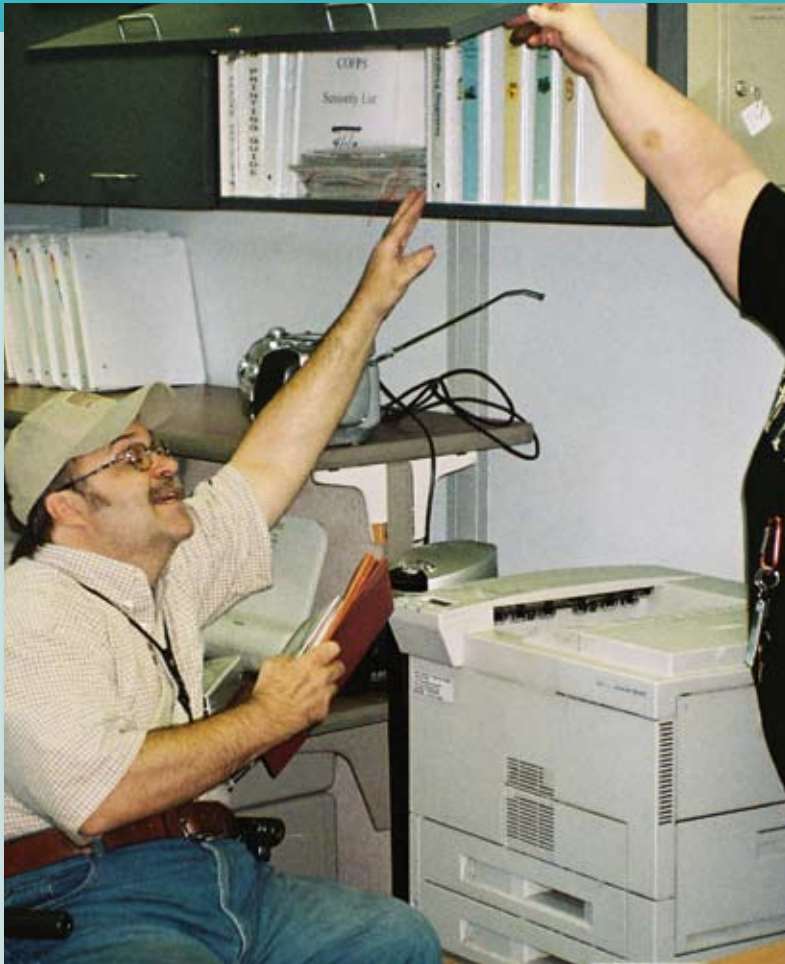
A CASE STUDY

ROD G. IS A 54 YEAR-OLD MALE WITH A

C5-6-7 spinal cord injury that resulted in quadriplegia in 1988. He has been wheelchair dependent since his injury. His neurologist reported he is developing glenohumeral osteoarthritis — causing pain which limits his overhead work, has lower extremity spasticity, decreased range of motion despite daily self-ranging, dependent edema in his feet and ankles, and has required repeated steroid injections over the last several years to minimize shoulder pain. Rod reported history of right shoulder fracture and dislocation in 2005, requiring surgical repair with a subsequent nursing home stay due to his inability to self-transfer. He developed pressure sores on his buttocks, which left him with fragile skin. He most recently suffered a heart attack on April 11, 2010, requiring one stent. He states his new cardiac medications cause leg cramps.

BEFORE RECEIVING HIS NEW EQUIPMENT, ROD USED HIS WHEELCHAIR'S ARMREST TO PULL ITEMS OFF HIGH SHELVES.





WITHOUT HIS STANDING WHEELCHAIR, ROD WAS FORCED TO ASK CO-WORKERS FOR HELP TO PERFORM EVEN THE MOST BASIC WORK ACTIVITIES.



AFTER RECEIVING HIS STANDING WHEELCHAIR, ROD HAS ACCESS TO THE COPIER AT WORK.

Rod lives in a modified accessible home with his 95 year-old mother for whom he provides care. He sits in his wheelchair 12 to 18 hours per day and drives a van with hand controls. Rod also uses a standing frame regularly one to three times per week, but less frequently than prior to shoulder repair. He does all his own home repairs including changing light bulbs, re-hanging a shower curtain his mother pulled down getting out of the tub, as well as all cooking and cleaning. Rod works full-time at Delta Airlines as a work controller production scheduler and reports he previously had to ask for assistance from other employees approximately 20 to 40 times in a 10 to 12 hour work shift due to not being able to reach items.

Rod was referred to the Seating and Wheeled Mobility Clinic at University of Minnesota Medical Center - Fairview Rehab Services and was seen Aug. 3, 2010, by the physical therapist and rehab technology supplier for an evaluation for a standing manual wheelchair. He was using an ultralight manual wheelchair obtained in 1999 with a pressure distribution cushion and adjustable tension back. He carries a backpack weighing approximately 20 lbs. on the wheelchair with personal and work supplies necessary for daily functioning. He reported independence with all activities of daily living, home management, driving and community activities. Rod did admit needing the assistance of his brother for overhead repairs to his home.



ROD IS ABLE TO ACCESS ALL OF THE SURFACES IN HIS WORKING ENVIRONMENT.

Clinical and mat evaluation grossly revealed Rod's shoulder strength 5/5, elbows 4+/5, left hand 4/5 with carpal tunnel symptoms, right 3+ to 4-/5 including atrophy of interossei and thenar muscles with fingertip numbness. Sitting posture revealed posterior pelvic tilt with slightly increased thoracic kyphosis and forward shoulders, all of which were flexible. Lower extremity range of motion was within functional limits for sitting and standing, with non-functional strength and spasticity in the left leg. Sitting measurements were taken and a plan was established for the Rehabilitation Technology Supplier (RTS) to obtain and provide trial periods of one week each of two different standing manual wheelchairs.

Rod did have a trial with both standing wheelchairs, using the wheelchair at work and home, and then met with the RTS to establish the specifications required for his definitive standing wheelchair. Those specifications were sent to the physical therapist for completion of the requisition and justification letter of medical necessity. The RTS then completed the necessary paperwork acquiring the physician's signature, submitted for authorization, ordered and delivered Rod's new standing wheelchair.

The entire process took approximately four months. ➔

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FILING WAS NEARLY IMPOSSIBLE FOR ROD BEFORE RECEIVING THE APPROPRIATE TECHNOLOGY.