

Client: Thulfeqar

PT/OT/Supplier: Caroline Portoghese, ATP/SMS, OTR/L

Location: St. Paul, MN

Thulfeqar is a 21 year old man with the diagnosis of cerebral palsy. He lives with his parents and siblings in an accessible apartment. The family does not have an accessible vehicle. He is followed by Kaylyn Unger, PT, DPT and Caroline Portoghese of Handi Medical for his complex rehab equipment needs.



The Need to Move

Thulfeqar tends to bounce and rock in his manual wheelchair ([Watch Video](#)). He seeks out movement, which provides sensory input and helps calm him. Movement very often decreases agitation and increases alertness or arousal levels. All this movement had led to quite a bit of equipment damage, however, including damage to the wheel locks, armrests, and footrests. Nearly every bolt on the frame was loose. According to Caroline, “the whole thing barely held together.”

Thulfeqar received a Motion Composites Helio ultralight manual wheelchair in 2017. Since that time, he grew 8” and his weight increased by 100 lbs (he currently weights over 260 lbs). As a result, he needed a new manual wheelchair to accommodate this growth. His seating and mobility team wanted to use an ultralight option again as the family needed to fold the chair to place it in their vehicle. Thulfeqar also had some ability to self-propel and can do so in an ultralight wheelchair. The team chose the Motion Composites Helio A7 with the HD kit, which has a weight limit of 350 lbs.

While waiting for his new wheelchair, he was provided with a loaner heavy duty K3 manual wheelchair as he could no longer use the 2017 Helio due to growth, as well as wear and tear. He was unable to push this frame as it weighed so much. He continued rocking and as a result, per Caroline, “destroyed this” – primarily loosening everything that could become loose.

Dynamic Seating

Not wanting a repeat of the damage which occurred to the prior manual wheelchair and loaner, the team recommended a Dynamic Back. Most of Thulfeqar’s movement came from his hips and a Dynamic Back would provide that movement in response to his forces. A Seating Dynamics Dynamic Rocker Back interface was ordered and installed by the team at Handi Medical.



Left to right: Isabel Castelnovo-Hoffman, Caroline, and Kristen Decker with level, hacksaw, and Seating Dynamics PN 6100 Jig.

Quick Notes

Challenges:

- Rocking and Bouncing
- Wear and Tear on equipment
- Tipping Risk
- Sensory Seeking

Areas affected:

- Back

Equipment Used:

- [Dynamic Rocker Back](#)

- [Motion Composites Helio A7](#)



Results

The recommended equipment was approved by funding and delivered at the end of 2025. As he has just received this equipment, we plan to update this case study in the future with his progress. So far, the Dynamic Back responds to his movements and Thulfeqar appears to enjoy this movement.

His team anticipates:

- reduced or even no damage to his equipment
- reduced shear forces
- reduced loss of position

To view a video of Thulfeqar in motion, click [here](#).

Caroline Portoghese, ATP/SMS, OTR/L
St. Paul, MN

“The Dynamic Rocker Back is a great option for people who need to move.”

About the Author

Michelle Lange is an occupational therapist with over 38 years of experience and has been in private practice, Access to Independence, for over 19 years where she currently focuses on education and consultation. She is a well-respected lecturer, both nationally and internationally, and has authored numerous texts, chapters, and articles. She is the co-editor of *Seating and Wheeled Mobility: a clinical resource guide* (1st & 2nd eds). Michelle is a RESNA Fellow and a RESNA certified ATP and SMS. She is also a member of the Clinician Task Force.
