

**Client:** Amber

**PT/OT/Supplier:** Judy Garber, Adaptive Equipment Technician

**Location:** State College, PA

Amber is 29 years old and has intellectual delays, cerebral palsy and choreoathetoid movements. She lives in a group home. Amber received a Dynamic Rocker Back Interface (DRBi) in 2013 and Judy Garber, her Adaptive Equipment Technician, decided to add on Dynamic Footrests in 2018 to the Invacare Solara manual tilt wheelchair.



### Dynamic Back

Amber first received the Dynamic Back as she tends to extend her entire body to indicate “Yes.” She does have a Tobii speech generating device but continues to extend to quickly answer questions. Per Judy, “this was rough on her body” and so a DRBi was ordered. This Dynamic Back moves in response to her extension, decreasing pain and protecting the back canes from breaking as force is diffused.

Amber first used another manufacturer’s Dynamic Back, however this “came apart over a few years” and so was replaced with the DRBi which has stood up to Amber’s tone.

Amber uses a two-piece molded seating system, though Judy has noticed less shear with the DRBi. Before the Dynamic Back, Amber was extending within the molded seating system, leading to significant shear forces. With the DRBi, Amber experiences very little shear as she can move and remain in alignment with the seating surfaces.

### Dynamic Footrests

Amber was also breaking her static footrests. She wears AFOs with a wedge designed to help with her position when in a stationary stander. Amber is very focused on fashion and likes her shoes. She would frequently experience pain in her hips when wearing the AFOs with her ‘fancy shoes’, no matter how much the wheelchair footrests were adjusted. Another manufacturer’s dynamic footrests did not solve the problem. Amber received her Seating Dynamics Dynamic Footrests and now has less pain. Amber also reports that she likes to move her legs.



### Quick Notes

#### Challenges:

- ✓ Extension
- ✓ Equipment breakage
- ✓ Pain
- ✓ Needs movement

#### Areas affected:

- ✓ Back
- ✓ Legs

#### Equipment Used:

- ✓ [Dynamic Rocker Back](#)
- ✓ [Dynamic Footrests](#)
- ✓ [Invacare Solara Wheelchair](#)

## Dancing

Judy works with many people in the group homes she serves who like to dance! She likes to use Dynamic Seating with these clients as this intervention allows movement without breakage due to excessive forces. Dancing is exciting and really brings out increased muscle tone!

Figure 2:



### Results

Since receiving the Dynamic Footrests, Amber reports less pain and enjoys this movement. Reducing pain is an important and medically necessary goal in wheelchair seating. Judy also has noticed decreased DRBi movement since Amber received the Dynamic Footrests, as this leg movement decreases the leverage under her feet used to activate the Dynamic Back.

**Judy Garber**  
**Adaptive Equipment Technician**  
**Skills of Central PA, Inc., State College, PA**

“I just wanted to send one last e-mail to let you know I installed the dynamic footrests on Amber’s chair yesterday. She is very happy with how they move and work for her. It’s an amazing concept, and so beneficial for someone like her. Thanks again for all the help with getting her the correct parts.”

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### About the Author

Michelle is an occupational therapist with 30 years of experience and has been in private practice, Access to Independence, for over 10 years. 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*, editor of *Fundamentals in Assistive Technology*, 4th ed., NRRTS Continuing Education Curriculum Coordinator and Clinical Editor of *Directions* magazine. Michelle is a RESNA Fellow and member of the Clinician Task Force. Michelle is a certified ATP, certified SMS and is a Senior Disability Analyst of the ABDA.

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