

Name: Smith, John

Age: 20 years

Diagnosis: cerebral palsy

Date of Evaluation: 4/17/18

Background Information:

John is a 20 year old young man with the diagnosis of cerebral palsy. He was seen for a wheelchair seating and mobility evaluation today.

John lives at home with his family and attends college. He has used his current seating system over the years with good success. He has also used a dynamic tilt in space wheelchair successfully. This technology moves in response to his strong extension, protecting the equipment from damage, diffusing muscle tone and increasing sitting tolerance. The seating system is over 5 years old and in need of replacement. The current manual wheelchair also needs to be replaced.

Goals:

- Evaluate current positioning
- Evaluate current manual mobility base

Current Equipment:

- Kids Rock 2 dynamic tilt in space manual wheelchair – 3 years old
- Seating system – 5 years old
- Shower chair
- Ceiling lift
- Home is accessible
- Vehicle is accessible

Evaluation:

Seating:

A seating evaluation was completed today. A replacement seating system was recommended. *(Specify evaluation results and seating recommendations here).*

Manual Wheelchair:

The current Kids Rock 2 is three years old and has had numerous issues. More importantly, this mobility base has been discontinued and support and parts will no longer be available to meet John’s needs. The current wheelchair has had repeated breakage of the footboard, the tilt cables, the front caster bearings, and the adjustable stroller handle.

John requires dynamic seating. He has used dynamic seating for many years now and this has successfully prevented breakage of components secondary to excessive force, diffuses his extreme muscle tone and increases his sitting tolerance. Unfortunately, the Kids Rock has been discontinued and is not a very durable frame. We

recommend a more durable and adjustable tilt in space manual wheelchair, (wheelchair name here). Separate dynamic components can be added to this wheelchair to provide the movement John requires.

We recommend a **Seating Dynamics Dynamic Rocker Back interface**. John has broken equipment in the past before receiving dynamic seating. The Dynamic Rocker Back moves posteriorly in response to client force and assists the client back to an upright starting position. The Dynamic Rocker Back is recommended to absorb forces exerted by the client which have led to equipment breakage in the past and to prevent future breakage. The dynamic components absorb these excessive forces, protecting the wheelchair frame, seating system and hardware from breakage. Breakage may result in John being unable to use his wheelchair and/or seating system until repairs are made.

The Dynamic Rocker Back is also recommended to absorb forces resulting from active client extensor tone. By absorbing and diffusing these forces, extensor tone can be decreased. Reducing extensor tone can increase function, sitting tolerance and conserve energy. Active range of motion at the hips is also provided, reducing risk and progression of range of motion losses.

We also recommend **Seating Dynamics Dynamic Footrests** with telescoping and the knee extension features. Dynamic Footrests lengthen and extend at the knee in response to client forces and then return to a starting position. Dynamic Footrests are recommended to absorb forces exerted by the client which have led to equipment breakage in the past and to prevent future breakage. The dynamic components absorb these excessive forces, protecting the wheelchair frame, seating system and hardware from breakage. Breakage may result in John being unable to use his wheelchair and/or seating system until repairs are made.

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One advantage of these new components is the ability to use separate dynamic footrest hangers, rather than the Kids Rock single footboard. This will allow the footrest hangers to swing away for transfers and to capture his movement separately for each leg, as this movement and force are not identical on each side. John does not require a plantar and dorsi flexion option, as he wears AFOs, preventing any ankle movement.

Finally, we recommend **Seating Dynamics Single Axis Dynamic Head Support Hardware** to support the recommended head pad. The Single Axis Dynamic Head Support Hardware moves posteriorly in response to client forces and then returns to a starting position. The Dynamic Head Support Hardware is recommended to absorb forces exerted by the client which have led to equipment breakage in the past and to prevent future breakage. The dynamic components absorb these excessive forces, protecting the wheelchair frame, seating system and hardware from breakage. Breakage may result in John being unable to use his wheelchair and/or seating system until repairs are made.

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Absorbing these forces can also protect the brain and cervical area from injury from sudden, forceful and/or repeated impacts as well as sustained forces. Finally, by absorbing forces and providing limited movement, the client may be less likely to come off of the head pad which can lead to John being caught under the head pad and/or choking.

John also needs lateral head support on his left side and so requires **the Seating Dynamics Lateral Component Hardware** on the left side of his head. The Lateral Component Hardware attaches to the Dynamic Head Support Hardware and provides lateral support to the head to limit neck rotation and lateral flexion, encouraging a midline

position for improved visual regard, breathing, and swallowing. John needs a switch mounted at the right side of his head to access (specify device, i.e. communication device). He also requires Lateral Component Hardware attached to the right side of the head support to provide mounting for a switch by the side of the head for access to an assistive technology device.

Recommendations:

1. Specify brand tilt in space manual wheelchair with:
 - a. Specify necessary wheelchair components
 - b. Seating Dynamics Rocker Back Interface.
 - c. Seating Dynamics Footrests with telescoping and knee extension options.
 - d. Shoeholders with padded ankle and toe straps to keep feet in contact with dynamic footrest footplates so that these will move in response to John’s movement.
 - e. Seating Dynamics Single Axis Head Support Mounting Hardware.
 - f. Seating Dynamics Lateral Component Hardware on both sides.
 - g. Specify head pad and lateral pads or accessories.

Feel free to contact me with any questions or further needs.

Name

Date

About the Author

Michelle Lange 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 on the teaching faculty of RESNA. Michelle is a member of the Clinician Task Force. Michelle is a certified ATP, certified SMS and is a Senior Disability Analyst of the ABDA.
