

## SEATING & MOBILITY SOLUTIONS FOR BARIATRIC CONSUMERS

JANE FONTEIN, B.Sc.OT<sup>1</sup>, STEPHANIE TANGUAY, OTR, ATP/S<sup>2</sup>

<sup>1</sup>PDG – Production Design Group, <sup>2</sup>Motion Concepts

When it comes to manual mobility, finding a wheelchair that fits a client and allows for true mobility is not easy. Finding the right chair can be even more challenging when working with an obese client. Though the bariatric client's mobility issues are the same as a client who uses a standard wheelchair, specific features need to be recognized and addressed. After all, a bariatric wheelchair is much more than just a wider chair. Features such as a forward wheelbase for easy mobility, adjustability for weight gain or loss or to accommodate multiple users, and adjustability for posture are just a few of the issues that should be considered.

Bariatric clients using wheelchairs commonly complain that chairs are too difficult to push or are very unstable forward. The client may be sitting in an uncomfortable extended position, may be dependent on someone to move their chair, and may not be able to reach the wheels or the floor with their feet. Often, caregivers blame these limitations on the client due to their size; when in fact, the design and fit of the chair more likely limits a client's ability.

Key issues need to be addressed when assessing mobility for a bariatric client. These include centre of gravity (CoG), seat *adjustability*, and seat position. Since the CoG of a bariatric client is further forward than an average sized client, too much weight rides over the front castors making it difficult to maneuver. Ideally, the majority of the client's weight (their CoG) should be located primarily over the rear wheels to provide basic mobility. Therapists should look for a forward-positioned front castor as well as the ability to move the rear axle forward in a bariatric chair in order to align the CoG over the rear wheels and allow for easy maneuverability and independent propulsion

Adjustability in width, depth, height and seat to back angle allow for weight gain or loss over time without purchasing a new wheelchair. While measurements can be difficult to obtain, frame adjustability can compensate for incorrect measurements and help assure a proper fit.

As with all seating and mobility evaluations, accurate client measurements are the key to good functional outcomes. In addition to the standard assessment points, several additional measurements can be helpful in addressing seating and positioning needs of bariatric consumers. Measuring from the seat surface to the top of the gluteal shelf will help determine the appropriate height for a back support to be mounted.

Many bariatric clients complain of back pain and do not have support or contact with the standard upholstery of their wheelchair. Seat depth should be measured from the posterior calf to the posterior aspect of the gluteal tissue and to the posterior thoracic tissue. These measurements can enable system configuration to provide adequate back support and allow soft gluteal tissue to be positioned more posterior.

During the last several years, many manufacturers have begun to offer seat cushions and back supports to bariatric configurations. These products can meet some of the width, depth and weight requirements necessary to offer pressure distribution, support and stability for this population.

### **Speaker Bios**

Jane Fontein, BSc.OT has more than 20 years of experience, having worked as an OT, a supplier and manufacturer educator. She is currently the Clinical Educator for PDG.

Stephanie Tanguay, OTR, ATP/S has more than 20 years of experience in the field of seating and mobility, as a clinician and equipment provider. She is currently the Clinical Education Specialist for Motion Concepts.