
F2: It IS More Than 4 Wheels!: How The Mat Assessment Influences the Prescription of Seating and Mobility Devices

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Learning objectives:

1. Describe surfaces on which to complete a hands on mat assessment
2. List three components of 3 pt positioning
3. List three components of the Mat Assessment
4. List two postural tendencies
5. Describe how centre of mass influences centre of gravity set up of the seating and mobility base.

Session description:

Completing a thorough but yet concise assessment has always been a challenge in seating mobility and is even more of a challenge when carried out in the community setting. It is imperative to gather appropriate assessment data but with time constraints as well as environmental challenges inherent in community settings this can prove to be a daunting task for the community therapist. This workshop will review what information is critical and how to access it in the community setting. A good seating and mobility evaluation involves not only the assessment, but the consideration of many client factors including physical, functional and lifestyle. These factors play a large role in determining the prescription of seating components and wheelchair frames/design to enhance functionality and overall performance for daily quality of life issues. It is imperative that we recognize that seating is not exclusive of mobility or the other way around. One enhances the other and therefore must be considered together when completing an initial MAT assessment to achieve a final assistive technology prescription. Assessment of postural tendencies and simulation of a support system with appropriate forces is imperative before a product prescription can be completed. This must be completed in order to determine if there are deformity tendencies in more than one anatomical plane, as well as to determine balance and dependent sitting concerns. This workshop will review critical points for wheelchair/ seating prescription and set-up

based on hands-on assessment and simulation. We will be reviewing complex seating involving 3 point positioning to reduce postural tendencies. Consideration will be given to lines and angles of force based on client centre of mass and positioning. We will also explore seating and mobility base set-up to address pressure issues along with postural concerns. Our goal will be to provide our clients with postural control, and functionality while considering pressure and physiological functions.

Content references:

1. Buck, S. More than 4 Wheels: Applying clinical practice to seating, mobility and assistive technology . 2009, revised 2017.
2. Geyer, M., Kusturiss, M., & Holm, M. (2010). A Randomized Clinical Trial on Preventing Pressure Ulcers with Wheelchair Seat Cushions. *Journal of the American Geriatrics Society*, 58(12), 2308–2314. <https://doi.org/10.1111/j.1532-5415.2010.03168.x> 3.
3. Kirby R. L., Smith C., Parker K., McAllister M., Boyce J., Rushton P. W., Routhier F., Best K. L., MacKenzie D., Mortenson B., Brandt A. (2016). *The Wheelchair Skills Program Manual Version 4.3*. Halifax, Nova Scotia: Dalhousie University. Retrieved from <http://www.wheelchairskillsprogram.ca/eng/documents/version4.3.3/>
4. *The_Wheelchair_Skills_Program_Manual.77_w_comments_and_highlights.pdf* 4. Lin, F., Parthasarathy, S., Taylor, S. J., Pucci, D., Hendrix, R. W., & Makhsous, M. (2006).