
C12: Applying Clinical Outcome Measures to Mobility and Seating Assessments

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Learning objectives:

1. The participant will be able to name at least two outcome measure for each manual and power chair prescription.
2. The participant will be able to state at least three specific features/programming parameters for both manual and power wheelchair setup which can have an impact on the applied outcome measure.
3. The participant will be able to describe the application of these resources for documentation and funding for complex rehab equipment.

Session description:

Clinical evaluation, whether it be traditional therapy or wheelchair assessment, is no more than a case study of one. The wheelchair provision process varies widely from client choice without clinical input to a fully- scripted wheelchair with clinical advanced knowledge including clinical assessment, clinical reasoning, trials, client participation and feedback. Yet until recent years we have not implemented evidenced based clinical outcome evaluation tools to justify those recommendations. The intervention, in this case, the specific mobility device can vary in performance and affect functional performance. An outcome assessment tool can help quantitatively and qualitatively assess the intervention. They also have application in the training, fit and adjustment of the device to decrease repetitive strain syndromes, energy conservation and establish safety in the use of the device. Documenting the results of an applied outcome measure can provide supportive justification to the prescribing body such as a funder to support the provision of the intervention. An active learning model, such as demonstration and discussion, video, audio and PowerPoint will be used to provide transfer of learning. Specific models of practice and assessment tools will be shared with references for clinical application. These measures can significantly improve the quality of our clinical practice.

Content references

1. Davy, R. (2013). Exploring the application of the wheelchair outcome measure (WhOM) as an outcome measure for people with complex needs—a single case study.
2. Gagnon, D. H., Roy, A., Gabison, S., Duclos, C., Verrier, M. C., & Nadeau, S. (2016). Effects of Seated Postural Stability and Trunk and Upper Extremity Strength on Performance during Manual Wheelchair Propulsion Tests in Individuals with Spinal Cord Injury: An Exploratory Study. *Rehabilitation Research and Practice*, 2016.
3. Kahn, J. H., Tappan, R., Newman, C. P., Palma, P., Romney, W., Stultz, E. T. & Weisbach, C. L. (2016). Outcome Measure Recommendations from the Spinal Cord Injury EDGE Task Force. *Physical therapy*.
4. Scott A Conger, Stacy N Scott, David R Bassett, Jr. Predicting energy expenditure through hand rim propulsion power output in individuals who use wheelchairs, *Br J Sports Med* 2014;**48**:13 1048-1053 Published Online First: 13 May 2014
5. Siobhan Kenny and Rosemary Joan Gowran Outcome Measures for Wheelchair and Seating Provision: A Critical Appraisal *British Journal of Occupational Therapy* February 2014 vol. 77 no. 2 67-77
6. Functional Tests for Persons who Self Propel a Manual Wheelchair, Rehabilitation Measures Database. Supporting text- <http://www.scireproject.com/book/export/html/117> Initially reviewed by Christopher Newman, PT, MPT, NCS, Phyllis Palma, PT, DPT, and the SCI EDGE task force of the Neurology Section of the APTA in 9/2012