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Wheelchair Skills Test (WST 2.4)**

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| Availability: | The WST 2.4 is freely available at Wheelchair Skills Test Link |
| Classification: | <p>Supplemental: Spinal Cord Injury (SCI) and SCI-Pediatric (age 6 and over)</p> <p>Exploratory: SCI-Pediatric (under 6 years)</p> |
| Short Description of Instrument: | <p>Construct measured: Wheelchair activity, Wheelchair mobility</p> <p>Generic vs. disease specific: Disease specific</p> <p>Means of administration: Clinician-administered</p> <p>Intended respondent: Participant</p> <p># of items: 50</p> <p># of subscales and names of sub-scales: 10 areas: brakes, armrests, footrests, rolling, turning, reaching, transfers, fold/open, obstacles, and wheelie</p> |
| Comments/Special instructions: | <p>Background: This test was developed to objectively measure manual wheelchair skills and safety. There are 50 items covering 10 areas: brakes, armrests, footrests, rolling, turning, reaching, transfers, fold/open, obstacles, and wheelie.</p> <p>Scoring: Scoring is on a pass-fail basis (pass=2, pass with difficulty=1, fail=0, NP=not possible, TE=testing error). There is also an additional goal attainment score (GAS), for which the clinician indicates whether or not the skill is a reasonable goal for the individual performing the test.</p> |
| Rationale/Justification: | <p>Strengths/Weaknesses: Limited to individuals who can push a manual wheelchair. A spotter is required for safety. The evaluator must be familiar with the test however, there are training manuals available. Appropriate for subacute and chronic.</p> <p>SCI-Pediatric specific: Some items (reaching over head and reaching to the floor) may be difficult for smaller children or those in a higher wheelchair.</p> <p>Psychometric Properties: There has been psychometric testing in the SCI population. Reliability is adequate to excellent (Pradon et al., 2012; Kirby et al., 2002). Validity is adequate to excellent (Pradon et al., 2012; Lemay et al., 2012; Kirby et al., 2002).</p> <p>Spinal Cord Injury Rehabilitation Evidence Wheelchair Skills Test Summary</p> |

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| References: | <p>Kirby, R. L., Swuste, J., Dupuis, D. J., MacLeod, D. A., & Monroe, R. (2002). The Wheelchair Skills Test: a pilot study of a new outcome measure. <i>Arch Phys Med Rehabil</i>, 83(1), 10–18.</p> <p>Lemay, V., Routhier, F., Noreau, L., Phang, S. H., & Ginis, K. A. (2012). Relationships between wheelchair skills, wheelchair mobility and level of injury in individuals with spinal cord injury. <i>Spinal Cord</i>, 50(1), 37–41.</p> <p>Pradon, D., Pinsault, N., Zory, R., & Routhier, F. (2012). Could mobility performance measures be used to evaluate wheelchair skills? <i>J Rehabil Med</i>, 44(3), 276–279.</p> <p>SCI-Pediatric:</p> <p>Sawatzky, B., Hers, N., & MacGillivray, M. K. (2015). Relationships between wheeling parameters and wheelchair skills in adults and children with SCI. <i>Spinal Cord</i>, 53(7), 561–564.</p> <p>Sawatzky, B., Rushton, P. W., Denison, I., & McDonald, R. (2012). Wheelchair skills training programme for children: a pilot study. <i>Aust Occup Ther J</i>, 59(1), 2–9.</p> |
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