

Outcome Measure	Craig Handicap Assessment and Reporting Technique (CHART)
Sensitivity to Change	Yes
Population	Adult
Domain	Social Role Participation and Social Functioning
Type of Measure	Clinician rating scale
ICF-Code/s	d1-d9
Description	<p>The CHART was developed as a “simple, objective measure” of handicap in the community setting.</p> <p>The most recent version contains 32 items, in six dimensions: Physical independence (3 items), Cognitive independence (5 items), Mobility (9 items), Occupation (7 items), Social integration (6 items), and Economic self-sufficiency (2 items). Items sample objective, quantifiable information (e.g., number of hours, occasions, contacts) or other factual information (e.g., cost, access) and responses are recorded for later coding.</p> <p>The CHART is designed as an interview, administered either face-to face or via the telephone. Administration time is 15 minutes.</p> <p>Scoring requires the transformation of raw score responses into weighted scores. Score range for each dimension is 0 to 100, with higher scores indicating less handicap or higher social and community participation.</p>
Properties	<p>See Tate (2010) for full details.</p> <p><i>Inter-rater reliability:</i> Segal and Schall (Segal & Schall, 1995) examined inter-rater reliability in 8 individuals whose responses were videotaped, finding ICC = .97.</p> <p><i>Test-retest reliability:</i> With a 1 week interval was found to be .93 (Whiteneck, Charlifue, Gerhart, Overholster, & Richardson, 1992), and with a 2 week interval was .83 (Cusick, Gerhart, & Mellick, 2000), and in a traumatic brain injury population, ICC = .92 (Walker, Mellick, Brooks, & Whiteneck, 2003).</p> <p><i>Convergent/divergent validity</i> Higher correlations with similar constructs (Segal & Schall, 1995): (1) CHART-Physical with FIM, $r = .63$ Lower correlations with dissimilar constructs (Segal & Schall, 1995): (1) CHART-Economic with FIM, $r = .05$ Discriminates between SCI and TBI ($p < .001$ on total and all dimensions) Walker et al., 2003)</p>
Advantages	<p>Theoretically based (on the WHO model of Handicap)</p> <p>Includes a cognitive independence dimension which was developed after the original version and makes it more applicable for TBI</p>

Disadvantages	Originally developed for people with SCI Possible difficulty with quantifying some responses (e.g. How many hours per week do you spend in active homemaking ...? And 'How many business or organizational associates do you visit, phone or write to at least once a month?') Doesn't measure level of dependence as well as CANS, or occupational and social function as well as SPRS.
Additional Information	The CHART-SF is a Core measure in the Social Role Participation Domain in Wilde et al (2010)
Reviewers	Jenny Fleming

References

- Cusick, C. P., Gerhart, K. A., & Mellick, D. C. (2000). Participant-proxy reliability in traumatic brain injury outcome research. *Journal of Head Trauma Rehabilitation, 15*(1), 739-749.
- Segal, M. E., & Schall, R. R. (1995). Assessing Handicap of Stroke Survivors - a Validation-Study of the Craig Handicap Assessment and Reporting Technique. *American Journal of Physical Medicine & Rehabilitation, 74*(4), 276-286. doi: Doi 10.1097/00002060-199507000-00004
- Walker, N., Mellick, D., Brooks, C. A., & Whiteneck, G. G. (2003). Measuring participation across impairment groups using the Craig handicap assessment reporting technique. *American Journal of Physical Medicine & Rehabilitation, 82*(12), 936-941. doi: Doi 10.1097/01.Phm.0000098041.42394.9a
- Whiteneck, G. G., Charlifue, S. W., Gerhart, K. A., Overholster, J. D., & Richardson, G. N. (1992). Quantifying handicap: A new measure of long-term rehabilitation outcomes. *Archives of Physical Medicine and Rehabilitation, 73*(6), 519-526.