

<b>Outcome Measure</b>	<b>Mayo-Portland Adaptability Inventory (MPAI-4)</b>
<b>Sensitivity to Change</b>	Can detect real changes in the person with a large effect size post therapeutic intervention. Further work is needed to quantify its sensitivity.
<b>Population</b>	Adult
<b>How to obtain</b>	Available from the COMBI site <a href="http://tbims.org">Mayo-Portland Adaptability Inventory (tbims.org)</a>
<b>Domain</b>	Global Outcome
<b>Type of Measure</b>	Self-report, informant-report, clinician-rated
<b>Time to administer</b>	<b>8-10 minutes</b>
<b>Description</b>	<p>The MPAI-4 (Malec et al, 1994) is a rating scale that can be completed using clinician, informant or self-ratings. It was designed for the clinical assessment of people with acquired brain impairment (ABI) in the post-acute period, and the evaluation of rehabilitation programmes.</p> <p>The MPAI-4 contains 29 core items and 6 additional items. The core items represent common sequelae of ABI in the physical, cognitive, emotional, behavioural and social domains. They are grouped into three subscales: Ability (12 items, focusing on sensory, motor and cognitive abilities), Adjustment (9 items, addressing mood, interpersonal interactions) and Participation (8 items, evaluating social contacts, initiation, money management). The outstanding items from previous MPAI versions have been retained, and added to, making a fourth subscale, Pre-existing and associated conditions, containing six items. These “non-core” items are not scored.</p> <p>Responses are made on a 5-point scale. The response descriptors are tailored to the individual items, generally along the lines of 0 (equivalent of mild problem that does not interfere with activities; may use assistive device or medication), 2 (equivalent of mild problem that interferes with activities 5-24% of the time), 3 (equivalent of moderate problem; interferes with activities 25-75% of the time), 4 (equivalent of severe problem; interferes with activities more than 75% of the time).</p>
<b>Properties</b>	<p>See Tate (2010) for full details.</p> <p><i>Internal consistency:</i> <math>\alpha = .89</math></p> <p><i>Inter-rater reliability:</i> no information available.</p> <p><i>Test-retest reliability:</i> no information available.</p> <p><i>Convergent/divergent validity</i> – Validation study only with MPAI-Version I. Correlates highly with similar measures:</p> <ul style="list-style-type: none"> <li>(1) Cognitive Index with RAVLT, <math>r = -.55</math></li> <li>(2) Cognitive Index with WCST, <math>r = .56</math></li> </ul> <p>Lower correlations with dissimilar constructs:</p> <ul style="list-style-type: none"> <li>(1) Non-cognitive Index with RAVLT, <math>r = -.22</math></li> <li>(2) Non-cognitive Index with WCST, <math>r = .29</math></li> </ul> <p>MPAI-4: High concurrent validity with the Disability Rating Scale (<math>r = 0.81</math>; [1], admission MPAI-4 correlates with participation at discharge (<math>r = .42-.63</math>) [2], moderate predictive validity when examining living status at 1 yr. follow-up from hospital discharge (<math>r = .64</math>; [3], and discriminant validity when discriminating between two subgroups of the Ranchos Los Amigos Levels of Functioning Scale (Kruskall–Wallis = 22.07, <math>p &lt; .001</math>; Malec &amp; Thompson, 1994). Highly responsive to change (<math>d = 1.71</math>; Malec, 2001) in response to treatment efforts.</p>
<b>Advantages</b>	<p>Thorough scale development process - MPAI-4 version represents a well-refined scale.</p> <p>Designed specifically for use in ABI.</p> <p>Subscales of Ability, Adjustment and Participation are reflective of key areas of global function</p> <p>Clinician, informant and self-rated versions.</p>
<b>Disadvantages</b>	No inter-rater or test-retest reliability estimates

## References

- Malec JF, Thompson JM. Relationship of the Mayo-Portland Adaptability Inventory to functional outcome and cognitive performance measures. *The Journal of Head Trauma Rehabilitation*. 1994;9(4):1-15.
- Malec JF, Parrot D, Altman IM, et al. Outcome prediction in home- and community-based brain injury rehabilitation using the Mayo-Portland Adaptability Inventory. *Neuropsychological Rehabilitation*. 2015 2015/09/03;25(5):663-676.
- Malec JF. Impact of comprehensive day treatment on societal participation for persons with acquired brain injury. *Archives of Physical Medicine and Rehabilitation*. 2001;82(7):885-895.
- Tate, R. L. (2010) *A compendium of tests, scales, and questionnaires: The practitioners guide to measuring outcomes after acquired brain impairment*. Psychology Press.