

# CANADIAN STROKE BEST PRACTICE RECOMMENDATIONS

## **Rehabilitation and Recovery following Stroke**

## **Table 4: Suggested Screening and Assessment Tools for Aphasia**

Teasell R, Salbach NM (Writing Group Chairs) on Behalf of the Canadian Stroke Best Practice Recommendations Rehabilitation and Recovery following Stroke Writing Group

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### Table 4: Suggested Screening and Assessment Tools for Aphasia

Assessment Tool	Time to Complete	Items and Scores	Required Equipment
Acute Aphasia Screening Protocol (AASP) Crary et al. 1989	10 minutes	44 items representing 4 domains: Attention/orientation to communication, auditory comprehension, expressive ability, and conversational style. Total scores range from 0-50 and are expressed as a percentage.	Several commonly available objects.
Communicative Effectiveness Index (CETI)	Unknown	16 items consisting of statements regarding communication abilities with each statement rated out of 10.	No equipment is required.
Lomas et al. 1905		indicative of good communication ability.	
Frenchay Aphasia Screening Test (FAST) Enderby et al. 1987	3-10 minutes	Respondents are presented with tasks representing 4 language domains: comprehension, speech, reading, and writing. Respondents are scored on the basis of completeness/correctness of responses, with total scores ranging from 0-30. Lower scores indicate greater language impairment.	A stimulus card and written instructions.
Frenchay Dysarthria Assessment Enderby et al. 1980	20 minutes	Respondents are presented with task representing 9 domains of speech: Reflexes (cough, swallow, dribble/drool); Respiration (at rest, in speech); Lips (at rest, spread, seal, alternate, in speech); Palate (fluids, maintenance, in speech);Laryngeal (time, pitch, volume, in speech); Tongue (at rest, protrusion, elevation, lateral, alternate, in speech); and Intelligibility (word, sentences, conversation). Respondents are rated on their ability to perform each parameter using a 9- point scale that includes 5 descriptors and ½ marks.	Required
Mississippi Aphasia Screening Test (MAST) Nakase-Thompson et al. 2005	5-10 minutes	46 items representing 9 subscales: Naming, automatic speech, repetition, yes and no accuracy, object recognition, verbal instructions, reading instructions, verbal fluency, and writing/spelling diction. Scores can be summed for each individual subscale, combined to form two index scores representing expressive and receptive language, or summed to provide a global score out of 100. Lower scores indicate greater language impairment.	A photo, several commonly available objects, and written instructions.
Porch Index of Communicative Ability (PICA) Porch 1967	60 minutes	10 items over 8 subtests including verbal, auditory, copying, reading, pantomime, writing, visual and completion time. Scores range from 1-16 with a higher score indicative of a high communicative ability and a low score indicative of communication impairment.	Several commonly available objects.
Reitan-Indiana Aphasia Screening Examination (ASE)	N/A	32 items assessing language reception, expression, and comprehension. Scores are summed to yield a total score out of 77, with higher scores indicating greater language impairment.	A single commonly available object and

Assessment Tool	Time to Complete	Items and Scores	Required Equipment
Reitan & Wolfson 1985			written instructions.
ScreeLing Doesborgh et al. 2003	15 minutes	72 items representing 3 subscales: Semantics, Phonology, and Syntax. Scores can be calculated for each subscale, yielding a score from 0-24, or can be summed to provide a global score ranging from 0-72. Lower scores indicate greater language impairment.	No equipment is required.
Ullevall Aphasia Screening Test (UAS) Thommessen et al. 1999	5-10 minutes	Respondents are shown a picture and asked to follow a set of standardized instructions. Seven aspects of language are used to assess responses and individuals are rated based on overall performance as having normal language ability or mild, moderate, or severe language disorder.	The stimulus painting, reading cards, and several commonly available objects.
Western Aphasia Battery (WAB) Shewan & Kertesz 1980	1-2 hours	<ul> <li>10 subtests assessing spontaneous speech, auditory comprehension, naming and repetition.</li> <li>Total scores are added up and expressed as a percentage. A score less than 93.8% is considered to be indicative of aphasia.</li> </ul>	Several commonly available objects and written instructions.

#### References

Crary MA, Haak NJ, Malinsky AE. Preliminary psychometric evaluation of an acute aphasia screening protocol. Aphasiology 1989;3:611–618.

- Doesborgh SJ, van de Sandt-Koenderman WM, Dippel DW, van Harskamp F, Koudstaal PJ, Visch-Brink EG. Linguistic deficits in the acute phase of stroke. Journal of Neurology 2003;250:977–982.
- Enderby PM, Wood VA, Wade DT, Langton Hewer R. The Frenchay Aphasia Screening Test: A short, simple test for aphasia appropriate for nonspecialists. International Journal of Rehabilitation Medicine 1987;8:166–170.
- Enderby PM. Frenchay Dysarthria Assessment. British Journal of Disorders of Communications. 1980; 15(3): 165-173.
- Lomas J, Pickard L, Bester S, Elbard H, Finlayson A, Zoghaib C. The communicative effectiveness index: Development and psychometric evaluation of a functional communication measure for adult aphasia. Journal of speech and hearing disorders. 1989 Feb;54(1):113-24.
- Nakase-Thompson R, Manning E, Sherer M, Yablon SA, Gontkovsky SLT, Vickery C. Brief assessment of severe language impairements: Initial validation of the Mississippi aphasia screening test. Brain Injury 2005;19:685–691.

Porch BE. Porch Index of Communicative Ability: Theory and Development. USA: Consulting Psychologists Press; 1971.

Reitan RM, Wolfson D. The Halstead-Reitan neuropsychological test battery: Theory and clinical interpretation. Tucson, AZ: Neuropsychology Press; 1985.

- Shewan CM, Kertesz A. Reliability and validity characteristics of the Western Aphasia Battery (WAB). *Journal of Speech and Hearing Disorders*. 1980 Aug;45(3):308-24.
- Thommessen B, Thoresen GE, Bautz-Holter E, Laake K. Screening by nurses for aphasia in stroke—the Ullevaal Aphasia Screening (UAS) test. Disability and Rehabilitation 1999;21:110–11.