

Assessment options to identify communication changes due to a right hemisphere stroke.

This list was created in January 2024 and will be updated annually on the righthemisherestroke.org website. This is not an exhaustive list, but rather offers suggested assessment tools and tasks that might identify communication changes across the linguistic, extralinguistic, and paralinguistic domains of communication. It is therefore particularly relevant to speech pathologists.

A comprehensive assessment should be guided by an understanding of the range of cognitive and communication changes, and heterogeneity of presentations, that may occur after a right hemisphere stroke. In addition to the above communication areas, a comprehensive assessment should also consider cognition, auditory and visual processing, and communication effectiveness across communication contexts that are unique to the individual. Difficulties might be most evident within contexts that require integration of information or that are more complex in nature (group conversation compared to one-on-one conversation). Standardised tests should be supplemented with ecologically valid tasks that replicate everyday communication. An individual's age, educational attainment, linguistic and cultural background, and pre-stroke communication style should be considered. Collaboration with significant others (family members or friends), occupational therapists and neuropsychologists would support a holistic assessment process.

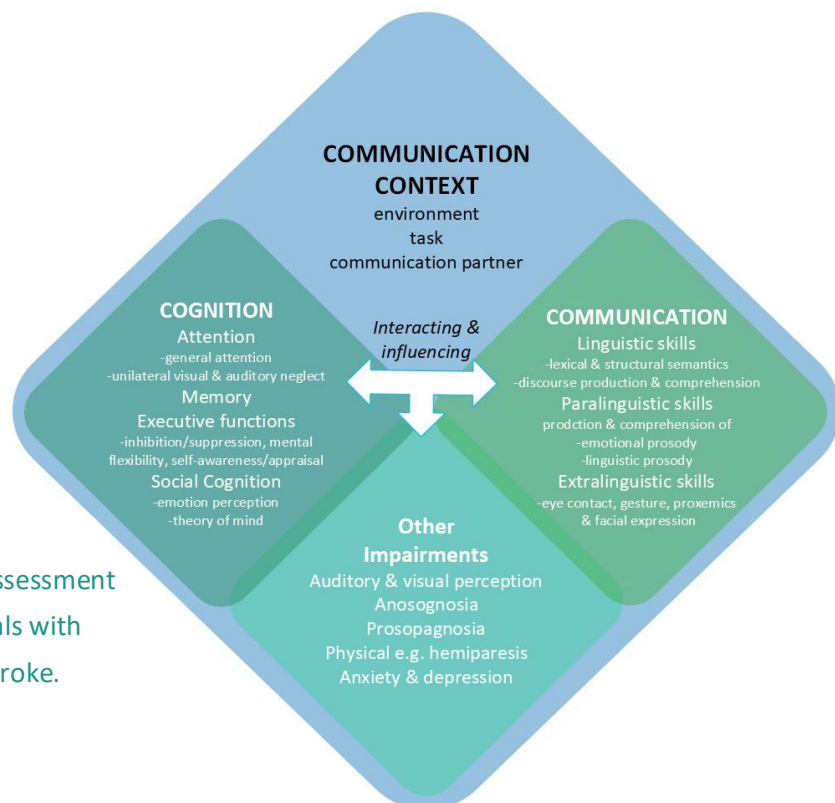


Figure
A holistic approach to assessment planning for individuals with right hemisphere stroke.

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The list contains tests that have been validated for the diagnosis of a cognitive communication disorder (CCD) following right hemisphere stroke, as well as tools used to diagnose and describe CCD post traumatic brain injury. Interpretation of performance on these tests should be made against the norms provided for individuals without brain injury or those with right hemisphere stroke (where available). Where norms are not representative of the individual being assessed, assessment findings should be analysed qualitatively and supplemented with structured observations of everyday communication.

| Linguistic domain | Assessment tools and tasks |
|---|---|
| Comprehension of logico-grammatical sentences | <ul style="list-style-type: none"> Comprehensive Aphasia Test: sentence comprehension subtest (CAT; Swinburn et al., 2023) |
| Comprehension of abstract and figurative language, verbal reasoning | <ul style="list-style-type: none"> Montreal Protocol for the Evaluation of Communication (MEC; Joannette et al., 2015) Measure of Cognitive-Linguistic Abilities: verbal reasoning subtest (MCLA; Ellmo, 1995) Mini Inventory of Right Brain Injury (MIRBI-2; Pimental & Kingsbury, 2000) |
| Speech act interpretation | <ul style="list-style-type: none"> MEC |
| Comprehension of spoken discourse | <ul style="list-style-type: none"> MEC Discourse comprehension test (DCT revised; Brookshire & Nicholas, 1997) MCLA: paragraph comprehension subtest |
| Reading comprehension | <ul style="list-style-type: none"> MCLA: functional, factual, abstract/complex levels DCT: can be administered as a reading task Functional assessment of verbal reasoning and executive strategies (FAVRES; MacDonald & Johnson, 2005) |
| Discourse production | <ul style="list-style-type: none"> MEC: conversational discourse task MCLA: procedural and narrative discourse RHDBank Protocol (RHDBank Protocol; Minga et al., 2021) Modern Cookie Theft Picture (Berube et al., 2022) LaTrobe Communication Questionnaire: self and other rating scales (LCQ; Douglas et al., 2007) Evaluation of Communication Problems in Right Hemisphere Dysfunction (RICE-3; Ryan, 2017) The Adapted Kagan Scales: participation in and support of conversation from the individual and significant other perspective (Togher et al, 2010) |

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| Extralinguistic domain | Assessment tools and tasks |
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| Observation of eye contact, gesture and proxemics during conversational discourse tasks | <ul style="list-style-type: none"> • RHDBank Protocol • Evaluation of Communication Problems in Right Hemisphere Dysfunction 3 (RICE-3; Ryan, 2017) • MEC |
| Facial emotion expression recognition | <ul style="list-style-type: none"> • Emotion Recognition Test (ERT; Kessels et al., 2014) |

| Paralinguistic domain | Assessment tools and tasks |
|-----------------------|---|
| Receptive aprosodia | <ul style="list-style-type: none"> • MEC • The Awareness of Social Inference Test (TASIT; McDonald et al., 2003) • Florida Affect Battery (FAB; Bowers et al., 1991) |
| Expressive aprosodia | <ul style="list-style-type: none"> • MEC • RHDBank Protocol: observation of paralinguistic elements during conversational discourse • MIRBI-2 |

| Assessments that can provide insight into the impact of cognition on communication | |
|--|---|
| Planning, reasoning, and evaluating performance | <ul style="list-style-type: none"> • FAVRES • Scales of cognitive ability for traumatic brain injury (SCATBI; Adamovich & Henderson, 1992) |
| Information processing speed | <ul style="list-style-type: none"> • FAVRES |
| Word selection and inhibition | <ul style="list-style-type: none"> • The Hayling and Brixton test: Sentence Completion Test (Burgess & Shallice, 1996) |
| Social cognition (theory of mind) | <ul style="list-style-type: none"> • The Awareness of Social Inference Test (TASIT; McDonald et al., 2003) |
| Attention* | <ul style="list-style-type: none"> • The Test of Everyday Attention (TEA; Robertson et al., 1994) • The Behavioral Inattention Test (BIT; Wilson et al., 1987) • Tests to support a diagnosis of auditory neglect (Refer to Gokhale et al., 2013) |
| Memory | <ul style="list-style-type: none"> • Ross Information Processing Assessment-2 (RIPA-2; Ross-Swain, 1996) • Rivermead Behavioural Memory Test-Third Edition (RBMT-3; Wilson et al., 2008) • Repeated Battery for the Assessment of Neuropsychological Status (RBANS; Randolph et al., 1998) |
| Self-awareness | <ul style="list-style-type: none"> • Awareness Questionnaire (Sherer et al., 2003) • Self Awareness of Deficit Interview (Fleming et al., 1996) |

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| Social participation | |
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| Changes to and current interpersonal relationships, vocational and leisure activities. | <ul style="list-style-type: none">• Sydney Psychosocial Reintegration Scale (SPRS-2; Tate, 2012)• Stroke Specific Quality of Life Scale (SS-QOL; Williams et al., 1999) |
| Social network and support | <ul style="list-style-type: none">• Social Support Survey (SSS; Sherbourne & Stewart, 1991)• Stroke Social Network Scale (SSNS; Northcott & Hilari, 2013) |

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