



## WMS<sup>®</sup>-IV Flexible Approach Case Study 3

### Autoimmune Inflammatory Disorder with Neurocognitive Effects

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##### Brief Evaluation Using LONA Configuration

Mr.Y. is a 53-year-old married white male who was diagnosed at the age of 42 with multiple sclerosis progressive relapsing type. Mr.Y. was able to continue working at his job on the assembly line of a large machine manufacturer; however, after a recent relapse he has experienced significant loss in motor functioning. His wife reported to his neurologist some concern about his cognitive functioning. She noticed a significant decline in his memory functioning over the past year, even prior to his most recent episode. Mr.Y. would like to return to work but does not have the motor strength and control to perform his previous job and he fatigues too easily to do other jobs in the plant. Mr.Y. would like to work in the shipping department where he feels he could manage the paperwork as long as he did not have to do any of the loading and unloading.

The neurologist made changes to Mr.Y.'s medication regime, which appeared to help with his episodes of fatigue. In order to assess his current cognitive functioning, Mr.Y. was sent for a neuropsychological evaluation. The neuropsychologist was concerned that Mr.Y.'s motor impairments might affect his performance in other cognitive domains including memory functioning; therefore, he selected the WMS-IV Flexible Approach LONA configuration as a general memory assessment. The WAIS-IV, WMS-IV Flexible Approach LONA, and other measures of language, executive functioning, visual-perceptual reasoning, and sensory-motor skills were administered.

The results of the WAIS-IV indicated average general intellectual functioning (FSIQ = 92). Mr.Y. performed in the average range on verbal (VCI = 107) and auditory working memory (WMI = 102) measures. His visual-perceptual reasoning was low-average (PRI = 88), and his processing speed was borderline (PSI = 74). The clinician noted that Mr.Y.'s performance was lower on tests that involved some motor control (i.e., block design and coding). On the WMS-IV Flexible Approach LONA subtests, Mr.Y. obtained the following scores: LO I = 10, LO II = 6, NA I = 8, and NA II = 6. The index scores were as follows: AVMI (LONA) = 85, AVIMI (LONA) = 94, and AVDMI (LONA) = 79. The difference between the immediate and delayed index scores was statistically significant ( $p < .05$ ) and the amount of the difference was statistically rare (base rate = 3.9%). On other tests, the results indicated difficulties with behavioural productivity and cognitive flexibility. The neuropsychologist identified weaknesses in delayed memory and executive functioning as potentially affecting Mr.Y.'s ability to work.

The results of the evaluation were used to help Mr.Y. apply for long-term disability benefits from his insurer. The case was turned over for an independent medical examination by the insurance company. The results of the second evaluation were similar to those of the first evaluation.