Upper Limb Performance Assessment: A comparison of upper limb assessments and their abilities to detect recovery in arm and hand use during activities of daily living post stroke

Shereen Mouafi¹, Jessica Worton¹, Judy Ranka² ³
¹St George Hospital, Sydney, NSW, Australia, ²Occupational Performance Network, Sydney, NSW, Australia, ³The University of Sydney, Sydney, NSW, Australia

Numerous standardised upper limb assessments exist. Most measure upper limb impairment. Few allow for individualisation to a client, link impairment with performance or are sensitive to incremental changes. The Upper Limb Performance Assessment (ULPA) is a new assessment of upper limb contributions to performance. Part one: Task Performance Mastery (TPM) assesses mastery in any activity requiring upper limb involvement. Part two: Comparative Analysis of Performance-Motor (CAP-M) assesses reasons for reduced mastery through analysis of expected, missing and excessive movements.

Objective: To compare the ULPA with two commonly used assessments and determine clinical utility across a stroke service.

Method: Fifteen patients were assessed using the ULPA, Motor Assessment Scale (MAS) and muscle testing (MT) at least twice during their admission post stroke. Comparisons were made between scores. Information was gathered about perceived benefits of information gained from each assessment.

Results: Where upper limb recovery occurred, ULPA-TPM scores improved, CAP-M excessive actions reduced and less missing actions were observed for all patients. MAS results improved but scores did not reflect if there were only small improvements in upper limb use. MT findings were variable and depended on the task assessed. Of benefit was that the ULPA allowed for culturally sensitive tasks to be chosen.

Conclusion: In comparison with MT and MAS assessment, the ULPA provides therapists with an assessment that links upper limb impairment to realistic functional performance, is sensitive to small incremental changes in upper limb use and allows for diversity in task selection.