Objectives: Chronic post-stroke aphasia directly impacts 30% of stroke survivors and countless family and friends. Two potent treatment types used in chronic aphasia are Constraint Induced Aphasia Therapy (CIAT) and Multi-Modal Aphasia Therapy (M-MAT). Participant response to these therapies is highly variable, with aphasia severity and co-occurring cognitive problems likely to be key factors in treatment response. However, the factors predicting treatment response have not been adequately studied leaving inadequate evidence for effective treatment prescription. This study aims to determine whether two intensive and contrasting treatments (M-MAT and CIAT) for chronic post-stroke aphasia are superior and cost saving when compared to usual care treatment. In addition, a nested sub-study will compare CIAT and M-MAT delivered at a less intense schedule to explore the impact of intensity of treatment on outcomes.

Methods: This is a 3-arm prospective, single-blinded, randomized controlled trial with an end point at three months post treatment. Participants (n=198) will be randomised to CIAT, M-MAT or usual care (UC). Both CIAT and M-MAT focus on intensive speech practice (30 hours in 2 weeks) using interactive game formats, however M-MAT also involves gesture, writing, and drawing cues. UC is usual health service based aphasia therapy. The primary outcome is the Aphasia Quotient of the Western Aphasia Battery. Secondary outcomes include measures of connected speech, multi-modal communication, and quality of life. In addition, we will identify participant cognitive and linguistic predictors of treatment response. A full cost effectiveness analysis will be undertaken.

Results: The trial is underway with ethics approval, trial registration, and data base all established. Recruitment will occur in five Australian states commencing February 2016.

Conclusions: This trial will determine the therapeutic effect of and response to different treatment types in chronic aphasia. It will provide vital economic evaluative information regarding the service delivery standards of aphasia rehabilitation.