accuracy predicted longer maximum backward digital span (β = .24, ρ = .01, 95% CI [.02, .16]). Greater mean M2C2 EM accuracy predicted stronger Logical Memory delayed recall (ß = .33, p < .001, 95% CI [.004, .012]) and total immediate recall on the Free and Cued Selective Reminding Test ($\beta = .19, p < .05, 95\%$ CI [.000, .006]). Moreover, EM significantly distinguished Aß- and Aß+ individuals (t (68) = 3.0, p < .01) with fair accuracy (AUC = .72). Conclusions: Mean performance across 8-days on each M2C2 task predicted same-domain cognitive task performance on a standard assessment battery, with medium effect sizes. Performance on the EM task was also sensitive to cerebral Aß status, consistent with subtle memory changes implicated in the preclinical stage of AD. These findings support the validity of this remote testing protocol in healthy older adults, with implications for future efforts to facilitate accessible and sensitive cognitive screening for early detection of ADRD. Limitations include the restricted generalizability of this primarily white and college educated sample.

Categories: Teleneuropsychology/ Technology **Keyword 1:** dementia - Alzheimer's disease

Keyword 2: technology

Keyword 3: neuropsychological assessment **Correspondence:** Louisa Thompson, Brown University, louisa_thompson@brown.edu

92 Teleneuropsychological Evaluation of Bariatric Surgery Candidates: Cognitive Profiles and Recommendations for Future Practice

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²Neuropsychological Assessment Clinic, Brighton, MA, USA. ³William James College, Newton, MA, USA. ⁴Tufts University School of Medicine, Department of Neurology, Boston, MA, USA. ⁵Boston University School of Medicine, Department of Neurology, Boston, MA, USA Objective: Vascular complications, including elevated body mass index (BMI), are known risk factors for cognitive impairment. Obtaining a cognitive baseline is commonplace in presurgical protocols, including for Parkinson's disease and epilepsy. Currently, routine evaluations for bariatric surgery candidates do not include neuropsychological assessment. This setting provides a unique opportunity to identify cognitive profiles of younger individuals at risk for cognitive impairment. Here, we argue for the standard implementation of a brief, online cognitive battery via telemedicine, to enhance existing protocols of bariatric pre-surgical evaluations.

Participants and Methods: Nineteen bariatric surgery candidates were referred to a private neuropsychological assessment practice for presurgical cognitive/psychological evaluation. Assessments were conducted by a neuropsychologist and a psychology graduate student, via remote video conferencing, between April 2020 and June 2022. Candidates completed a clinical interview, intake form, and the Behavior Rating Inventory of Executive Function for Adults (BRIEF-A), and were administered a battery of cognitive measures: Wechsler Test of Adult Reading (WTAR), Hopkins Verbal Learning Test-Revised (HVLT-R); and select subtests from the TestMyBrain Digital Neuropsychology Toolkit: Trail Making Tests A and B (TMT-A/B), Matrix Reasoning (MR), Digit Span Forward and Backward (DSF, DSB), Gradual Onset Continuous Performance Test (CPT), and Simple and Choice Reaction Time (SRT, CRT). Descriptive statistics were conducted to analyze sample demographics. Raw scores on cognitive measures were converted to z-scores and averaged across the sample.

Results: The average age at evaluation was 38.2 (9.6) years and average pre-surgical BMI was 46.6k/m2 (9.3), indicating morbid obesity (BMI≥40k/ m2). Ten (52.6%) candidates identified as female, 10 (52.6%) identified as White, 8 (42.1%) had 12 years of education or less, 4 (21.1%) were unemployed, and 9 (47.4%) had comorbid psychiatric diagnoses. BRIEF-A sub-scales were within the average range (T's= 47.9 - 52.9, SD's [10.1 – 12.8]). Estimated premorbid IQ was average at 102.7 (11.4). Neuropsychological data revealed group performance within the average range on DSF and DSB (z's= 0.00), TMT-A (z= -0.16), MR (z= -0.53), CPT (z= -0.39), and HVLT-R False Positives (z= 0.05) and Recognition

Discriminability (z= -0.44). SRT (z= -0.70), CRT Accuracy (z= -1.37), TMT-B (z= -0.79), HVLT-R Total Recall and Percent Retained (z's= -0.88), and Delayed Recall and True Positives (z's= -1.27) were low average.

Conclusions: In this sample of pre-surgical bariatric candidates with average intelligence, baseline evaluations revealed mild deficits in reaction time accuracy, visual motoric setshifting, and verbal learning/memory. These deficits may be the result of microvascular changes in the brain secondary to physical compromise. Results provide additional insight into potential early-onset executive dysfunction. psychomotor slowing, and verbal learning/memory difficulties. In addition to these relative areas of neuropsychological weakness, candidates demonstrated relative strengths in attention, working memory, and visuospatial functioning. These insights provide pre-surgical evaluators with additional information to tailor recommendations and treatment approaches that foster surgical success. With a remote, concise, easy-to-administer battery of tests, routine neuropsychological assessment for bariatric surgery candidates is both a feasible and a useful tool for identifying areas of cognitive strengths and weaknesses. Documenting a patients' cognitive baseline can assist with monitoring long-term vascular riskfactors and potential cognitive impairment.

Categories: Teleneuropsychology/ Technology Keyword 1: vascular cognitive impairment Keyword 2: teleneuropsychology Keyword 3: neuropsychological assessment Correspondence: Madeline Uretsky, Boston University Alzheimer's Disease and CTE Centers, Boston University School of Medicine; Neuropsychological Assessment Clinic. muretsky@bu.edu

93 Acceptability and Usability of Tablet-Based Neuropsychological Tests among South African and Ugandan Adolescents With and Without HIV

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Objective: Neuropsychological (NP) tests are increasingly computerized, which automates testing, scoring, and administration. These innovations are well-suited for use in resourcelimited settings, such as low- to middle- income countries (LMICs), which often lack specialized testing resources (e.g., trained staff, forms, norms, equipment). Despite this, there is a dearth of research on their acceptability and usability which could affect performance, particularly in LMICs with varying levels of access to computer technology. NeuroScreen is a tablet-based battery of tests assessing learning, memory, working memory, processing speed, executive functions, and motor speed. This study evaluated the acceptability and usability of NeuroScreen among two groups of LMIC adolescents with and without HIV from Cape Town, South Africa and Kampala, Uganda.

Participants and Methods: Adolescents in Cape Town (n=131) and Kampala (n=80) completed NeuroScreen and questions about their use and ownership of, as well as comfort with computer technology and their experiences completing NeuroScreen. Participants rated their technology use -comfort with and ease-of-use of computers, tablets, smartphones, and NeuroScreen on a Likert-type scale: (1) Very Easy/Very Comfortable to (6) Very Difficult/Very Uncomfortable. For analyses, responses of Somewhat Easy/Comfortable to Very Easy/Comfortable were collapsed to codify comfort and ease. Descriptive statistics assessed technology use and experiences of using the NeuroScreen tool. A qualitative question asked how participants would feel receiving NeuroScreen routinely in the future; responses were coded as positive, negative, or