acceptability/usability, 94% agreed the application was easy to use, 56% enjoyed completing the mobile memory tests (36% felt neutral), 40% prefer remote mobile memory tests to standard in-person paper and pencil tests, and 50% understood the test instructions. 87% felt the frequency of tests assigned was "just right" (13% "too often") and 90% felt the test length was "just right" (7% too short, 3% too long). Participants who completed all 24 sessions to date (n=12) all endorsed being "satisfied" or "very satisfied" with the platform and visit schedule, as well as recommended continued use of this type of cognitive testing. **Conclusions:** Remote memory assessment using smartphones and tablets is feasible and acceptable for cognitively unimpaired late middle-aged and older adults. Follow-up by study staff was needed to ensure adequate retention. Comprehension of instructions and compliance with completing delayed retrieval tasks within the expected timeframe was lower than expected. These feedback will be incorporated into an updated version of the app to improve compliance and retention. Longitudinal data collection is ongoing and results will be updated with a larger sample. Results will be compared across frequency schedule groups.

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91 Remote Smartphone-Based Assessment Predicts Standard Neuropsychological Test Performance and Cerebral Amyloid Status in Cognitively Normal Older Adults

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Objective: Routine cognitive screening in the elderly may facilitate earlier diagnosis of neurodegenerative diseases and access to care and resources for patients and families. However, despite growing rates of Alzheimer's and related disorders (ADRD), the availability and implementation of cognitive screening for older adults in the US remains quite limited. Remote cognitive assessment via smartphone app may reduce several barriers to more widespread screening. We examined the validity of a remote app-based cognitive screening protocol in healthy older adults by examining remote task convergence with standard-person assessments and cerebral amyloid (Aß) status as an AD biomarker.

Participants and Methods: Participants (N =117) were cognitively unimpaired adults aged 60-80 years (67.5% female, 88% White, 75% education ≥ 16 years). A portion had Aß PET imaging results available from prior research participation [(Aß positive (Aß+) n =26, and Aß negative (Aß-) n = 44]. A modified Telephone Interview for Cognitive Status (TICSm) cutoff score of ≥34 was used to establish unimpaired cognition. Participants completed 8 consecutive assessment days using Mobile Monitoring of Cognitive Change (M2C2), a smartphone app-based testing platform developed as part of the National Institute of Aging's Mobile Toolbox initiative. Brief (i.e., 3-4 minute) M2C2 sessions were assigned daily within morning, afternoon, and evening time windows. Tasks included measures of visual working memory (WM), processing speed (PS), and episodic memory (EM) (see Thompson et al., 2022). Participants then completed a battery of standard neuropsychological assessments in-person at a follow-up visit.

Results: Participants completed 22.6 (*SD* = 2.6) out of 24 assigned sessions (3 sessions x 8 days) on average. Performance on all M2C2 tasks decreased significantly with age. Women performed significantly better on WM and EM tasks relative to men. There were no detectable significant differences in performance by race or education. Shorter mean reaction time on M2C2 PS trials predicted faster Trails A and B completion (ß = .26, *p* < .01, 95% CI [3.8, 23.3] and ß = .20, *p* < .05, 95% CI [.23, 6.8], respectively). Greater mean M2C2 WM

accuracy predicted longer maximum backward digital span (ß = .24, *p* = .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 (ß = .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.

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

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Objective: Vascular complications, including elevated body mass index (BMI), are known risk factors for cognitive impairment. Obtaining a cognitive baseline is commonplace in pre-surgical 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 pre-surgical 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