



Supplemental Clinical Criteria: Optum Psychological and Neuropsychological Testing

Policy Number: BH803PNTSCC0102024
Effective Date: October, 2024

Table of Contents	Page
Introduction & Instructions for Use	1
Benefit Considerations	2
Provider Qualifications	2
Automated Testing and Result	3
Coverage Rationale/Limitations	4
Developmental, Cognitive and Brief Emotional Assessment	8
Psychological Tele-Assessment	8
References	9
Revision History	10

Introduction & Instructions for Use

Introduction

The Supplemental Clinical Criteria to the American Psychological Association’s (APA) *Psychological and Neuropsychological Testing Billing and Coding Guide*, provides further guidance regarding provider qualifications, coverage rationale and limitations, and developmental testing specific to behavioral health benefit plans managed by Optum®.

Instructions for Use

This Supplemental Clinical Criteria is used along with the *American Psychological Association’s Psychological and Neuropsychological Testing Billing and Coding Guide* to make coverage decisions as well as to inform discussions about evidence-based practices and discharge planning for behavioral health benefit plans managed by Optum. When deciding coverage, the member’s specific benefits must be referenced.

All reviewers must first identify member eligibility, the member-specific benefit plan coverage, and any federal or state regulatory requirements that supersede the member’s benefits prior to using this guideline. In the event that the requested service or procedure is limited or excluded from the benefit, is defined differently or there is otherwise a conflict between this guideline and the member’s specific benefit, the member’s specific benefit supersedes this guideline. Other clinical criteria may apply. Optum reserves the right, in its sole discretion, to modify its clinical criteria as necessary using the process described in Clinical Criteria.

This guideline is provided for informational purposes. It does not constitute medical advice.

Optum may also use tools developed by third parties that are intended to be used in connection with the independent professional medical judgment of a qualified health care provider and do not constitute the practice of medicine or medical

advice. Optum may develop clinical criteria or adopt externally developed clinical criteria that supersede this guideline when required to do so by contract or regulation.

Benefit Considerations

Before using this policy, please check the member-specific benefit plan document and any federal or state mandates, if applicable.

Provider Qualifications

Psychological Testing

Psychological Test Evaluation Services is a set of formal procedures utilizing reliable and validated tests designed to measure areas of intellectual, cognitive emotional, and behavioral functioning, in addition to identifying psychopathology, personality style, interpersonal processes, and adaptive skills. Service activities can include test selection, review of records, consultation with referral source, integration of clinical data, clinical decision making, preparation of the testing report, and reviewing the results of testing with member and/or caregivers.

- The provider's professional training and licensure must include one of the following:
 - A doctoral-level psychologist who is licensed to practice independently and demonstrates sufficient training and experience.
 - A masters-degreed behavioral health professional whose licensure specifically allows for provision of psychological testing services.
 - The masters-degreed provider has professional expertise in the types of tests/assessments being administered.
 - The masters-degreed provider is conducting test evaluation services in accordance with licensing standards and psychological testing professional and ethical standards.

Psychological Test Administration and Scoring is the formal process of administering reliable and validated tests selected by the doctoral-level psychologist or qualified masters-degreed provider according to standardized test manual instructions and scoring the respondents answers to test items.

- The provider's professional training and licensure must include one of the following:
 - A doctoral-level psychologist who is licensed to practice independently and demonstrates sufficient training and experience.
 - A psychometrist or psychometrician who administers and scores psychological tests under the supervision of a licensed doctoral-level psychologist, and whose services are billed by the supervising psychologist.
 - The supervising psychologist must have face-to-face contact with the member at intake and during the feedback session.
 - The supervising psychologist is also responsible for final test interpretation, report writing, and final signature of approval.
 - A masters-degreed behavioral health professional whose licensure specifically allows for provision of psychological testing services.
 - The masters-degreed provider has professional expertise in the types of tests/assessments being administered.
 - The masters-degreed provider is conducting test administration and scoring in accordance with licensing standards and psychological testing professional and ethical standards.

Neuropsychological Testing

Neuropsychological Test Evaluation Services is a set of formal procedures utilizing reliable and valid tests specifically focused on identifying the presence of brain damage, injury, or dysfunction, and any associated functional deficits. Service activities can include test selection, review of records, consultation with referral source, integration of clinical data, clinical decision making, preparation of the testing report, and reviewing the results of testing with member and/or caregivers.

- Neuropsychological testing is within the scope of the provider's professional training and licensure when the provider is any of the following:
 - A doctoral-level psychologist who is licensed to practice independently and demonstrates sufficient training and experience.
 - A credentialed psychiatrist who meets the following requirements:

- Recognized certification in neurology through the American Board of Psychiatry and Neurology;
- Accreditation in behavioral neurology and neuropsychiatry through the American Neuropsychiatric Association;
- State medical licensure specifically allowing for the provision of neuropsychological testing service(s);
- Evidence of professional training and expertise in the specific tests and/or assessment measures for which authorization is requested;
- Physician and supervised psychometrician(s) adhere to the prevailing national professional and ethical standards regarding test administration, scoring, and interpretation.

Neuropsychological Test Administration and Scoring is the formal process of administering reliable and validated tests selected by the doctoral-level psychologist or qualified provider according to standardized test manual instructions and scoring the respondents answers to test items.

- Neuropsychological Test Administration and Scoring is within the scope of the provider's professional training and licensure when the provider is any of the following:
 - A doctoral-level psychologist who is licensed to practice independently and demonstrates sufficient training and experience.
 - A psychometrist or psychometrician who administers and scores psychological tests under the supervision of a licensed doctoral-level psychologist, and whose services are billed by the supervising psychologist.
 - The supervising psychologist must have face-to-face contact with the member at intake and during the feedback session.
 - The supervising psychologist is also responsible for final test interpretation, report writing, and final signature of approval.
 - A credentialed psychiatrist who meets the following requirements:
 - Recognized certification in neurology through the American Board of Psychiatry and Neurology;
 - Accreditation in behavioral neurology and neuropsychiatry through the United Council for Neurologic Subspecialties (UCNS);
 - State medical licensure specifically allowing for the provision of neuropsychological testing service(s);
 - Evidence of professional training and expertise in the specific tests and/or assessment measures for which authorization is requested;
 - Physician and supervised psychometrician(s) adhere to the prevailing national professional and ethical standards regarding test administration, scoring, and interpretation.

Automated Testing and Result

Automated Testing and Result is primarily a method of screening for potentially clinically significant intellectual, cognitive, emotional, and behavioral symptoms or functional deficits that utilizes a single reliable and validated instrument that has fully automated administration, scoring and interpretation. Automated Testing may also be used to quickly estimate changes in clinical status over time either as a method of obtaining an objective measure of progress in treatment or periodic objective surveillance of known risk issues.

- Automated Testing and Result is within the scope of the provider's professional training and licensure when the provider is any of the following:
 - A doctoral-level psychologist who is licensed to practice independently and demonstrates sufficient training and experience.
 - A masters-degreed behavioral health professional whose licensure specifically allows for provision of psychological testing services.
 - The masters-degreed provider has professional expertise in the types of tests/assessments being administered.
 - The masters-degreed provider is conducting test administration, scoring and interpretation in accordance with licensing standards and psychological testing professional and ethical standards.
 - A credentialed psychiatrist who meets the following requirements:
 - Recognized certification in neurology through the American Board of Psychiatry and Neurology;
 - Accreditation in behavioral neurology and neuropsychiatry through the American Neuropsychiatric Association;
 - State medical licensure specifically allowing for the provision of neuropsychological testing service(s);
 - Evidence of professional training and expertise in the specific tests and/or assessment measures for which authorization is requested;

- Physician and supervised psychometrician(s) adhere to the prevailing national professional and ethical standards regarding test administration, scoring, and interpretation.

Coverage Rationale/Limitations

- Neuropsychological testing is unproven and not medically necessary for the following:
 - Baseline neuropsychological testing in asymptomatic persons at risk for sport-related concussions
 - Computerized neuropsychological testing when used alone for evaluating concussions.
 - Neuropsychological testing for the following diagnoses alone without other covered conditions as noted above:
 - Headaches, including migraine headache;
 - History of myocardial infarction;
 - Intermittent explosive disorder.
 - Computerized cognitive testing, such as Mindstreams® Cognitive Health Assessment, BrainCare™ and QbTest.
 - Available clinical trials fail to document a beneficial effect of computerized cognitive testing on long-term clinical outcomes. The evidence is insufficient to establish the validity of computerized cognitive testing compared with traditional tests for the assessment of dementia and cognitive impairment. Evidence includes:
 - In a systematic review and meta-analysis of diagnostic tests for the screening of mild cognitive impairment (MCI) and dementia, Chan et al. (2022) included 90 studies with 22, 567 participants to evaluate diagnostic performance among different types of digital drawing tests and paper-and-pencil drawing tests. Seventy-six of the included studies included participants with MCI or dementia in an outpatient clinic or from the community while the rest of the studies recruited participants in a hospital or long-term care setting. The digital drawing tests included in their review and analysis included the digital clock drawing test (CDT), digital pentagon drawing test, digital Rey-Osterrieth complex figure (ROCF), digital tree drawing test, digital house drawing test, and digital spiral test while the paper-and-pencil drawing tests included the CDT, pentagon drawing test, cube drawing test, and ROCF. Six of the studies used digital CDT and 80 of the studies used paper-and-pencil CDT. The primary outcome of the study was the diagnostic performance of the CDT for the screening of MCI and dementia and the secondary outcome was the diagnostic performance of the other types of drawing tests. The authors reported that the performances of the digital and paper-and-pencil pentagon drawing tests were comparable in the screening of dementia, but that the digital CDT demonstrated better sensitivity and specificity diagnostic performance than paper-and-pencil CDT for MCI. Other types of digital drawing tests showed comparable performance with paper-and-pencil formats. Limitations of this study include the lack of head-to-head comparisons, and that the number of studies to compare diagnostic performance of drawing tests are limited. The authors stated that the benefits of digital drawing tests may be stronger if there were more studies available for this meta-analysis.
 - Romero-Garcia et al. (2022) completed a single-center, prospective cohort study to assess if cognitive impairments would be apparent in a young and high functioning cohort and that app-based cognitive screening would complement traditional neuropsychological assessments. Their study included 17 patients with diffuse gliomas who completed a neuropsychological battery of tests that took 2-3 hours to complete and the OCS-BRIDGE assessment, an app-based touchscreen assessment that could be completed in 30 minutes. The traditional neuropsychological assessment was administered pre-operatively while the OCS-BRIDGE was administered pre- and post-operatively at the 3- and 12-month follow-ups. The authors reported that the traditional assessment showed that 79% of participants had an impairment in at least one domain, and an average of 2.88 cognitive impairments per participant before surgery, and that, after surgery, all but one participant had at least one impairment with a mean of 4.5 impairments per participants. The OCS-BRIDGE touchscreen assessment showed that 59% of participants had an impairment in at least one domain with a mean of 0.94 impairments per participant before surgery while longitudinal post-operative changes showed that 44% had a reduced number of impairments by their last assessment, 25% had the same, and 31% showed an increased number of impairments. Overall, the traditional neuropsychological tests detected 44 preoperative impairments among the 17 participants in the four combined domains of attention, memory, verbal skills, and non-verbal skills. OCS-BRIDGE detected 13 impairments and 28 possible impairments pre-operatively. The authors recognized that the traditional assessment using multiple items across the difficulty range proved more sensitive than the brief touchscreen assessment; however, they also noted that the capacity of the screening app to capture reaction times enhanced its sensitivity in the area of non-verbal function. The authors concluded that a combined approach, using traditional assessment in those areas

where brief screening, may be less sensitive, and OCS-BRIDGE style measures for reaction time and perceptual tasks may be most effective and recommended robust, objective and accessible assessment across multiple centers. Limitations of the study include the small sample size and single-center design, logistical and technical limitations to the assessments, heterogeneity of tumor location, size and treatment and the potential for practice effects due to reuse of the cognitive assessment tools.

- A statistical analysis by Ye et al. (2022) was performed to evaluate BrainCheck, a computerized cognitive testing battery, for its diagnostic accuracy and ability to distinguish the severity of cognitive impairment. A total of 99 participants diagnosed with dementia, mild cognitive impairment (MCI), or normal cognition (NC) completed the BrainCheck battery. Statistical analyses compared participant performances on BrainCheck based on their diagnostic group. BrainCheck battery performance showed differences between the NC, MCI, and dementia groups, achieving 88% or higher sensitivity and specificity (i.e., true positive and true negative rates) for separating dementia from NC, and 77% or higher sensitivity and specificity in separating the MCI group from the NC and dementia groups. Three-group classification found true positive rates of 80% or higher for the NC and dementia groups and true positive rates of 64% or higher for the MCI group. The authors concluded that BrainCheck was able to distinguish between diagnoses of dementia, MCI, and NC, providing a potentially reliable tool for early detection of cognitive impairment. A small sample size makes it difficult to decide whether these conclusions can be generalized to a larger population. Further research with randomized controlled trials is needed to validate these findings.
- Chan et al. (2021) performed a systematic review to evaluate the diagnostic performance of digital cognitive tests for mild cognitive impairment (MCI) and dementia in older adults. Literature searches were systematically performed in the OVID databases. Validation studies that reported the diagnostic performance of a digital cognitive test for MCI or dementia were included. The main outcome was the diagnostic performance of the digital test for the detection of MCI or dementia. A total of 56 studies with 46 digital cognitive tests were included in this study. Most of the digital cognitive tests were shown to have comparable diagnostic performances with the paper-and-pencil tests. Twenty-two digital cognitive tests showed a good diagnostic performance for dementia, with a sensitivity and a specificity over 0.80, such as the Computerized Visuo-Spatial Memory test and Self-Administered Tasks Uncovering Risk of Neurodegeneration. Eleven digital cognitive tests showed a good diagnostic performance for MCI such as the Brain Health Assessment. However, all the digital tests only had a few validation studies to verify their performance. The authors concluded that digital cognitive tests showed good performances for MCI and dementia, and that the digital test can collect digital data that is far beyond the traditional ways of cognitive tests. Further research with randomized controlled trials is needed to validate these findings.
- In a cohort of 114 patients presenting to an attention deficit hyperactivity disorder (ADHD) outpatient clinic, Brunkhorst-Kanaan et al. (2020) investigated how well a commercially available continuous performance test (CPT) (QbTest) can differentiate between patients with ADHD ($n = 94$) and patients with a disconfirmed ADHD diagnosis ($n = 20$). Both groups showed numerous comorbidities, predominantly depression (27.2% in the ADHD group vs. 45% in the non-ADHD group) and substance-use disorders (18.1% vs. 10%, respectively). Patients with ADHD showed significant higher activity (2.07 ± 1.23) than patients without ADHD (1.34 ± 1.27 , $df = 112$; $p = 0.019$), whereas for the other core parameters, inattention and impulsivity no differences could be found. Reaction time variability has been discussed as a typical marker for inattention in ADHD. Therefore, the authors investigated how well ex-Gaussian analysis of response time can differentiate between ADHD and other patients, showing, that it does not help to identify patients with ADHD. Even though patients with ADHD showed significantly higher activity, this parameter differed only poorly between patients. The authors concluded that CPTs do not help to identify patients with ADHD in a specialized outpatient clinic. According to the authors, the usability of this test for differentiating between ADHD and other psychiatric disorders is poor and a sophisticated analysis of reaction time did not decisively increase the test accuracy.
- Cahn-Hidalgo et al. (2020) determined the cut-off scores for classification of cognitive impairment and assessed Cognivue safety and efficacy in a validation study. Adults (age 55-95 years) at risk for age-related cognitive decline or dementia were invited via posters and email to participate in two cohort studies conducted at various outpatient clinics and assisted- and independent-living facilities. In the cut-off score determination study ($n = 92$), optimization analyses by positive percent agreement (PPA) and negative percent agreement

(NPA), and by accuracy and error bias were conducted. In the clinical validation study (n = 401), regression, rank linear regression, and factor analyses were conducted. Participants in the clinical validation study also completed other neuropsychological tests. For the cut-off score determination study, 92 participants completed St. Louis University Mental Status (SLUMS, reference standard) and Cognivue tests. Analyses showed that SLUMS cut-off scores of < 21 (impairment) and > 26 (no impairment) corresponded to Cognivue scores of 54.5 (NPA = 0.92; PPA = 0.64) and 78.5 (NPA = 0.5; PPA = 0.79), respectively. Therefore, conservatively, Cognivue scores of 55-64 corresponded to impairment, and 74-79 to no impairment. For the clinical validation study, 401 participants completed ≥ 1 testing session, and 358 completed 2 sessions 1-2 wk. apart. Cognivue classification scores were validated, demonstrating good agreement with SLUMS scores (weighted κ 0.57; 95%CI: 0.50-0.63). Reliability analyses showed similar scores across repeated testing for Cognivue (R² = 0.81; r = 0.90) and SLUMS (R² = 0.67; r = 0.82). Psychometric validity of Cognivue was demonstrated vs. traditional neuropsychological tests. Scores were most closely correlated with measures of verbal processing, manual dexterity/speed, visual contrast sensitivity, visuospatial/executive function, and speed/sequencing. The investigators concluded that Cognivue scores ≤ 50 avoid misclassification of impairment, and scores ≥ 75 avoid misclassification of un-impairment. According to the investigators, this validation study demonstrates good agreement between Cognivue and SLUMS; superior reliability; and good psychometric validity. A limitation of these studies is the use of a single reference standard, SLUMS. Longitudinal follow-up studies are needed to evaluate the ability of Cognivue to monitor cognitive deterioration over time.

- Groppe et al., (2019) determined the accuracy and validity of BrainCheck Memory as a diagnostic aid for age-related cognitive impairment, as compared against physician diagnosis and other commonly used neurocognitive screening tests, including the Saint Louis University Mental Status (SLUMS) exam, the Mini-Mental State Examination (MMSE), and the Montreal Cognitive Assessment (MoCA). A total of 583 volunteers over the age of 49 were tested from various community centers and living facilities. The volunteers were divided into five cohorts: a normative population and four comparison groups for the SLUMS exam, the MMSE, the MoCA, and physician diagnosis. Each comparison group completed their respective assessment and BrainCheck Memory. A total of 398 subjects were included in the normative population. A total of 84 participants were in the SLUMS exam cohort, 51 in the MMSE cohort, 35 in the MoCA cohort, and 18 in the physician cohort. BrainCheck Memory assessments were significantly correlated to the SLUMS exam, with coefficients ranging from .5 to .7. Correlation coefficients for the MMSE and BrainCheck and the MoCA and BrainCheck were also significant. Of the 18 subjects evaluated by a physician, 9 (50%) were healthy, 6 (33%) were moderately impaired, and 3 (17%) were severely impaired. A significant difference was found between the severely and moderately impaired subjects and the healthy subjects (p = .02). The investigators found that the BrainCheck Memory composite score showed stronger correlations with the standard assessments as compared to the individual BrainCheck assessments. Receiver operating characteristic (ROC) curve analysis of this composite score found a sensitivity of 81% and a specificity of 94%. The investigators concluded that BrainCheck Memory provides a sensitive and specific metric for age-related cognitive impairment in older adults, with the advantages of a mobile, digital, and easy-to-use test. According to the authors, some participants were unable to complete BrainCheck's entire battery of assessments. While this was accounted for during the analysis, the missing data may have limited statistical power. The investigators also indicated that due to the study's small sample size, more research is needed to compare and validate BrainCheck against physician diagnosis.
- Hollis et al. (2018) evaluated the impact of providing a computerized test of attention and activity (QbTest) report on the speed and accuracy of diagnostic decision-making in children with suspected ADHD. A randomized, parallel, single-blind controlled trial in mental health and community pediatric clinics in England was conducted. Participants were 6-17 years-old and referred for ADHD diagnostic assessment; all underwent assessment-as-usual, plus QbTest. Participants and their clinician were randomized to either receive the QbTest report immediately (QbOpen group), or the report was withheld (QbBlind group). The primary outcome was number of consultations until a diagnostic decision confirming/excluding ADHD within 6-months from baseline. One hundred and thirty-two participants were randomized to QbOpen group (123 analyzed) and 135 to QbBlind group (127 analyzed). Clinicians with access to the QbTest report (QbOpen) were more likely to reach a diagnostic decision about ADHD (hazard ratio 1.44, 95% CI 1.04-2.01). At 6-months, 76% of those with a QbTest report had received a diagnostic decision, compared with 50% without. QbTest reduced

appointment length by 15% (time ratio 0.85, 95% CI 0.77-0.93), increased clinicians' confidence in their diagnostic decisions (odds ratio 1.77, 95% CI 1.09-2.89) and doubled the likelihood of excluding ADHD. There was no difference in diagnostic accuracy. The authors concluded that the QbTest may increase the efficiency of ADHD assessment pathway allowing greater patient throughput with clinicians reaching diagnostic decisions faster without compromising diagnostic accuracy. Limitations of the study include that follow-up was limited to a six-month time period. Given that overall, almost one third of participants had still not received a diagnostic decision after six months, it was not possible to determine the impact of QbTest on the eventual diagnosis of those participants still awaiting a diagnostic decision at the end of the study. Additionally, the study was not powered enough to assess possible age effects.

- Aslam et al. (2018) conducted a systematic review to determine whether automated computerized tests accurately identify patients with progressive cognitive impairment and, if so, to investigate their role in monitoring disease progression and/or response to treatment. Six electronic databases were searched from January 2005 to August 2015 to identify papers for inclusion. Studies assessing the diagnostic accuracy of automated computerized tests for mild cognitive impairment (MCI) and early dementia against a reference standard were included. Where possible, sensitivity, specificity, positive predictive value, negative predictive value, and likelihood ratios were calculated. The Quality Assessment of Diagnostic Accuracy Studies tool was used to assess risk of bias. Sixteen studies assessing 11 diagnostic tools for MCI and early dementia were included. No studies were eligible for inclusion in the review of tools for monitoring progressive disease and response to treatment. The overall quality of the studies was good. However, the wide range of tests assessed, and the non-standardized reporting of diagnostic accuracy outcomes meant that statistical analysis was not possible. The authors concluded that some tests have shown promising results for identifying MCI and early dementia. However, concerns over small sample sizes, lack of replicability of studies, and lack of evidence available make it difficult to make recommendations on the clinical use of the computerized tests for diagnosing, monitoring progression, and treatment response for MCI and early dementia.
- Racine et al. (2016) conducted a study that included 469 late middle-aged participants from the Wisconsin Registry for Alzheimer's Prevention (mean age 63.8 ± 7 years at testing; 67% female; 39% APOE4 +) to evaluate whether computerized cognitive assessments, like the CogState battery, are sensitive to preclinical cognitive changes or pathology in people at risk for Alzheimer's disease (AD). The study examined relationships between a CogState abbreviated battery (CAB) of seven tests and demographic characteristics, traditional paper-based neuropsychological tests as well as a composite cognitive impairment index, cognitive impairment status (determined by consensus review), and biomarkers for amyloid and tau (CSF phosphorylated-tau/A β 42 and global PET-PiB burden) and neural injury (CSF neurofilament light protein). CSF and PET-PiB were collected in n = 71 and n = 91 participants, respectively, approximately four years prior to CAB testing. For comparison, three traditional tests of delayed memory in parallel were examined. Similar to studies in older samples, the CAB was less influenced by demographic factors than traditional tests. CAB tests were generally correlated with most paper-based cognitive tests examined and mapped onto the same cognitive domains. Greater composite cognitive impairment index was associated with worse performance on all CAB tests. Cognitively impaired participants performed significantly worse compared to normal controls on all but one CAB test. Poorer One Card Learning test performance was associated with higher levels of CSF phosphorylated-tau/A β 42. The authors concluded that these results support the use of the CogState battery as measures of early cognitive impairment in studies of people at risk for Alzheimer's disease. However, according to the authors, the study also suggests that CogState at a single time point may not substantially improve preclinical AD detection over traditional neuropsychological tests.
- Shopin et al. (2013) compared a computerized battery of neuropsychological tests for memory, attention and executive functions (MindStreams) with the Montreal Cognitive Assessment (MoCA) to detect mild-to-moderate cognitive impairments in poststroke patients. A total of 454 patients with transient ischemic attack (TIA) or stroke enrolled to the TABASCO (Tel Aviv Brain Acute Stroke Cohort) study, a prospective study which includes consecutive first-ever mild-to-moderate stroke patients, were included. All participants underwent neurological and cognitive evaluations. The patients' mean MoCA and MindStreams scores were lower than normal; however, the TIA group presented significantly better scores using either method. The correlation between the MoCA and the computerized global score was 0.6. A significant correlation was found between

the subcategory scores (executive function, memory and attention). However, the MoCA identified many more subjects with low scores (< 26) compared to the MindStreams (70.6 vs. 15.7%).

Developmental, Cognitive and Brief Emotional Assessment

- Assessment of Aphasia (96105) is the evaluation of expressive and receptive speech and language function, language comprehension, speech production ability, spelling or writing with interpretation and report per hour. This procedure is often conducted by a speech language therapist. It is not considered a form of psychological testing and is not typically covered under the behavioral health benefit.
- Standardized cognitive performance testing (96125) is an occupational therapy assessment used to assess capacity to function in activities of daily living. It is not considered a form of psychological or neuropsychological testing and is not typically covered under the behavioral health benefit.
- Developmental Testing (96110, 96112, 96113) is an adjunct to the routine surveillance for developmental delays in young children. This procedure is often conducted by a developmental pediatrician, or a speech, language, physical or occupational therapist. It is not considered a form of psychological testing and is not typically covered under the behavioral health benefit unless contractually required to manage as a behavioral health service.
- Brief emotional/behavioral assessment (96127) is typically used in primary care settings for early detection of potential conditions or disorders, to monitor progress in treatment or track changes in symptoms over time. Results of brief self-report screening assessments can also be used to inform decisions about whether to refer for psychological or neuropsychological testing. Brief screening assessments should not be used for making definitive diagnostic decisions and are not considered to be psychological or neuropsychological testing. This service code is not typically included on behavioral contracts or fee schedules and most often is managed under medical benefits.

Psychological and Neuropsychological Tele-Assessment

- Tele-assessment is typically not covered unless required by regulation or contract. Member-specific benefit plan documents and any federal or state mandates should be consulted. The use of tele-assessment should not contradict federal, state, or local laws overseeing the practice of psychologists providing assessment services including applicable licensure requirements.
- Face-to-face assessment is the standard of care, but there may be case-by-case circumstances where tele-assessment is indicated and an exception could be made (e.g., to extend geographical reach to isolated populations, areas where there are no available providers who can render the required testing, or to lessen the number of visits to specialist clinics).
- Adapting traditional assessment practices to the remote delivery of services must maintain professional and ethical standards and ensure the integrity and accuracy of psychological assessments conducted via telecommunication platforms. Remote testing should not override typical and standardized practice. Teleassessment is not covered when:
 - In person testing is available.
 - The provider is not sufficiently proficient in the use of telehealth to deliver care.
 - The provider is not actively licensed or credentialed to practice in the state where the member will receive testing.
 - HIPAA compliant platform will not be used. Examples of HIPAA compliant platforms include:
 - Doximity
 - Doxy.me
 - GoToMeeting
 - Healthie
 - Kareo
 - Teladoc
 - Thera-LINK
 - TherapyNotes
 - Zoom for Healthcare
 - Test materials are not adequately secured (e.g. sending physical materials).
 - Adequate monitoring of test administration through audio-visual methods will not occur.
 - Member is not a good candidate for remote administration (e.g. due to age, condition or diagnosis, lack of access to a conducive test environment).

- Member does not have technology literacy or access to technology to effectively participate in teleassessment.
- Test selection does not include tests that are medically necessary to answer the referral questions because the test(s) can't be remotely administered or would require modification to such an extent as to undermine test score reliability.
- Standard administration procedures must be modified to such an extent as to undermine test validity.
- Informed consent has not been secured for telehealth testing and/or risks and limitations of remote assessment have not been plainly communicated to the member.

References

- American Academy of Clinical Neuropsychology. Neuropsychology model LCD 2012. Retrieved from: https://theaacn.org/wp-content/uploads/2015/10/neuropsychology_model_lcd-1.pdf.
- American Academy of Clinical Neuropsychology. Practice guidelines for neuropsychological assessment and consultation. The Clinical Neuropsychologist 2007; 21(2):209-231. 2007.
- American Medical Association, CPT 2019 Professional Edition, 2019.
- American Psychiatric Association. Practice guidelines for the psychiatric evaluation of adults (3rd ed.) 2016; Arlington, VA: American Psychiatric Publishing.
- American Psychiatric Association. Diagnostic and statistical manual of mental disorders (5th ed.) 2013; Arlington, VA: American Psychiatric Publishing.
- American Psychiatric Association. Guideline Watch: Practice guideline for the treatment of patients with Alzheimer's disease and other dementias 2014; Arlington VA: American Psychiatric Publishing.
- American Psychological Association. Guidelines for the evaluation of dementia and age-related cognitive change. American Psychologist 2012; 67(1):1-9.
- American Psychological Association. Guidance on psychological tele-assessment during the COVID-19 crisis, May 1, 2020; A. Jordan Wright, PhD, Joni L. Mihura, PhD, Hadas Pade, PsyD, and David M. McCord. Retrieved from: <https://www.apaservices.org/practice/reimbursement/health-codes/testing/tele-assessment-covid-19>
- American Psychological Association. Report of the task force on test user qualifications 2000; Washington, DC: Author.
- Aslam RW, Bates V, Dundar Y, et al. A systematic review of the diagnostic accuracy of automated tests for cognitive impairment. Int J Geriatr Psychiatry. 2018 Apr;33(4):561-575.
- Bauer RM, Iverson GL, Cernich AN, Binder LM, Ruff RM, & Naugle RI. Computerized neuropsychological assessment devices: Joint position paper of the American Academy of Clinical Neuropsychology and the National Academy of Neuropsychology. Clin Neuropsychology 2012; 26(2):177-196.
- Cahn-Hidalgo D, Estes PW, Benabou R. Validity, reliability, and psychometric properties of a computerized, cognitive assessment test (Cognivue®). World J Psychiatry. 2020 Jan 19;10(1):1-11.
- Centers for Medicare and Medicaid Services. Local coverage determination (LCD): Psychological and neuropsychological testing 2016. Retrieved from: <https://www.cms.gov/medicare-coverage-database/details/lcd-details.aspx?LCDId=34646>.
- Chan JYC, Bat BKK, Wong A, et al. Evaluation of digital drawing tests and paper-and-pencil drawing tests for the screening of mild cognitive impairment and dementia: A systematic review and meta-analysis of diagnostic studies. Neuropsychol Rev. 2022 Sep;32(3):566-576.
- Chan JYC, Yau STY, Kwok TCY, et al. Diagnostic performance of digital cognitive tests for the identification of MCI and dementia: a systematic review. Ageing Res Rev. 2021 Dec;72:101506.
- Cole WR, Arrieux JP, Ivins BJ, et al. A comparison of four computerized neurocognitive assessment tools to a traditional neuropsychological test battery in service members with and without mild traumatic brain injury. Arch Clin Neuropsychol. 2018 Feb 1;33(1):102-119.
- Fink HA, Hemmy LS, Linskens EJ, et al. Diagnosis and treatment of clinical Alzheimer's-type dementia: A systematic review. Comparative Effectiveness Review No. 223. (Prepared by the Minnesota Evidence-based Practice Center under Contract No. 290- 2015-00008-I.) AHRQ Publication No. 20-EHC003. Rockville, MD: Agency for Healthcare Research and Quality; April 2020.
- Groppell S, Soto-Ruiz KM, Flores B, et al. A rapid, mobile neurocognitive screening test to aid in identifying cognitive impairment and dementia (BrainCheck): Cohort Study. JMIR Aging. 2019 Mar 21;2(1):e12615.

Hang B, Babcock L, Hornung R, et al. Can computerized neuropsychological testing in the emergency department predict recovery for young athletes with concussions? *Pediatr Emerg Care*. 2015 Oct;31(10):688-93.

Hollis C, Hall CL, Guo B, et al.; the AQUA Trial Group. The impact of a computerized test of attention and activity (QbTest) on diagnostic decision-making in children and young people with suspected attention deficit hyperactivity disorder: single-blind randomized controlled trial. *J Child Psychol Psychiatry*. 2018 Dec;59(12):1298-1308.

Ivins BJ, Arrieux JP, Schwab KA, et al. Using rates of low scores to assess agreement between brief computerized neuropsychological assessment batteries: A clinically based approach for psychometric comparisons. *Arch Clin Neuropsychol*. 2019 Feb 23. Pii: acz004.

Nakayama Y, Covassin T, Schatz P, et al. Examination of the Test-Retest Reliability of a Computerized Neurocognitive Test Battery. *Am J Sports Med*. 2014 Jun 6;42(8):2000-2005.

Nelson LD, Furger RE, Gikas P, et al. Prospective, head-to-head study of three computerized neurocognitive assessment tools part 2: utility for assessment of mild traumatic brain injury in emergency department patients. *J Int Neuropsychol Soc*. 2017 Apr;23(4):293-303.

Nelson LD, LaRoche AA, Pfaller AY, et al. Prospective, head-to-head study of three computerized neurocognitive assessment tools (CNTs): reliability and validity for the assessment of sport-related concussion. *J Int Neuropsychol Soc*. 2016 Jan;22(1):24-37.

Oliva I, Losa J. Validation of the Computerized Cognitive Assessment Test: NNCT. *Int J Environ Res Public Health*. 2022 Aug 23;19(17):10495.

Pagán AF, Huizar YP, Schmidt AT. Conner’s Continuous Performance Test and adult ADHD: A systematic literature review. *J Atten Disord*. 2023 Feb;27(3):231-249.

Puente AE, Adams R, Barr WB, Bush SS, NAN Policy and Planning Committee, Ruff RM, Barth JT, Broshek D, Koffler SP, Reynolds C, Silver CH, Troster AI, & the National Academy of Neuropsychology. The use, education, training, and supervision of neuropsychological test technicians (psychometrists) in clinical practice. Official statement of the National Academy of Neuropsychology. *Arch Clin Neuropsychology* 2006; 21(8):837-839.

Romero-Garcia R, Owen M, McDonald A, et al. Assessment of neuropsychological function in brain tumor treatment: a comparison of traditional neuropsychological assessment with app-based cognitive screening. *Acta Neurochir (Wien)*. 2022 Aug;164(8):2021-2034.

Takagi M, Hearps SJC, Babl FE, et al. Does a computerized neuropsychological test predict prolonged recovery in concussed children presenting to the ED? *Child Neuropsychol*. 2020 Jan;26(1):54-68.

Turner SM, DeMers ST, Fox HR, & Reed GM. APA’s guidelines for test user qualifications: An executive summary. *American Psychologist* 2001; 56(12):1099-1113.

Vyshedskiy A, Netson R, Fridberg E, et al. Boston cognitive assessment (BOCA) - a comprehensive self-administered smartphone- and computer-based at-home test for longitudinal tracking of cognitive performance. *BMC Neurol*. 2022 Mar 15;22(1):92.

Ye S, Sun K, Huynh D, et al. A computerized cognitive test battery for detection of dementia and mild cognitive impairment: instrument validation study. *JMIR Aging*. 2022 Apr 15;5(2):e36825.

United Healthcare Medical Policy, Neuropsychological Testing under the Medical Benefit, April 2023.

Revision History

Date	Summary of Changes
1/1/2021	Version 1
3/1/2022	Version 2 – Annual Review
2/1/2023	Version 3 – Annual Review
7/10/2023	Version 3 Revised – Computerized Testing
10/15/2024	Version 4 – Annual Review – Tele-assessment

Date	Summary of Changes