Concussion Testing

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Disclaimer

Highmark Health Options medical policy is intended to serve only as a general reference resource regarding coverage for the services described. This policy does not constitute medical advice and is not intended to govern or otherwise influence medical decisions.

POLICY STATEMENT

Highmark Health Options may provide coverage under the medical-surgical benefits of the Company's Medicaid products for medically necessary benefits.

This policy is designed to address medical necessity guidelines that are appropriate for the majority of individuals with a particular disease, illness or condition. Each person's unique clinical circumstances warrant individual consideration, based upon review of applicable medical records.

The qualifications of the policy will meet the standards of the National Committee for Quality Assurance (NCQA) and the Delaware Department of Health and Social Services (DHSS) and all applicable state and federal regulations.

DEFINITIONS

Concussion – A traumatic brain injury that affects your brain function.

Highmark Health Options (HHO) – Managed care organization serving vulnerable populations that have complex needs and qualify for Medicaid. Highmark Health Options members include individuals and families with low income, expecting mothers, children, and people with disabilities. Members pay nothing to very little for their health coverage. Highmark Health Options currently services Delaware Medicaid: Delaware Healthy Children Program (DHCP) and Diamond State Health Plan Plus LTSS (DSHP Plus LTSS) members.

POLICY POSITION

Prior authorization is not required.

Various testing methods, both computerized and non-computerized, are available to evaluate brain function and manage health following suspected concussion.

Computer-based neuropsychological testing includes any instrument that utilizes a computer, digital tablet, handheld device, or other digital interface instead of a human examiner to administer, score, or interpret tests of brain function and related factors relevant to questions of neurologic health and illness such as concussion.

Computer-based neuropsychological testing for concussion, is considered experimental/investigational, and therefore, non-covered because the safety and/or effectiveness of this service cannot be established by the available published peer-reviewed literature, tests include but are not limited to:

- Immediate Post-Concussion Assessment Tool (ImPACT™); or
- C3 Logix; or
- Headminder's Concussion Resolution Index (CRI); or
- Computerized Cognitive Assessment Tool (CCAT); or
- Concussion Vital Signs.

Baseline computerized neuropsychological testing is considered experimental/investigational for asymptomatic individuals at risk for brain injuries, and therefore, non-covered because the safety and/or effectiveness of this service cannot be established by the available published peer-reviewed literature.

Portable, noninvasive, point of care devices, which record and measure brain function, analyze and display brain electrical activity, such as BrainScope One, are considered experimental/investigational in the evaluation of individuals with suspected concussion, and therefore, noncovered because the safety and/or effectiveness of this service cannot be established by the available published peer-reviewed literature.

Noncomputerized testing to assess cognitive and balance impairment following suspected concussion (e.g., Sport Concussion Assessment Tool [SCAT] and Balance Error Scoring System [BESS]) may be considered medically necessary when administered as an adjunct to clinical examination and diagnostic testing.

Noncomputerized testing for any other indication is not considered medically necessary.

PROFESSIONAL STATEMENTS AND SOCIETAL POSITIONS GUIDELINES

Summary of evidence-based guideline update: Evaluation and management of concussion in sports: Report of the Guideline Development Subcommittee of the American Academy of Neurology, June 11,2013

- OBJECTIVE: To update the 1997 American Academy of Neurology (AAN) practice parameter regarding sports concussion, focusing on 4 questions: 1) What factors increase/decrease concussion risk? 2) What diagnostic tools identify those with concussion and those at increased risk for severe/prolonged early impairments, neurologic catastrophe, or chronic neurobehavioral impairment? 3) What clinical factors identify those at increased risk for severe/prolonged early post-concussion impairments, neurologic catastrophe, recurrent concussions, or chronic neurobehavioral impairment? 4) What interventions enhance recovery, reduce recurrent concussion risk, or diminish long-term sequelae?
- RESULTS: Specific risk factors can increase or decrease concussion risk. Diagnostic tools to help identify individuals with concussion include graded symptom checklists, the Standardized Assessment of Concussion, neuropsychological assessments, and the Balance Error Scoring System. There is insufficient evidence to support conclusions about the use of neuropsychological testing in identifying concussion in preadolescent age groups. Ongoing clinical symptoms, concussion history, and younger age identify those at risk for post-concussion impairments. Risk factors for recurrent concussion include history of multiple

concussions, particularly within 10 days after initial concussion. Risk factors for chronic neurobehavioral impairment include concussion exposure and APOE ε4 genotype. Data are insufficient to show that any intervention enhances recovery or diminishes long-term sequelae post-concussion. Practice recommendations are presented for preparticipation counseling, management of suspected concussion, and management of diagnosed concussion.

2020 AAN Update

- High schools and athletic associations should utilize standardized tools such as the most current version of the Sport Concussion Assessment Tool (SCAT) to aid qualified healthcare providers to screen for the presence of concussion. Athletes diagnosed with concussion should be evaluated and treated by a healthcare provider trained to employ a comprehensive concussion management plan.

Concussion in Sport Group (CISG) -2017

- The 2017 Concussion in Sport Group (CISG) consensus statement is designed to build on the principles outlined in the previous statements and to develop further conceptual understanding of sport-related concussion (SRC) using an expert consensus-based approach. This document is developed for physicians and health care providers who are involved in athlete care, whether at a recreational, elite or professional level. While agreement exists on the principal messages conveyed by this document, the authors acknowledge that the science of SRC is evolving and therefore individual management and return-to-play decisions remain in the realm of clinical judgment.
- This consensus document reflects the current state of knowledge and will need to be modified as new knowledge develops. It provides an overview of issues that may be of importance to health care providers involved in the management of SRC. This paper should be read in conjunction with the systematic reviews and methodology paper that accompany it. First and foremost, this document is intended to guide clinical practice; however, the authors feel that it can also help form the agenda for future research relevant to SRC by identifying knowledge gaps.
- At present, there is no perfect diagnostic test or marker that clinicians can rely on for an immediate diagnosis of SRC in the sporting environment. Sideline evaluation of cognitive function is an essential component in the assessment of this injury. Brief neuropsychological (NP) test batteries that assess attention and memory function have been shown to be practical and effective. Such tests include the SCAT5, which incorporates the Maddocks' questions and the Standardised Assessment of Concussion (SAC). It is worth noting that standard orientation questions (e.g., time, place, person) are unreliable in the sporting situation when compared with memory assessment. It is recognized, however, that abbreviated testing paradigms are designed for rapid SRC screening on the sidelines and are not meant to replace a comprehensive neurological evaluation; nor should they be used as a standalone tool for the ongoing management of SRC.
- The SCAT5 currently represents the most well-established and rigorously developed instrument available for sideline assessment. There is published support for using the SCAT and Child SCAT in the evaluation of SRC. The SCAT is useful immediately after injury in differentiating concussed from non-concussed athletes, but its utility appears to decrease significantly 3–5 days after injury. The symptom checklist, however, does demonstrate clinical utility in tracking recovery. Baseline testing may be useful but is not necessary for interpreting post-injury scores. If used, clinicians must strive to replicate baseline testing conditions. Additional domains that may add to the clinical utility of the SCAT tool include clinical reaction time, gait/balance assessment, video-observable signs and oculomotor screening.

- Baseline or pre-season NP testing was considered by the panel and was not felt to be required as a mandatory aspect of every assessment; however, it may be helpful or add useful information to the overall interpretation of these tests. It also provides an additional educative opportunity for the healthcare provider to discuss the significance of this injury with the athlete.
- Post-injury NP testing is not required for all athletes. However, when this is considered necessary, the assessment should optimally be performed by a trained and accredited neuropsychologist. Although neuropsychologists are in the best position to interpret NP tests by virtue of their background and training, the ultimate return-to-play decision should remain a medical one in which a multidisciplinary approach, when possible, has been taken. In the absence of NP and other testing, a more conservative return-to-play approach may be appropriate.

NONCOVERED SERVICES

Experimental/investigational (E/I) services are not covered regardless of place of service.

Non-computerized testing is typically an outpatient procedure which is only eligible for coverage as an inpatient procedure in special circumstances, including, but not limited to, the presence of a co-morbid condition that would require monitoring in a more controlled environment such as the inpatient setting.

PROCEDURE CODES

CPT code	Description
96116	Neurobehavioral status exam (clinical assessment of thinking, reasoning, and judgement, e.g., acquired knowledge, attention, language, memory, planning, and problem solving, and visual spatial abilities), per hour of the psychologist's or physician's time, both face-to-face time with the patient and time interpreting test results and preparing the report.
96130	Psychological testing evaluation services by physician or other qualified health care professional, including integration of patient data, interpretation of standardized test results and clinical data, clinical decision making, treatment planning and report, and interactive feedback to the patient family member(s) or caregiver(s) when performed; first hour.
96131	Psychological testing evaluation services by physician or other qualified health care professional, including integration of patient data, interpretation of standardized test results and clinical data, clinical decision making, treatment planning and report, and interactive feedback to the patient family member(s) or caregiver(s) when performed; each additional hour (list separately in addition to code for primary procedure).
96132	Neuropsychological testing evaluation services by physician or other qualified health care professional, including integration of patient data, interpretation of standardized Test results and clinical data, clinical decision making, treatment planning and report, and interactive feedback to the patient, family member(s) or caregiver(s), when performed; first hour.
96133	Neuropsychological testing evaluation services by physician or other qualified health care professional, including integration Of patient data, interpretation of standardized test results and clinical data, clinical decision making, treatment planning and report, and interactive feedback to the patient, family member(s) or caregiver(s), when performed; each additional hour (List separately in addition to code for primary procedure).
96136	Psychological or neuropsychological test administration and scoring by physician or other qualified health care professionals, two or more tests, any method; first 30 minutes.

96137	Psychological or neuropsychological test administration and scoring by physician or other qualified health care professionals, two or more tests, any method; each Additional 30 minutes (list separately in addition to code for primary procedure).
96146	Psychological or neuropsychological test administration, with single automated, standardized instrument via electronic platform, with automated result only.

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POLICY UPDATE HISTORY

06/22/2022	Approved in Medical Policy Committee
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