



MASSACHUSETTS

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Medical Policy Gait Analysis

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Policy Number: 236

BCBSA Reference Number: 2.01.03

Related Policies

- Dynamic Posturography, #263

Policy

Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity Medicare HMO BlueSM and Medicare PPO BlueSM Members

Comprehensive gait analysis (including a quantitative assessment of coordinated muscle function in a dedicated laboratory) as an aid in surgical planning in patients with gait disorders associated with cerebral palsy may be considered **MEDICALLY NECESSARY**.

Comprehensive gait analysis for all other applications is **INVESTIGATIONAL**.

Gait analysis that is not comprehensive is **INVESTIGATIONAL**.

Prior Authorization Information

Commercial Members: Managed Care (HMO and POS)

Prior authorization is **NOT** required.

Commercial Members: PPO, and Indemnity

Prior authorization is **NOT** required.

Medicare Members: HMO BlueSM

Prior authorization is **NOT** required.

Medicare Members: PPO BlueSM

Prior authorization is **NOT** required.

CPT Codes / HCPCS Codes / ICD-9 Codes

The following codes are included below for informational purposes. Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an

individual member. A draft of future ICD-10 Coding related to this document, as it might look today, is included below for your reference.

Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

CPT Codes

CPT codes:	Code Description
96000	Comprehensive computer-based motion analysis by video-taping and 3D kinematics
96001	Comprehensive computer-based motion analysis by video-taping and 3D kinematics; with dynamic plantar pressure measurements during walking
96002	Dynamic surface electromyography, during walking or other functional activities, 1-12 muscles
96003	Dynamic surface electromyography, during walking or other functional activities, 1 muscle
96004	Physician review and interpretation of comprehensive computer-based motion analysis, dynamic plantar pressure measurements, dynamic surface electromyography during walking or other functional activities, and dynamic fine wire electromyography, with written report

ICD-9 Diagnosis Codes

ICD-9-CM diagnosis codes:	Code Description
333.71	Athetoid cerebral palsy
343.0	Congenital diplegia
343.1	Congenital hemiplegia
343.2	Congenital quadriplegia
343.3	Congenital monoplegia
343.4	Infantile hemiplegia
343.8	Other specified infantile cerebral palsy
343.9	Infantile cerebral palsy, unspecified
344.89	Other specified paralytic syndrome

ICD-10 Diagnosis Codes

ICD-10-CM Diagnosis codes:	Code Description
G80.3	Athetoid cerebral palsy
G80.0	Spastic quadriplegic cerebral palsy
G80.1	Spastic diplegic cerebral palsy
G80.2	Spastic hemiplegic cerebral palsy
G80.4	Ataxic cerebral palsy
G80.8	Other cerebral palsy
G80.9	Cerebral palsy, unspecified
G83.81	Brown-Séquard syndrome
G83.82	Anterior cord syndrome
G83.83	Posterior cord syndrome
G83.84	Todd's paralysis (postepileptic)
G83.89	Other specified paralytic syndromes

Description

Gait analysis (GA) is the quantitative laboratory assessment of coordinated muscle function, typically requiring a dedicated facility and staff and analysis of a video-recorded observation of a patient walking. Videos can be observed from several visual planes at slow speed, allowing detection of movements not observable at normal speed. Joint angles and various time-distance variables, including step length, stride length, cadence, and cycle time, can be measured.

Electromyography (EMG), assessed during walking, measures timing and intensity of muscle contractions. This calculation allows determination of whether certain muscle activity is normal, out of phase, continuous, or clonic. Kinetics is the term used to describe those factors that cause or control movement. Evaluating kinetics involves the use of principles of physics and biomechanics to explain the kinematic patterns observed and generate analyses that describe the forces generated during normal and abnormal gait analysis.

GA has been proposed as an aid in surgical planning, primarily for cerebral palsy but also for other conditions such as clubfoot. In addition, it is being investigated as a means to plan rehabilitative strategies (i.e., orthotic-prosthetic devices) for ambulatory problems related to cerebral palsy, aging, stroke, spinal cord injury, etc.

An example of a gait analysis device is the Peak Motus Motion Measurement System from Peak Performance Technologies. All gait analysis systems are considered investigational regardless of the commercial name, the manufacturer or FDA approval status except when used for the medically necessary indications that are consistent with the policy statement.

Summary

No randomized controlled trials have been published that compare health outcomes in patients managed with and without gait analysis. However, one non-randomized study found that the overall number of surgical procedures and costs do not differ in patients with cerebral palsy who do or do not undergo gait analysis as part of surgical planning. Several studies conducted among patients with cerebral palsy and other conditions suggest that gait analysis recommendations impact treatment decisions, but the impact of these decisions on health outcomes is as yet unknown. Based on input from clinical reviewers, gait analysis, when comprehensive, may be medically necessary for planning prior to surgery in children with gait disorders associated with cerebral palsy. Due to insufficient evidence, gait analysis is considered investigational for all other indications.

Policy History

Date	Action
5/2014	Updated Coding section with ICD10 procedure and diagnosis codes, effective 10/2015.
5/2014	New references added from BCBSA National medical policy.
1/2014	Coding information clarified
4/2013	New references from BCBSA National medical policy.
11/2011- 4/2012	Medical policy ICD 10 remediation: Formatting, editing and coding updates. No changes to policy statements.
6/2011	Reviewed - Medical Policy Group – Orthopedics, Rehabilitation, and Rheumatology. No changes to policy statements.
4/2011	BCBSA National medical policy review. No changes to policy statements.
11/1/2010	New policy, effective 11/01/2010, describing covered and non-covered indications.
11/2010	BCBSA National medical policy review. Changes to policy statements.
10/2007	BCBSA National medical policy review. No changes to policy statements.

Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information:

[Medical Policy Terms of Use](#)
[Managed Care Guidelines](#)
[Indemnity/PPO Guidelines](#)
[Clinical Exception Process](#)
[Medical Technology Assessment Guidelines](#)

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