Medical Policy:

Ocular Photoscreening

POLICY NUMBER	LAST REVIEW
MG.MM.ME.76aC4	April 12, 2024

Applicable to: EmblemHealth/ConnectiCare Commercial and EmblemHealth Medicaid Plans

Guideline

Instrument-based ocular screening using photoscreening is covered as medically necessary for vision screening for the following:

- As a preventive screening instrument for children 1–3 years of age (ends on 4th birthday)
- Individuals 4 years of age and older who are developmentally delayed and are unable or unwilling to cooperate with routine visual acuity screening

Limitations/Exclusions

Instrument-based ocular screening using photoscreening is unproven and not medically necessary for all other patient populations including children younger than 1 year of age. More age-appropriate screening methods are available for these populations.

Retinal birefringence scanning for the detection of eye misalignment or strabismus (CPT 0469T) is not considered medically necessary, as its effectiveness has not been established.

Clinical Evidence

Ocular photoscreening has been investigated as an alternative screening method to detect risk factors for amblyopia, which include strabismus, high refractive errors, anisometropia, and media opacities. Many children permanently lose vision each year as a result of these treatable ocular disease processes. Early diagnosis and treatment of these conditions has been shown to yield better visual outcomes.

The U.S. Preventive Services Task Force (USPSTF, 2017) recommended vision screening for amblyopia and its risk factors in children aged 3 to 5 years. Evidence was insufficient to assess the benefits and harms of vision screening in children younger than 3 years. Various screening tests are used in primary care to identify visual impairment among children, including visual acuity tests, stereoacuity tests, the cover-uncover test, and the Hirschberg light reflex test (for ocular alignment/strabismus). Photoscreeners (instruments that detect amblyogenic risk factors and refractive errors) may also be used.

Infants and young preverbal children are difficult to screen because they are unable to provide subjective responses to visual acuity testing and do not easily cooperate with testing of ocular alignment or stereoacuity (AAP, 2002). For similar reasons, it also is difficult to screen certain older children, such as those who are nonverbal or have developmental delays.

Ocular photoscreening has been used to screen for amblyogenic factors, such as strabismus, media opacities, and significant refractive errors, in children (AAP, 2002). An advantage of ocular photoscreening over standard methods of testing visual acuity, ocular alignment and stereoacuity is that photoscreening requires little cooperation from the child, other than having to fixate on the appropriate target long enough for photoscreening. Thus, photoscreening has the potential to improve vision screening rates in preverbal children and those with developmental delays who are the most difficult to screen. Many of the children that are most difficult to screen using conventional methods are also at highest risk of amblyopia (e.g., premature infants, children with developmental delays).

In a retrospective study, Longmuir et al. (2013) reported their experience with vision screening in children and compared the results of photoscreening in children younger than 3 years with those of children of preschool age and older. During the 11 years of the study, 210,695 photoscreens on children were performed at 13,750 sites. In the 3 years old. According to the authors, these results confirm that early screening, before amblyopia is more pronounced, can reliably detect amblyogenic risk factors in children younger than 3 years of age, and they recommend initiation of photoscreening in children aged 1 year and older.

In a cross-sectional study, Longmuir et al. (2010) reported on a cohort of preschool children screened by a photoscreening program (using MTI PhotoScreener) over a 9-year period from a single, statewide vision screening effort. Children who failed the photoscreening were referred to local eye care professionals who performed a comprehensive eye evaluation. Over the 9 years of the continuously operating program, 147,809 children underwent photoscreens to detect amblyopic risk factors at 9746 sites. Because of abnormal photoscreen results, 6247 children (4.2%) were referred. The overall positive predictive value (PPV) of the MTI PhotoScreener was 94.2%.

Professional Societies

American Academy of Ophthalmology (AAO)

The American Academy of Ophthalmology (AAO) Preferred Practice Patterns for Pediatric Eye Evaluations (2017) state that vision screening should be performed at an early age and at regular intervals throughout childhood. The elements of vision screening vary depending on the age and level of cooperation of the child. Subjective visual acuity testing is preferred to instrument-based screening in children who are able to participate reliably. Instrument-based screening is useful for some young children and those with developmental delays. Instrument-based screening techniques, such as photoscreening and autorefraction, are useful for assessing amblyopia and reduced-vision risk factors for children ages 1 to 5 years, as this is a critical time for visual development. Instrument-

based screening can occur for children at age 6 years and older when children cannot participate in optotype-based screening.

American Academy of Ophthalmology/American Association for Pediatric Ophthalmology and Strabismus / American Association of Certified Orthoptists

The American Academy of Ophthalmology, the American Association for Pediatric Ophthalmology and Strabismus, and the American Association of Certified Orthoptists coauthored a policy statement regarding the use of instrument-based screening devices. These devices are available commercially and have had extensive validation, both in field studies as well as in the pediatrician's offices. Screening instruments detect amblyopia, high refractive error, and strabismus, which are the most common conditions producing visual impairment in children. If available, they can be used at any age but have better success after 18 months of age. Instrument-based screening can be repeated at each annual preventive medicine encounter through 5 years of age or until visual acuity can be assessed reliably using optotypes. Using these techniques in children younger than 6 years can enhance detection of conditions that may lead to amblyopia and/or strabismus compared with traditional methods of assessment (Donahue and Baker, 2016).

Procedure Codes

99174	Instrument-based ocular screening (e.g., photoscreening, automated-refraction), bilateral; with remote analysis and report
99177	Instrument-based ocular screening (e.g., photoscreening, automated-refraction), bilateral; with on- site analysis

ICD-10 Diagnoses

E78.71	Barth syndrome
E78.72	Smith-Lemli-Opitz syndrome
F07.9	Unspecified personality and behavioral disorder due to known physiological condition
F09	Unspecified mental disorder due to known physiological condition
F45.8	Other somatoform disorders
F70	Mild intellectual disabilities
F71	Moderate intellectual disabilities
F72	Severe intellectual disabilities
F73	Profound intellectual disabilities
F78	Other intellectual disabilities
F79	Unspecified intellectual disabilities
F80.4	Speech and language development delay due to hearing loss
F82	Specific developmental disorder of motor function
F84.0	Autistic disorder
F84.3	Other childhood disintegrative disorder
F84.5	Asperger's syndrome

F84.8	Other pervasive developmental disorders
F84.9	Pervasive developmental disorder, unspecified
F90.0	Attention-deficit hyperactivity disorder, predominantly inattentive type
F90.1	Attention-deficit hyperactivity disorder, predominantly hyperactive type
F90.2	Attention-deficit hyperactivity disorder, combined type
F90.8	Attention-deficit hyperactivity disorder, other type
F90.9	Attention-deficit hyperactivity disorder, unspecified type
G12.0	Infantile spinal muscular atrophy, type I [Werdnig-Hoffman]
G20	Parkinson's disease
G21.4	Vascular parkinsonism
G23.0	Hallervorden-Spatz disease
G23.1	Progressive supranuclear ophthalmoplegia [Steele-Richardson-Olszewski]
G23.2	Striatonigral degeneration
G23.8	Other specified degenerative diseases of basal ganglia
G23.9	Degenerative disease of basal ganglia, unspecified
G37.0	Diffuse sclerosis of central nervous system
G37.5	Concentric sclerosis [Balo] of central nervous system
G40.001	Localization-related (focal) (partial) idiopathic epilepsy and epileptic syndromes with seizures of localized onset, not intractable, with status epilepticus
G40.009	Localization-related (focal) (partial) idiopathic epilepsy and epileptic syndromes with seizures of localized onset, not intractable, without status epilepticus
G40.011	Localization-related (focal) (partial) idiopathic epilepsy and epileptic syndromes with seizures of localized onset, intractable, with status epilepticus
G40.019	Localization-related (focal) (partial) idiopathic epilepsy and epileptic syndromes with seizures of localized onset, intractable, without status epilepticus
G40.101	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with simple partial seizures, not intractable, with status epilepticus
G40.109	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with simple partial seizures, not intractable, without status epilepticus
G40.111	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with simple partial seizures, intractable, with status epilepticus
G40.119	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with simple partial seizures, intractable, without status epilepticus
G40.201	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with complex partial seizures, not intractable, with status epilepticus
G40.209	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with complex partial seizures, not intractable, without status epilepticus
G40.211	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with complex partial seizures, intractable, with status epilepticus
G40.219	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with complex partial seizures,

	intractable, without status epilepticus
G40.301	Generalized idiopathic epilepsy and epileptic syndromes, not intractable, with status epilepticus
G40.309	Generalized idiopathic epilepsy and epileptic syndromes, not intractable, without status epilepticus
G40.311	Generalized idiopathic epilepsy and epileptic syndromes, intractable, with status epilepticus
G40.319	Generalized idiopathic epilepsy and epileptic syndromes, intractable, without status epilepticus
G40.401	Other generalized epilepsy and epileptic syndromes, not intractable, with status epilepticus
G40.409	Other generalized epilepsy and epileptic syndromes, not intractable, without status epilepticus
G40.411	Other generalized epilepsy and epileptic syndromes, intractable, with status epilepticus
G40.419	Other generalized epilepsy and epileptic syndromes, intractable, without status epilepticus
G40.501	Epileptic seizures related to external causes, not intractable, with status epilepticus
G40.509	Epileptic seizures related to external causes, not intractable, without status epilepticus
G40.801	Other epilepsy, not intractable, with status epilepticus
G40.802	Other epilepsy, not intractable, without status epilepticus
G40.803	Other epilepsy, intractable, with status epilepticus
G40.804	Other epilepsy, intractable, without status epilepticus
G40.811	Lennox-Gastaut syndrome, not intractable, with status epilepticus
G40.812	Lennox-Gastaut syndrome, not intractable, without status epilepticus
G40.813	Lennox-Gastaut syndrome, intractable, with status epilepticus
G40.814	Lennox-Gastaut syndrome, intractable, without status epilepticus
G40.821	Epileptic spasms, not intractable, with status epilepticus
G40.822	Epileptic spasms, not intractable, without status epilepticus
G40.823	Epileptic spasms, intractable, with status epilepticus
G40.824	Epileptic spasms, intractable, without status epilepticus
G40.833	Dravet syndrome, intractable with status epilepticus
G40.834	Dravet syndrome, intractable, without status epilepticus
G40.89	Other seizures
G40.901	Epilepsy, unspecified, not intractable, with status epilepticus
G40.909	Epilepsy, unspecified, not intractable, without status epilepticus
G40.911	Epilepsy, unspecified, intractable, with status epilepticus
G40.919	Epilepsy, unspecified, intractable, without status epilepticus
G40.A01	Absence epileptic syndrome, not intractable, with status epilepticus
G40.A09	Absence epileptic syndrome, not intractable, without status epilepticus
G40.A11	Absence epileptic syndrome, intractable, with status epilepticus
G40.A19	Absence epileptic syndrome, intractable, without status epilepticus
G46.3	Brain stem stroke syndrome
G46.4	Cerebellar stroke syndrome

G46.5	Pure motor lacunar syndrome
G46.6	Pure sensory lacunar syndrome
G46.7	Other lacunar syndromes
G46.8	Other vascular syndromes of brain in cerebrovascular diseases
G52.7	Disorders of multiple cranial nerves
G60.8	Other hereditary and idiopathic neuropathies
G71.20	Congenital myopathy, unspecified
G71.21	Nemaline myopathy
G71.220	X-linked myotubular myopathy
G71.228	Other centronuclear myopathy
G71.29	Other congenital myopathy
G72.3	Periodic paralysis
G80.0	Spastic quadriplegic cerebral palsy
G80.1	Spastic diplegic cerebral palsy
G80.2	Spastic hemiplegic cerebral palsy
G80.3	Athetoid cerebral palsy
G80.4	Ataxic cerebral palsy
G80.8	Other cerebral palsy
G80.9	Cerebral palsy, unspecified
G83.81	Brown-Sequard syndrome
G83.82	Anterior cord syndrome
G83.83	Posterior cord syndrome
G83.84	Todd's paralysis (postepileptic)
G83.89	Other specified paralytic syndromes
G83.9	Paralytic syndrome, unspecified
G90.09	Other idiopathic peripheral autonomic neuropathy
G90.3	Multi-system degeneration of the autonomic nervous system
G93.1	Anoxic brain damage, not elsewhere classified
G97.31	Intraoperative hemorrhage and hematoma of a nervous system organ or structure complicating a nervous system procedure
G97.32	Intraoperative hemorrhage and hematoma of a nervous system organ or structure complicating other procedure
H93.25	Central auditory processing disorder
I67.2	Cerebral atherosclerosis
I67.81	Acute cerebrovascular insufficiency
I67.82	Cerebral ischemia
I67.89	Other cerebrovascular disease

I68.0	Cerebral amyloid angiopathy
I68.8	Other cerebrovascular disorders in diseases classified elsewhere
I69.00	Unspecified sequelae of nontraumatic subarachnoid hemorrhage
I69.010	Attention and concentration deficit following nontraumatic subarachnoid hemorrhage
I69.011	Memory deficit following nontraumatic subarachnoid hemorrhage
I69.012	Visuospatial deficit and spatial neglect following nontraumatic subarachnoid hemorrhage
I69.013	Psychomotor deficit following nontraumatic subarachnoid hemorrhage
I69.014	Frontal lobe and executive function deficit following nontraumatic subarachnoid hemorrhage
I69.015	Cognitive social or emotional deficit following nontraumatic subarachnoid hemorrhage
I69.018	Other symptoms and signs involving cognitive functions following nontraumatic subarachnoid hemorrhage
I69.019	Unspecified symptoms and signs involving cognitive functions following nontraumatic subarachnoid hemorrhage
I69.020	Aphasia following nontraumatic subarachnoid hemorrhage
I69.021	Dysphasia following nontraumatic subarachnoid hemorrhage
I69.023	Fluency disorder following nontraumatic subarachnoid hemorrhage
I69.031	Monoplegia of upper limb following nontraumatic subarachnoid hemorrhage affecting right dominant side
I69.032	Monoplegia of upper limb following nontraumatic subarachnoid hemorrhage affecting left dominant side
I69.033	Monoplegia of upper limb following nontraumatic subarachnoid hemorrhage affecting right non- dominant side
I69.034	Monoplegia of upper limb following nontraumatic subarachnoid hemorrhage affecting left non- dominant side
I69.039	Monoplegia of upper limb following nontraumatic subarachnoid hemorrhage affecting unspecified side
I69.041	Monoplegia of lower limb following nontraumatic subarachnoid hemorrhage affecting right dominant side
I69.042	Monoplegia of lower limb following nontraumatic subarachnoid hemorrhage affecting left dominant side
I69.043	Monoplegia of lower limb following nontraumatic subarachnoid hemorrhage affecting right non- dominant side
I69.044	Monoplegia of lower limb following nontraumatic subarachnoid hemorrhage affecting left non- dominant side
I69.049	Monoplegia of lower limb following nontraumatic subarachnoid hemorrhage affecting unspecified side
I69.051	Hemiplegia and hemiparesis following nontraumatic subarachnoid hemorrhage affecting right dominant side
I69.052	Hemiplegia and hemiparesis following nontraumatic subarachnoid hemorrhage affecting left dominant side
I69.053	Hemiplegia and hemiparesis following nontraumatic subarachnoid hemorrhage affecting right non- dominant side
I69.054	Hemiplegia and hemiparesis following nontraumatic subarachnoid hemorrhage affecting left non- dominant side
I69.059	Hemiplegia and hemiparesis following nontraumatic subarachnoid hemorrhage affecting unspecified side
I69.061	Other paralytic syndrome following nontraumatic subarachnoid hemorrhage affecting right dominant side
I69.062	Other paralytic syndrome following nontraumatic subarachnoid hemorrhage affecting left dominant side
I69.063	Other paralytic syndrome following nontraumatic subarachnoid hemorrhage affecting right non- dominant side
I69.064	Other paralytic syndrome following nontraumatic subarachnoid hemorrhage affecting left non- dominant side
I69.065	Other paralytic syndrome following nontraumatic subarachnoid hemorrhage, bilateral
I69.069	Other paralytic syndrome following nontraumatic subarachnoid hemorrhage affecting unspecified side
I69.090	Apraxia following nontraumatic subarachnoid hemorrhage

I69.091	Dysphagia following nontraumatic subarachnoid hemorrhage
I69.092	Facial weakness following nontraumatic subarachnoid hemorrhage
I69.093	Ataxia following nontraumatic subarachnoid hemorrhage
I69.098	Other sequelae following nontraumatic subarachnoid hemorrhage
I69.10	Unspecified sequelae of nontraumatic intracerebral hemorrhage
I69.110	Attention and concentration deficit following nontraumatic intracerebral hemorrhage
I69.111	Memory deficit following nontraumatic intracerebral hemorrhage
I69.112	Visuospatial deficit and spatial neglect following nontraumatic intracerebral hemorrhage
I69.113	Psychomotor deficit following nontraumatic intracerebral hemorrhage
I69.114	Frontal lobe and executive function deficit following nontraumatic intracerebral hemorrhage
I69.115	Cognitive social or emotional deficit following nontraumatic intracerebral hemorrhage
I69.118	Other symptoms and signs involving cognitive functions following nontraumatic intracerebral hemorrhage
I69.119	Unspecified symptoms and signs involving cognitive functions following nontraumatic intracerebral hemorrhage
I69.120	Aphasia following nontraumatic intracerebral hemorrhage
I69.121	Dysphasia following nontraumatic intracerebral hemorrhage
I69.123	Fluency disorder following nontraumatic intracerebral hemorrhage
I69.131	Monoplegia of upper limb following nontraumatic intracerebral hemorrhage affecting right dominant side
I69.132	Monoplegia of upper limb following nontraumatic intracerebral hemorrhage affecting left dominant side
I69.133	Monoplegia of upper limb following nontraumatic intracerebral hemorrhage affecting right non- dominant side
I69.134	Monoplegia of upper limb following nontraumatic intracerebral hemorrhage affecting left non- dominant side
I69.139	Monoplegia of upper limb following nontraumatic intracerebral hemorrhage affecting unspecified side
I69.141	Monoplegia of lower limb following nontraumatic intracerebral hemorrhage affecting right dominant side
I69.142	Monoplegia of lower limb following nontraumatic intracerebral hemorrhage affecting left dominant side
I69.143	Monoplegia of lower limb following nontraumatic intracerebral hemorrhage affecting right non- dominant side
I69.144	Monoplegia of lower limb following nontraumatic intracerebral hemorrhage affecting left non-dominant side
I69.149	Monoplegia of lower limb following nontraumatic intracerebral hemorrhage affecting unspecified side
I69.151	Hemiplegia and hemiparesis following nontraumatic intracerebral hemorrhage affecting right dominant side
I69.152	Hemiplegia and hemiparesis following nontraumatic intracerebral hemorrhage affecting left dominant side
I69.153	Hemiplegia and hemiparesis following nontraumatic intracerebral hemorrhage affecting right non- dominant side
I69.154	Hemiplegia and hemiparesis following nontraumatic intracerebral hemorrhage affecting left non- dominant side
I69.159	Hemiplegia and hemiparesis following nontraumatic intracerebral hemorrhage affecting unspecified side
I69.161	Other paralytic syndrome following nontraumatic intracerebral hemorrhage affecting right dominant side
I69.162	Other paralytic syndrome following nontraumatic intracerebral hemorrhage affecting left dominant side
I69.163	Other paralytic syndrome following nontraumatic intracerebral hemorrhage affecting right non- dominant side
I69.164	Other paralytic syndrome following nontraumatic intracerebral hemorrhage affecting left non- dominant side
I69.165	Other paralytic syndrome following nontraumatic intracerebral hemorrhage, bilateral

I69.169	Other paralytic syndrome following nontraumatic intracerebral hemorrhage affecting unspecified side
I69.190	Apraxia following nontraumatic intracerebral hemorrhage
I69.191	Dysphagia following nontraumatic intracerebral hemorrhage
I69.192	Facial weakness following nontraumatic intracerebral hemorrhage
I69.193	Ataxia following nontraumatic intracerebral hemorrhage
I69.198	Other sequelae of nontraumatic intracerebral hemorrhage
I69.20	Unspecified sequelae of other nontraumatic intracranial hemorrhage
I69.210	Attention and concentration deficit following other nontraumatic intracranial hemorrhage
I69.211	Memory deficit following other nontraumatic intracranial hemorrhage
I69.212	Visuospatial deficit and spatial neglect following other nontraumatic intracranial hemorrhage
I69.213	Psychomotor deficit following other nontraumatic intracranial hemorrhage
I69.214	Frontal lobe and executive function deficit following other nontraumatic intracranial hemorrhage
I69.215	Cognitive social or emotional deficit following other nontraumatic intracranial hemorrhage
I69.218	Other symptoms and signs involving cognitive functions following other nontraumatic intracranial hemorrhage
I69.219	Unspecified symptoms and signs involving cognitive functions following other nontraumatic intracranial hemorrhage
I69.220	Aphasia following other nontraumatic intracranial hemorrhage
I69.221	Dysphasia following other nontraumatic intracranial hemorrhage
I69.223	Fluency disorder following other nontraumatic intracranial hemorrhage
I69.231	Monoplegia of upper limb following other nontraumatic intracranial hemorrhage affecting right dominant side
I69.232	Monoplegia of upper limb following other nontraumatic intracranial hemorrhage affecting left dominant side
I69.233	Monoplegia of upper limb following other nontraumatic intracranial hemorrhage affecting right non- dominant side
I69.234	Monoplegia of upper limb following other nontraumatic intracranial hemorrhage affecting left non- dominant side
I69.239	Monoplegia of upper limb following other nontraumatic intracranial hemorrhage affecting unspecified side
I69.241	Monoplegia of lower limb following other nontraumatic intracranial hemorrhage affecting right dominant side
I69.242	Monoplegia of lower limb following other nontraumatic intracranial hemorrhage affecting left dominant side
I69.243	Monoplegia of lower limb following other nontraumatic intracranial hemorrhage affecting right non- dominant side
I69.244	Monoplegia of lower limb following other nontraumatic intracranial hemorrhage affecting left non- dominant side
I69.249	Monoplegia of lower limb following other nontraumatic intracranial hemorrhage affecting unspecified side
I69.251	Hemiplegia and hemiparesis following other nontraumatic intracranial hemorrhage affecting right dominant side
I69.252	Hemiplegia and hemiparesis following other nontraumatic intracranial hemorrhage affecting left dominant side
I69.253	Hemiplegia and hemiparesis following other nontraumatic intracranial hemorrhage affecting right non- dominant side
I69.254	Hemiplegia and hemiparesis following other nontraumatic intracranial hemorrhage affecting left non- dominant side
I69.259	Hemiplegia and hemiparesis following other nontraumatic intracranial hemorrhage affecting unspecified side
I69.261	Other paralytic syndrome following other nontraumatic intracranial hemorrhage affecting right dominant side
I69.262	Other paralytic syndrome following other nontraumatic intracranial hemorrhage affecting left dominant side
I69.263	Other paralytic syndrome following other nontraumatic intracranial hemorrhage affecting right non- dominant side

I69.264	Other paralytic syndrome following other nontraumatic intracranial hemorrhage affecting left non- dominant side
I69.265	Other paralytic syndrome following other nontraumatic intracranial hemorrhage, bilateral
I69.269	Other paralytic syndrome following other nontraumatic intracranial hemorrhage affecting unspecified side
I69.290	Apraxia following other nontraumatic intracranial hemorrhage
I69.291	Dysphagia following other nontraumatic intracranial hemorrhage
I69.292	Facial weakness following other nontraumatic intracranial hemorrhage
I69.293	Ataxia following other nontraumatic intracranial hemorrhage
I69.298	Other sequelae of other nontraumatic intracranial hemorrhage
I69.30	Unspecified sequelae of cerebral infarction
I69.310	Attention and concentration deficit following cerebral infarction
I69.311	Memory deficit following cerebral infarction
I69.312	Visuospatial deficit and spatial neglect following cerebral infarction
I69.313	Psychomotor deficit following cerebral infarction
I69.314	Frontal lobe and executive function deficit following cerebral infarction
I69.315	Cognitive social or emotional deficit following cerebral infarction
I69.318	Other symptoms and signs involving cognitive functions following cerebral infarction
I69.319	Unspecified symptoms and signs involving cognitive functions following cerebral infarction
I69.320	Aphasia following cerebral infarction
I69.321	Dysphasia following cerebral infarction
I69.323	Fluency disorder following cerebral infarction
I69.331	Monoplegia of upper limb following cerebral infarction affecting right dominant side
I69.332	Monoplegia of upper limb following cerebral infarction affecting left dominant side
I69.333	Monoplegia of upper limb following cerebral infarction affecting right non-dominant side
I69.334	Monoplegia of upper limb following cerebral infarction affecting left non-dominant side
I69.339	Monoplegia of upper limb following cerebral infarction affecting unspecified side
I69.341	Monoplegia of lower limb following cerebral infarction affecting right dominant side
I69.342	Monoplegia of lower limb following cerebral infarction affecting left dominant side
I69.343	Monoplegia of lower limb following cerebral infarction affecting right non-dominant side
I69.344	Monoplegia of lower limb following cerebral infarction affecting left non-dominant side
I69.349	Monoplegia of lower limb following cerebral infarction affecting unspecified side
I69.351	Hemiplegia and hemiparesis following cerebral infarction affecting right dominant side
I69.352	Hemiplegia and hemiparesis following cerebral infarction affecting left dominant side
I69.353	Hemiplegia and hemiparesis following cerebral infarction affecting right non-dominant side
I69.354	Hemiplegia and hemiparesis following cerebral infarction affecting left non-dominant side
I69.359	Hemiplegia and hemiparesis following cerebral infarction affecting unspecified side
I69.361	Other paralytic syndrome following cerebral infarction affecting right dominant side

I69.362	Other paralytic syndrome following cerebral infarction affecting left dominant side
I69.363	Other paralytic syndrome following cerebral infarction affecting right non-dominant side
I69.364	Other paralytic syndrome following cerebral infarction affecting left non-dominant side
I69.365	Other paralytic syndrome following cerebral infarction, bilateral
I69.369	Other paralytic syndrome following cerebral infarction affecting unspecified side
I69.390	Apraxia following cerebral infarction
I69.391	Dysphagia following cerebral infarction
I69.392	Facial weakness following cerebral infarction
I69.393	Ataxia following cerebral infarction
I69.398	Other sequelae of cerebral infarction
I69.80	Unspecified sequelae of other cerebrovascular disease
I69.810	Attention and concentration deficit following other cerebrovascular disease
I69.811	Memory deficit following other cerebrovascular disease
I69.812	Visuospatial deficit and spatial neglect following other cerebrovascular disease
I69.813	Psychomotor deficit following other cerebrovascular disease
I69.814	Frontal lobe and executive function deficit following other cerebrovascular disease
I69.815	Cognitive social or emotional deficit following other cerebrovascular disease
I69.818	Other symptoms and signs involving cognitive functions following other cerebrovascular disease
I69.819	Unspecified symptoms and signs involving cognitive functions following other cerebrovascular disease
I69.820	Aphasia following other cerebrovascular disease
I69.821	Dysphasia following other cerebrovascular disease
I69.823	Fluency disorder following other cerebrovascular disease
I69.831	Monoplegia of upper limb following other cerebrovascular disease affecting right dominant side
I69.832	Monoplegia of upper limb following other cerebrovascular disease affecting left dominant side
I69.833	Monoplegia of upper limb following other cerebrovascular disease affecting right non-dominant side
I69.834	Monoplegia of upper limb following other cerebrovascular disease affecting left non-dominant side
I69.839	Monoplegia of upper limb following other cerebrovascular disease affecting unspecified side
I69.841	Monoplegia of lower limb following other cerebrovascular disease affecting right dominant side
I69.842	Monoplegia of lower limb following other cerebrovascular disease affecting left dominant side
I69.843	Monoplegia of lower limb following other cerebrovascular disease affecting right non-dominant side
I69.844	Monoplegia of lower limb following other cerebrovascular disease affecting left non-dominant side
I69.849	Monoplegia of lower limb following other cerebrovascular disease affecting unspecified side
I69.851	Hemiplegia and hemiparesis following other cerebrovascular disease affecting right dominant side
I69.852	Hemiplegia and hemiparesis following other cerebrovascular disease affecting left dominant side
I69.853	Hemiplegia and hemiparesis following other cerebrovascular disease affecting right non-dominant side
I69.854	Hemiplegia and hemiparesis following other cerebrovascular disease affecting left non-dominant side

I69.859	Hemiplegia and hemiparesis following other cerebrovascular disease affecting unspecified side
I69.861	Other paralytic syndrome following other cerebrovascular disease affecting right dominant side
I69.862	Other paralytic syndrome following other cerebrovascular disease affecting left dominant side
I69.863	Other paralytic syndrome following other cerebrovascular disease affecting right non-dominant side
I69.864	Other paralytic syndrome following other cerebrovascular disease affecting left non-dominant side
I69.865	Other paralytic syndrome following other cerebrovascular disease, bilateral
I69.869	Other paralytic syndrome following other cerebrovascular disease affecting unspecified side
I69.890	Apraxia following other cerebrovascular disease
I69.891	Dysphagia following other cerebrovascular disease
I69.892	Facial weakness following other cerebrovascular disease
I69.893	Ataxia following other cerebrovascular disease
I69.898	Other sequelae of other cerebrovascular disease
I69.90	Unspecified sequelae of unspecified cerebrovascular disease
I69.910	Attention and concentration deficit following unspecified cerebrovascular disease
I69.911	Memory deficit following unspecified cerebrovascular disease
I69.912	Visuospatial deficit and spatial neglect following unspecified cerebrovascular disease
I69.913	Psychomotor deficit following unspecified cerebrovascular disease
I69.914	Frontal lobe and executive function deficit following unspecified cerebrovascular disease
I69.915	Cognitive social or emotional deficit following unspecified cerebrovascular disease
I69.918	Other symptoms and signs involving cognitive functions following unspecified cerebrovascular disease
I69.919	Unspecified symptoms and signs involving cognitive functions following unspecified cerebrovascular disease
I69.920	Aphasia following unspecified cerebrovascular disease
I69.921	Dysphasia following unspecified cerebrovascular disease
I69.923	Fluency disorder following unspecified cerebrovascular disease
I69.931	Monoplegia of upper limb following unspecified cerebrovascular disease affecting right dominant side
I69.932	Monoplegia of upper limb following unspecified cerebrovascular disease affecting left dominant side
I69.933	Monoplegia of upper limb following unspecified cerebrovascular disease affecting right non-dominant side
I69.934	Monoplegia of upper limb following unspecified cerebrovascular disease affecting left non-dominant side
I69.939	Monoplegia of upper limb following unspecified cerebrovascular disease affecting unspecified side
I69.941	Monoplegia of lower limb following unspecified cerebrovascular disease affecting right dominant side
I69.942	Monoplegia of lower limb following unspecified cerebrovascular disease affecting left dominant side
I69.943	Monoplegia of lower limb following unspecified cerebrovascular disease affecting right non-dominant side
I69.944	Monoplegia of lower limb following unspecified cerebrovascular disease affecting left non-dominant side
I69.949	Monoplegia of lower limb following unspecified cerebrovascular disease affecting unspecified side
I69.951	Hemiplegia and hemiparesis following unspecified cerebrovascular disease affecting right dominant side
I69.952	Hemiplegia and hemiparesis following unspecified cerebrovascular disease affecting left dominant side

I69.953	Hemiplegia and hemiparesis following unspecified cerebrovascular disease affecting right non- dominant side
I69.954	Hemiplegia and hemiparesis following unspecified cerebrovascular disease affecting left non-dominant side
I69.959	Hemiplegia and hemiparesis following unspecified cerebrovascular disease affecting unspecified side
I69.961	Other paralytic syndrome following unspecified cerebrovascular disease affecting right dominant side
I69.962	Other paralytic syndrome following unspecified cerebrovascular disease affecting left dominant side
I69.963	Other paralytic syndrome following unspecified cerebrovascular disease affecting right non-dominant side
I69.964	Other paralytic syndrome following unspecified cerebrovascular disease affecting left non-dominant side
I69.965	Other paralytic syndrome following unspecified cerebrovascular disease, bilateral
I69.969	Other paralytic syndrome following unspecified cerebrovascular disease affecting unspecified side
I69.990	Apraxia following unspecified cerebrovascular disease
I69.991	Dysphagia following unspecified cerebrovascular disease
I69.992	Facial weakness following unspecified cerebrovascular disease
I69.993	Ataxia following unspecified cerebrovascular disease
I97.810	Intraoperative cerebrovascular infarction during cardiac surgery
I97.811	Intraoperative cerebrovascular infarction during other surgery
I97.820	Postprocedural cerebrovascular infarction following cardiac surgery
I97.821	Postprocedural cerebrovascular infarction following other surgery
Q05.0	Cervical spina bifida with hydrocephalus
Q05.1	Thoracic spina bifida with hydrocephalus
Q05.2	Lumbar spina bifida with hydrocephalus
Q05.3	Sacral spina bifida with hydrocephalus
Q05.4	Unspecified spina bifida with hydrocephalus
Q05.5	Cervical spina bifida without hydrocephalus
Q05.6	Thoracic spina bifida without hydrocephalus
Q05.7	Lumbar spina bifida without hydrocephalus
Q05.8	Sacral spina bifida without hydrocephalus
Q05.9	Spina bifida, unspecified
Q07.00	Arnold-Chiari syndrome without spina bifida or hydrocephalus
Q07.01	Arnold-Chiari syndrome with spina bifida
Q07.02	Arnold-Chiari syndrome with hydrocephalus
Q07.03	Arnold-Chiari syndrome with spina bifida and hydrocephalus
Q14.2	Congenital malformation of optic disc
Q87.81	Alport syndrome
Q90.0	Trisomy 21, nonmosaicism (meiotic nondisjunction)
Q90.1	Trisomy 21, mosaicism (mitotic nondisjunction)
Q90.2	Trisomy 21, translocation

Q90.9	Down syndrome, unspecified
Q91.0	Trisomy 18, nonmosaicism (meiotic nondisjunction)
Q91.1	Trisomy 18, mosaicism (mitotic nondisjunction)
Q91.2	Trisomy 18, translocation
Q91.3	Trisomy 18, unspecified
Q91.4	Trisomy 13, nonmosaicism (meiotic nondisjunction)
Q91.5	Trisomy 13, mosaicism (mitotic nondisjunction)
Q91.6	Trisomy 13, translocation
Q91.7	Trisomy 13, unspecified
Q92.0	Whole chromosome trisomy, nonmosaicism (meiotic nondisjunction)
Q92.1	Whole chromosome trisomy, mosaicism (mitotic nondisjunction)
Q92.2	Partial trisomy
Q92.5	Duplications with other complex rearrangements
Q92.7	Triploidy and polyploidy
Q92.8	Other specified trisomies and partial trisomies of autosomes
Q92.9	Trisomy and partial trisomy of autosomes, unspecified
Q93.0	Whole chromosome monosomy, nonmosaicism (meiotic nondisjunction)
Q93.1	Whole chromosome monosomy, mosaicism (mitotic nondisjunction)
Q93.2	Chromosome replaced with ring, dicentric or isochromosome
Q93.3	Deletion of short arm of chromosome 4
Q93.4	Deletion of short arm of chromosome 5
Q93.5	Other deletions of part of a chromosome
Q93.7	Deletions with other complex rearrangements
Q93.81	Velo-cardio-facial syndrome
Q93.88	Other microdeletions
Q93.89	Other deletions from the autosomes
Q93.9	Deletion from autosomes, unspecified
Q95.2	Balanced autosomal rearrangement in abnormal individual
Q95.3	Balanced sex/autosomal rearrangement in abnormal individual
Q95.5	Individual with autosomal fragile site
Q95.8	Other balanced rearrangements and structural markers
Q95.9	Balanced rearrangement and structural marker, unspecified
Q96.0	Karyotype 45, X
Q96.1	Karyotype 46, X iso (Xq)
Q96.2	Karyotype 46, X with abnormal sex chromosome, except iso (Xq)
Q96.3	Mosaicism, 45, X/46, XX or XY

Q96.4	Mosaicism, 45, X/other cell line(s) with abnormal sex chromosome
Q96.8	Other variants of Turner's syndrome
Q96.9	Turner's syndrome, unspecified
Q98.0	Klinefelter syndrome karyotype 47, XXY
Q98.1	Klinefelter syndrome, male with more than two X chromosomes
Q98.3	Other male with 46, XX karyotype
Q98.4	Klinefelter syndrome, unspecified
Q99.2	Fragile X chromosome
R29.5	Transient paralysis
R41.840	Attention and concentration deficit
R62.0	Delayed milestone in childhood
Z01.00	Encounter for examination of eyes and vision without abnormal findings
Z01.01	Encounter for examination of eyes and vision with abnormal findings

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9. Specialty matched clinical peer review.

Revision History

Company(ies)	DATE	REVISION
EmblemHealth ConnectiCare	May 8, 2020	Added clarification that retinal birefringence scanning (CPT code 0469T) is not considered medically necessary.