Clinical Policy: Dark Adaption and Color Vision Examinations

Reference Number: OC.UM.CP.0023 Coding Implications
Last Review Date: 11/2022 Revision Log

See Important Reminder at the end of this policy for important regulatory and legal information.

Description

This policy describes the medical necessity requirements for dark adaptation and color vision examinations.

Policy/Criteria

I. It is the policy of health plans affiliated with Envolve Vision, Inc.® (Envolve) that dark adaption and color vision examination is **medically necessary** for the following indications:

A. Color vision examination (e.g. anomaloscope or equivalent) (CPT 92283), one of the following conditions must be met:
   1. Nystagmus
   2. Suspected achromatopsia
   3. Patients that display/complain of symptoms of color vision deficiency and are undergoing hydroxychloroquine (Plaquenil) therapy. Repeat testing is indicated in five years.

B. Dark adaptation examination (CPT 92284), one of the following conditions must be met:
   1. Confirm diagnosis of night blindness
   2. Pigmentary retinal dystrophies
   3. Primary angle-closure glaucoma

Background

Dark Adaptation:
When light enters the eye, it ultimately reaches the photoreceptors of the retina, the rods and cones. Rods handle vision in low light conditions and cones handle color vision and detail. Dark adaptation exam tests the function of the photoreceptors. The eye to be tested is exposed to a bright light and the room is darkened. At 30-second intervals, the light is increased and the effect of the stimulus on the retina is measured by an adaptometer machine.

Color Vision:
Color blindness occurs when there is a problem with the color-sensing granules (pigments) in certain nerve cells of the eye. These cells are called cones. They are found in the retina, the light-sensitive layer of tissue that lines the back of the eye. If just one pigment is missing, a person may have trouble telling the difference between red and green. This is the most common type of color blindness. If a different pigment is missing, a person may have trouble seeing blue-yellow colors. People with blue-yellow color blindness usually have problems identifying reds and greens, too. The most severe form of color blindness is achromatopsia. A person with this rare condition cannot see any color, so they see everything in shades of gray. Achromatopsia is often associated with lazy eye, nystagmus (small, jerky eye movements), severe light sensitivity, and extremely poor vision.

Most color blindness is due to a genetic problem. About 10% of men have some form of color blindness compared to 1% of women. The drug hydroxychloroquine (Plaquenil) can also cause color blindness. It

is used to treat rheumatoid arthritis, among other conditions. Color vision testing is an extended color vision examination involving an anomaloscope or equivalent, which is an instrument used to diagnose abnormalities of color perception in which one-half of a field of color is matched by mixing two other colors.

Coding Implications

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CPT® Codes	Description
92283	Color Vision Examination
92284	Dark Adaption Examination

ICD-10-CM Diagnosis Codes that Support Coverage Criteria

Color Vision Examination

ICD-10-CM Code	ICD-10 Code Description
H53.53	Deuteranomaly
H53.55	Tritanomaly
H53.51	Achromatopsia
H53.52	Acquired color vision deficiency
H53.54	Protanomaly
H55.01	Congenital nystagmus
H55.02	Latent nystagmus
H55.03	Visual deprivation nystagmus
H55.09	Other forms of nystagmus
H55.04	Dissociated nystagmus
Z79.899	Other long term current drug therapy

Dark Adaption Examination

ICD-10-CM Code	ICD-10 Code Description
E50.5	Vitamin A deficiency with night blindness
H35.52	Pigmentary retinal dystrophy
H35.53	Other dystrophies primarily involving the sensory retina
H35.54	Dystrophies primarily involving the retinal pigment epithelium
H40.211	Acute angle-closure glaucoma right eye

ICD-10-CM Code	ICD-10 Code Description
H40.212	Acute angle-closure glaucoma left eye
H40.213	Acute angle-closure glaucoma bilateral
H53.61	Abnormal dark adaptation curve
H53.62	Acquired night blindness
H53.63	Congenital night blindness

Reviews, Revisions, and Approvals	Date	Approval Date
Annual Review	12/2019	12/2019
Converted to new template	05/2020	06/2020
Annual Review	12/2020	12/2020
Annual Review	12/2021	12/2021
Annual Review	11/2022	11/2022

References

1. J Nathans, TP Piantanida, RL Eddy, TB Shows, DS Hogness, Molecular genetics of inherited variation in human color vision, Science 11 Apr 1986: Vol. 232, Issue 4747, pp. 203-210
2. Frank D. Carroll, Charles Haig, Congenital Stationary Night Blindness without Ophthalmoscopic or Other Abnormalities, Transactions of the American Ophthalmological Society. 1952; 50: 193–209.
3. Krill AE, Klien BA. Flecked retina syndrome. *Arch Ophthalmol.* 1965 Oct;74(4):496–508.

Important Reminder

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. "Health Plan" means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Envolve Vision, Inc., or any of such health plan's affiliates, as applicable.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable Health Plan-level administrative policies and procedures.

This clinical policy is effective as of the date determined by the Health Plan. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. The Health Plan retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members. This clinical policy is not intended to recommend treatment for members. Members should consult with their treating physician in connection with diagnosis and treatment decisions.

Providers referred to in this clinical policy are independent contractors who exercise independent judgment and over whom the Health Plan has no control or right of control. Providers are not agents or employees of the Health Plan.

This clinical policy is the property of the Health Plan. Unauthorized copying, use, and distribution of this clinical policy or any information contained herein are strictly prohibited. Providers, members and their representatives are bound to the terms and conditions expressed herein through the terms of their contracts. Where no such contract exists, providers, members and their representatives agree to be bound by such terms and conditions by providing services to members and/or submitting claims for payment for such services.

Note: For Medicaid members, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.

Note: For Medicare members, to ensure consistency with the Medicare National Coverage Determinations (NCD) and Local Coverage Determinations (LCD), all applicable NCDs, LCDs, and Medicare Coverage Articles should be reviewed prior to applying the criteria set forth in this clinical policy. Refer to the CMS website at http://www.cms.gov for additional information.