

## UTILIZATION REVIEW CRITERIA

### VEP-ERG iCare Criteria #922.10

VEP/ERG – CPT CODE: 95930, 92273, 92274, 0509T

#### Indications of Coverage Visual Evoked Potentials or Responses (VEPs/VERs):

1. Confirm diagnosis of multiple sclerosis when clinical criteria are inconclusive.
2. Evaluate diseases of the optic nerve, such as:
  - a) Optic neuritis
  - b) Ischemic optic neuropathy
  - c) Toxic amblyopia
  - d) Nutritional amblyopia
  - e) Neoplasms compressing the anterior visual pathways
  - f) Optic nerve injury or atrophy
  - g) Malingering/functional vision loss (to rule out)
3. Monitor the visual system during optic nerve (or related) surgery (monitoring of short latency evoked potential studies).

#### Covered Indications ERG:

1. To diagnose loss of retinal function or distinguish between retinal lesions and optic nerve lesions. Note: There are multiple retinal conditions that would be considered covered indications that may not be listed below. For a complete listing of covered diagnoses, please refer to the "ICD-10 Codes that Support Medical Necessity" section of the LCD.
  - Toxic retinopathies, including those caused by intraocular metallic foreign bodies, Vigabatrin and Chlorpromazine
  - Diabetic retinopathy
  - Retinal vascular disease [e.g., Central Retinal Artery Occlusion (CRAO), Central Retinal Vein Occlusion (CRVO), Branch Vein Occlusion (BVO), and sickle cell retinopathy
  - Autoimmune retinopathies [e.g., Cancer Associated Retinopathy (CAR), Melanoma Associated Retinopathy (MAR), and Acute Zonal Occult Outer Retinopathy (AZOOR)]
  - Retinal detachment
  - Assessment of retinal function after trauma [e.g., vitreous hemorrhage, dense cataracts, and other conditions where the fundus cannot be visualized]
  - Retinitis pigmentosa and related hereditary degenerations
  - Retinitis punctata albescens
  - Leber's congenital amaurosis
  - Choroideremia
  - Gyrate atrophy of the retina and choroid
  - Goldman-Favre syndrome
  - Congenital stationary night blindness
  - X-linked juvenile retinoschisis
  - Achromatopsia
  - Cone dystrophy
  - Disorders mimicking retinitis pigmentosa

- Usher Syndrome
  - Retinal Dystrophies (e.g. Stargardt's disease, Fundus Flavimaculata, North Carolina macular dystrophy, Best's Vitelliform dystrophy, Sorsby's macular dystrophy)
2. To detect chloroquine (Aralen) and hydroxychloroquine (Plaquenil) toxicity (mfERG) per AAO guidelines, which does not recommend mfERG for routine primary screening, but can provide objective confirmation of suspected visual loss.

VEP/ERG in Glaucoma:

- Neither of the 2015 AAO Preferred Practice Guidelines, "Primary Open-Angle Glaucoma Suspect" or "Primary Open-Angle Glaucoma," mention VEP or ERG as diagnostic tool.
- There remain no verified guidelines for normal vs. abnormal that would be easily applicable to an individual patient.
- iCare, therefore, considers the use of VEP or ERG for either glaucoma diagnosis or management investigational.

**Limitations:**

The following is considered not reasonable and necessary and therefore, will be denied:

- The use of ERG for glaucoma (either diagnosis or management) is considered experimental and investigational as the available published clinical evidence does not support clinical value.
- Therefore, the use of ERG (all forms: ERG, mfERG, PERG, etc.) for glaucoma is non-covered and will be denied as not reasonable and necessary.
- There could be rare retinal conditions that with supporting documentation could be considered for coverage on appeal.

**Documentation Requirements:**

- All documentation must be maintained in the patient's medical record and made available upon request. *The provider has a responsibility to maintain a record for possible post payment review.*
- Every page of the record must be legible and include appropriate patient identification information (ex. complete name, date of birth, dates of service[s]).
- The documentation must include the legible signature of the physician or non-physician practitioner responsible for and providing the care to the patient.
- The submitted medical record must support the use of the selected ICD-10-CM code(s). The submitted CPT/HCPCS code must describe the service performed.
- Diagnostic test results.

**Definition and Background:**

VEP/VER - The visual evoked response (VER) and visual evoked potential (VEP) evaluate the visual nervous system pathways from the eyes to the occipital cortex of the brain. By measuring the function of the entire visual pathway, it helps to separate eye disease from central nervous system defects.

ERG - The full-field electroretinogram (ERG) is used to detect loss of retinal function or distinguish between retinal and optic nerve lesions. ERG measures the electrical activity generated by neural and non-neuronal cells in the retina in response to a light stimulus. ERGs are usually obtained using electrodes embedded in a corneal contact lens, or a thin wire inside the lower eyelid, which measure a summation of retinal electrical activity at the corneal surface.

**Sources:**

*Portions of the criteria herein may have been adopted in whole or in part from Local Coverage Determinations as provided by the applicable fiscal intermediary and/or criteria from certain health plan partners.*

- American Academy of Ophthalmology. Cataract in the Adult Eye Preferred Practice Pattern®. San Francisco, CA: AAO; 2021.
- American Academy of Ophthalmology. Primary Open Angle Glaucoma Preferred Practice Pattern®. San Francisco, CA: AAO; 2015.
- American Academy of Ophthalmology. Primary Open Angle Glaucoma Suspect Preferred Practice Pattern®. San Francisco, CA: AAO; 2015.
- First Coast Service Options, Inc. Local Coverage Determination (LCD): Electroretinography (L37398). Jacksonville, FL: First Coast; effective November 28, 2019.
- First Coast Service Options, Inc. Local Coverage Determination Reference Article: Billing and Coding: Electroretinography (A57677). Jacksonville, FL: First Coast; effective October 03, 2018.

<b>REVIEW AND REVISION HISTORY</b>		
<b>Date</b>	<b>Description</b>	<b>Approver &amp; Title</b>
January 15, 2024	Approval by PAC Committee	Approved by PAC Committee
November 2023	Administrative revisions (non-clinical)	Dr. Smith Blanc, Director of UM
July 17, 2023	Approval by PAC Committee (clinical documentation changes made)	Approved by PAC Committee
January 23, 2023	Approval by PAC Committee	Approved by PAC Committee
January 17, 2022	Approval by PAC Committee	Approved by PAC Committee
January 18, 2021	Approval by PAC Committee	Approved by PAC Committee
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January 28, 2019	Approval by PAC Committee	Approved by PAC Committee
January 29, 2018	Approval by PAC Committee	Approved by PAC Committee
January 9, 2017	Approval by PAC Committee	Approved by PAC Committee