I. Policy

Visual-evoked potentials (VEP), also known as visual-evoked responses (VER), are brain waves resulting from light stimuli. VEP are used to track visual signals from the retina to the occipital cortex. With electrodes placed at occipital and parietal locations of the scalp, a checkerboard pattern is projected on a screen and rapidly reversed 100 times at a rate of once or twice per second. The procedure is performed on each eye. Occasionally, checkerboard pattern testing is difficult to use in infants or older patients, so a stroboscopic flash stimulus is used. This type of testing is severely limited due to the great variability of responses among normal persons and its relative insensitivity to clinical lesions. Visual neural impulses from either method are recorded as they travel from the eye to the occipital cortex. VEP are abnormal in patients with optic neuritis or multiple sclerosis.

Visual evoked potentials (VEPs) are considered medically necessary for any of the following indications:

A. To diagnose and monitor multiple sclerosis (acute or chronic phases); or

B. To evaluate signs and symptoms of visual loss in persons who are unable to communicate (e.g., unresponsive persons, etc.; or

C. To identify persons at increased risk for developing clinically definite multiple sclerosis (CDMS); or

D. To localize the cause of a visual field defect, not explained by lesions seen on CT or MRI, metabolic disorders, or infectious diseases.

Standard or automated VEPs do not meet the criteria of medical necessity for routine screening of infants and other persons; evidence-based guidelines from leading medical professional organizations and public health agencies have not recommended VEP screening of infants.

VEPs do not meet the criteria for medical necessity for all other indications because their effectiveness for indications other than the ones listed above has not been established.

UHA considers multi-focal visual evoked potential for the diagnosis and early detection of glaucomatous field defects as not medically necessary because of insufficient evidence of its effectiveness.

II. Background Research

The U.S. Preventive Services Task Force’s recommendation statement on Screening for glaucoma (2013) listed tonometry, visual field measurement, dilated ophthalmoscopy and slit lamp examination as screening tests for primary open angle glaucoma (POAG). The USPSTF statement noted that Diagnosis of POAG is based on a combination of tests showing characteristic degenerative changes in the optic disc and defects in visual fields (often loss in peripheral vision). Although increased IOP was previously considered an important part of the definition of this condition, it is now known that many persons with POAG do not have increased IOP and not all persons with increased IOP have or will develop glaucoma. Therefore, screening with tonometry alone may be inadequate to detect all cases of POAG. Measurement of visual fields can be difficult. The reliability of a single measurement may be low; several consistent measurements are needed to establish the presence of defects. Specialists use dilated ophthalmoscopy or slit lamp examination to evaluate changes in the optic disc; however, even experts have varying ability to detect glaucomatous
progression of the optic disc. In addition, no single standard exists to define and measure progression of visual field defects. Most tests that are available in a primary care setting do not have acceptable accuracy to detect glaucoma.

UpToDate reviews on Open-angle glaucoma: Epidemiology, clinical presentation, and diagnosis (Jacobs, 2014) and Angle-closure glaucoma Weizer, 2014) do not mention the use of VEP as a diagnostic tool.

The U.S. Preventive Services Task Force (USPSTF) has not recommended vision screening of infants and young children. The 2011 USPSTF recommendation does not support vision screening for children less than 3 years of age, as it concludes that the current evidence is insufficient to assess the balance of benefits and harms to this subpopulation. This position is consistent with the current recommendations of the American Academy of Ophthalmology and the American Association for Pediatric Ophthalmology and Strabismus and other professional organizations.

Current guidelines from the American Academy of Ophthalmology do not recommend visual evoked potentials for screening or diagnosis of hydroxychloroquine toxicity (Marmor, et al., 2011; Karmel, 2011; Scechtman and Karpecki, 2011).

III. Limitations/Exclusions

NOTE:
This UHA PPL is a guide to coverage, the need for prior authorization and other administrative directives. It is not meant to provide instruction in the practice of medicine and it should not deter a provider from expressing his/her judgment.

Even though this payment policy may indicate that a particular service or supply is considered covered, specific provider contract terms and/or members' individual benefit plans may apply, and this policy is not a guarantee of payment. UHA reserves the right to apply this payment policy to all UHA companies and subsidiaries.

UHA understands that opinions about and approaches to clinical problems may vary. Questions concerning medical necessity (see Hawaii Revised Statutes §432E-1.4) are welcome. A provider may request that UHA reconsider the application of the medical necessity criteria in light of any supporting documentation.

IV. Administrative Guidelines

A. Prior authorization is not required.

B. UHA reserves the right to perform retrospective review using the above criteria to validate if services rendered met payment determination criteria and to ensure proper reimbursement is made.

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<th>CPT</th>
<th>Description</th>
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<tr>
<td>95930</td>
<td>Visual evoked potential (VEP) testing central nervous system, checkerboard or flash</td>
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V. Policy History

Policy Number:  M.MIS.27.150317
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Original Document Effective Date:  05/01/2016
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