

Electroretinography

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Disclaimer

Highmark Health Options medical policy is intended to serve only as a general reference resource regarding coverage for the services described. This policy does not constitute medical advice and is not intended to govern or otherwise influence medical decisions.

POLICY STATEMENT

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.

Focal or foveal electroretinogram (fERG) is useful in providing information regarding diseases limited to the macula.

Multi-focal electroretinography (mfERG) is a higher resolution form of ERG, enabling assessment of ERG activity in small areas of the retina.

Pattern electroretinogram (PERG) uses pattern-reversal stimuli and is used to detect subtle optic neuropathies.

DEFINITIONS

Highmark Health Options (HHO) – Managed care organization serving vulnerable populations that have complex needs and qualify for Medicaid. Highmark Health Options members include individuals and families with low income, expecting mothers, children, and people with disabilities. Members pay nothing to very little for their health coverage. Highmark Health Options currently serves Delaware Medicaid: Delaware Healthy Children Program (DHCP) and Diamond State Health Plan and Health Plan Plus members.

POLICY POSITION

Electroretinography used to diagnose loss of retinal function or distinguish between retinal lesions and optic nerve lesions may be considered medically necessary for ANY ONE of the following indications (This is not an all-inclusive list):

- Toxic retinopathies, including those caused by intraocular metallic foreign bodies, Vigabatrin and Chlorpromazine; or

- Diabetic retinopathy; or
- Retinal vascular disease (e.g., Central Retinal Artery Occlusion [CRAO], Transient Retinal Artery Occlusion, Central Retinal Vein Occlusion [CRVO], Branch Vein Occlusion [BVO], and sickle cell retinopathy); or
- Autoimmune retinopathies (e.g., Cancer Associated Retinopathy [CAR], Melanoma Associated Retinopathy [MAR], and Acute Zonal Occult Outer Retinopathy [AZOOR]); or
- Retinal detachment; or
- Assessment of retinal function after trauma (e.g., vitreous hemorrhage, dense cataracts, macula scars and other conditions where the fundus cannot be visualized); or
- Retinitis pigmentosa and related hereditary degenerations; or
- Retinitis punctata albescens; or
- Leber's congenital amaurosis; or
- Choroideremia; or
- Gyrate atrophy of the retina and choroid; or
- Goldman-Favre syndrome; or
- Congenital stationary night blindness; or
- X-linked juvenile retinoschisis; or
- Achromatopsia; or
- Cone dystrophy; or
- Disorders mimicking retinitis pigmentosa; or
- Usher Syndrome; or
- Retinal Dystrophies (e.g., Stargardt's disease, Fundus Flavimaculata, North Carolina macular dystrophy, Best's Vitelliform dystrophy, Sorsby's macular dystrophy).

mfERG may be considered medically necessary to detect chloroquine (Aralen) and hydroxychloroquine (Plaquenil) toxicity.

NONCOVERED SERVICES

Electroretinography not meeting the criteria as indicated in this policy, except glaucoma, is considered not medically necessary.

ALL forms of electroretinography (ERG, fERG, mfERG, and PERG) for either diagnosis or management of glaucoma are considered experimental/investigational and therefore noncovered because the safety and/or effectiveness of this service cannot be established by the available published peer-reviewed literature.

ELIGIBLE PROCEDURE CODES

92273	Electroretinography (erg) With Interpretation And Report; Full Field (ie, Fferg, Flash Erg, Ganzfield Erg).
92274	Electroretinography (erg) With Interpretation And Report; Multifocal (mferg).

Code Appendix

Covered Diagnosis Codes for 99273 and 99274

A18.53	D18.09	E08.311	E08.319	E08.3211
E08.3212	E08.3213	E08.3291	E08.3292	E08.3293
E08.3311	E08.3312	E08.3313	E08.3391	E08.3392
E08.3393	E08.3411	E08.3412	E08.3413	E08.3491
E08.3492	E08.3493	E08.3511	E08.3512	E08.3513
E08.3521	E08.3522	E08.3523	E08.3531	E08.3532
E08.3533	E08.3541	E08.3542	E08.3543	E08.3551
E08.3552	E08.3553	E08.3591	E08.3592	E08.3593
E09.311	E09.319	E09.3211	E09.3212	E09.3213
E09.3291	E09.3292	E09.3293	E09.3311	E09.3312
E09.3313	E09.3391	E09.3392	E09.3393	E09.3411
E09.3412	E09.3413	E09.3491	E09.3492	E09.3493
E09.3511	E09.3512	E09.3513	E09.3521	E09.3522
E09.3523	E09.3531	E09.3532	E09.3533	E09.3541
E09.3542	E09.3543	E09.3551	E09.3552	E09.3553
E09.3591	E09.3592	E09.3593	E10.311	E10.319
E10.3211	E10.3212	E10.3213	E10.3291	E10.3292
E10.3293	E10.3311	E10.3312	E10.3313	E10.3391
E10.3392	E10.3393	E10.3411	E10.3412	E10.3413
E10.3491	E10.3492	E10.3943	E10.3511	E10.3512
E10.3513	E10.3521	E10.3522	E10.3523	E10.3531
E10.3532	E10.3533	E10.3541	E10.3542	E10.3543
E10.3551	E10.3552	E10.3553	E10.3591	E10.3592
E10.3593	E11.311	E11.319	E11.3211	E11.3212
E11.3213	E11.3291	E11.3292	E11.3293	E11.3311
E11.3312	E11.3313	E11.3391	E11.3392	E11.3393
E11.3411	E11.3412	E11.3413	E11.3491	E11.3492
E11.3493	E11.3511	E11.3512	E11.3513	E11.3521
E11.3522	E11.3523	E11.3531	E11.3532	E11.3533
E11.3541	E11.3542	E11.3543	E11.3551	E11.3552
E11.3553	E11.3591	E11.3592	E11.3593	E13.311
E13.319	E13.3211	E13.3212	E13.3213	E13.3291
E13.3292	E13.3293	E13.3311	E13.3312	E13.3313
E13.3391	E13.3392	E13.3393	E13.3411	E13.3412

E13.3413	E13.3491	E13.3492	E13.3493	E13.3511
E13.3512	E13.3513	E13.3521	E13.3522	E13.3523
E13.3531	E13.3532	E13.3533	E13.3541	E13.3542
E13.3543	E13.3551	E13.3552	E13.3553	E13.3591
E13.3592	E13.3593	E50.5	E50.9	F44.6
G45.3	H15.031	H15.032	H15.033	H20.011
H20.012	H20.013	H30.001	H30.002	H30.003
H30.011	H30.012	H30.013	H30.021	H30.022
H30.023	H30.031	H30.032	H30.033	H30.041
H30.042	H30.043	H30.101	H30.102	H30.103
H30.111	H30.112	H30.113	H30.121	H30.122
H30.123	H30.131	H30.132	H30.133	H30.141
H30.142	H30.143	H30.21	H30.22	H30.23
H30.811	H30.812	H30.813	H30.891	H30.892
H30.893	H30.91	H30.92	H30.93	H31.001
H31.002	H31.003	H31.011	H31.012	H31.013
H31.021	H31.022	H31.023	H31.091	H31.092
H31.093	H31.101	H31.102	H31.103	H31.111
H31.112	H31.113	H31.121	H31.122	H31.123
H31.20	H31.21	H31.22	H31.23	H31.29
H31.301	H31.302	H31.303	H31.311	H31.312
H31.313	H31.321	H31.322	H31.323	H31.401
H31.402	H31.403	H31.411	H31.412	H31.413
H31.421	H31.422	H31.423	H33.001	H33.002
H33.003	H33.011	H33.012	H33.013	H33.021
H33.022	H33.023	H33.031	H33.032	H33.033
H33.041	H33.042	H33.043	H33.051	H33.052
H33.053	H33.101	H33.102	H33.103	H33.111
H33.112	H33.113	H33.191	H33.192	H33.193
H33.21	H33.22	H33.23	H33.301	H33.302
H33.303	H33.311	H33.312	H33.313	H33.321
H33.322	H33.323	H33.331	H33.332	H33.333
H33.41	H33.42	H33.42	H33.8	H34.01
H34.02	H34.03	H34.11	H34.12	H34.13
H34.211	H34.212	H34.213	H34.231	H34.232
H34.233	H34.8110	H34.8111	H34.8112	H34.8120
H34.8121	H34.8122	H34.8130	H34.8111	H34.8112
H34.8120	H34.8121	H34.8122	H34.8130	H34.8131

H34.8132	H34.821	H34.822	H34.823	H34.8310
H34.8311	H34.8312	H34.8320	H34.8321	H34.8322
H34.8330	H34.8331	H34.8332	H34.9	H35.00
H35.012	H35.013	H35.021	H35.023	H35.031
H35.032	H35.033	H35.041	H35.042	H35.043
H35.051	H35.052	H35.053	H35.061	H35.062
H35.063	H35.071	H35.072	H35.073	H35.09
H35.101	H35.102	H35.103	H35.111	H35.112
H35.113	H35.121	H35.121	H35.122	H35.123
H35.131	H35.132	H35.133	H35.141	H35.142
H35.143	H35.151	H35.152	H35.153	H35.161
H35.162	H35.163	H35.171	H35.172	H35.173
H35.21	H35.22	H35.23	H35.30	H35.3110
H35.3111	H35.3112	H35.3113	H35.3114	H35.3120
H35.3121	H35.3122	H35.3123	H35.3124	H35.3130
H35.3131	H35.3132	H35.3133	H35.3134	H35.3210
H35.3211	H35.3212	H35.3213	H35.3220	H35.3221
H35.3222	H35.3223	H35.3230	H35.3231	H35.3232
H35.3233	H35.33	H35.341	H35.342	H35.343
H35.351	H35.352	H35.353	H35.361	H35.362
H35.363	H35.371	H35.372	H35.373	H35.381
H35.382	H35.383	H35.40	H35.411	H35.412
H35.413	H35.421	H35.422	H35.423	H35.431
H35.432	H35.433	H35.441	H35.442	H35.443
H35.451	H35.452	H35.453	H35.461	H35.462
H35.463	H35.50	H35.51	H35.52	H35.53
H35.54	H35.61	H35.62	H35.63	H35.70
H35.711	H35.712	H35.713	H35.721	H35.722
H35.723	H35.731	H35.732	H35.733	H35.81
H35.82	H35.89	H36	H44.2A1	H44.2A2
H44.2A3	H44.2B1	H44.2B2	H44.2B3	H44.2C1
H44.2C2	H44.2C3	H44.2D1	H44.2D2	H44.2D3
H44.2E1	H44.2E2	H44.2E3	H46.01	H46.02
H46.03	H46.11	H46.12	H46.13	H46.2
H46.3	H46.8	H46.9	H47.011	H47.012
H47.013	H47.021	H47.022	H47.023	H47.031
H47.032	H47.033	H47.091	H47.092	H47.093
H47.10	H47.11	H47.12	H47.13	H47.141

H47.142	H47.143	H47.20	H47.211	H47.212
H47.213	H47.22	H47.231	H47.232	H47.233
H47.291	H47.292	H47.293	H47.311	H47.312
H47.313	H47.321	H47.322	H47.323	H47.331
H47.332	H47.333	H47.391	H47.392	H47.393
H53.10	H53.11	H53.121	H53.122	H53.123
H53.131	H53.132	H53.133	H53.15	H53.16
H53.19	H53.411	H53.412	H53.413	H53.451
H53.452	H53.453	H53.51	H53.52	H53.60
H53.61	H53.62	H53.63	H53.69	H53.71
H53.72	H53.8	H53.9	H54.0X33	H54.0X34
H54.0X35	H54.0X43	H54.0X44	H54.0X45	H54.0X53
H54.0X54	H54.0X55	H54.1131	H54.1132	H54.1141
H54.1142	H54.1151	H54.1152	H54.1213	H54.1214
H54.1215	H54.1223	H54.1224	H54.1225	H54.2X11
H54.2X12	H54.2X21	H54.2X22	H54.413A	H54.414A
H54.415A	H54.42A3	H54.42A4	H54.511A	H54.512A
H54.52A1	H54.52A2	H54.7	S04.011A	S04.011D
S04.011S	S04.012A	S04.012D	S04.012S	S05.51XA
S05.51XD	S05.51XS	S05.52XA	S05.52XD	S05.52XS

Noncovered Diagnosis Codes for 99273 and 99274

H40.10X0	H40.10X1	H40.10X2	H40.10X3	H40.10X4
H40.1110	H40.1111	H40.1112	H40.1113	H40.1114
H40.1120	H40.1121	H40.1122	H40.1123	H40.1124
H40.1130	H40.1131	H40.1132	H40.1133	H40.1134
H40.1190	H40.1191	H40.1192	H40.1193	H40.1194
H40.1210	H40.1211	H40.1212	H40.1213	H40.1214
H40.1220	H40.1221	H40.1222	H40.1223	H40.1224
H40.1230	H40.1231	H40.1232	H40.1234	H40.1290
H40.1291	H40.1292	H40.1293	H40.1294	H40.1310
H50.1311	H40.1312	H40.1313	H40.1314	H40.1320
H40.1321	H40.1322	H40.1323	H40.1324	H40.1330
H40.1331	H40.1332	H40.1333	H40.1334	H40.1390
H40.1391	H40.1392	H40.1393	H40.1394	H40.1410
H40.1411	H40.1412	H40.1413	H40.1414	H40.1420
H40.1421	H40.1422	H40.1423	H40.1424	H40.1430

H40.1431	H40.1432	H40.1433	H40.1434	H40.1490
H40.1491	H40.1492	H40.1493	H40.1494	H40.151
H40.152	H40.153	H40.159	H40.20X0	H40.20X1
H40.20X2	H40.20X3	H40.20X4	H40.211	H40.212
H40.213	H40.219	H40.2210	H40.2211	H40.2212
H40.2213	H40.2214	H40.2220	H40.2221	H40.2222
H40.2223	H40.2224	H40.2230	H40.2231	H40.2232
H40.2233	H40.2234	H40.2290	H40.2291	H40.2292
H40.2293	H40.2294	H40.231	H40.232	H40.233
H40.239	H40.241	H40.242	H40.243	H40.249
H40.30X0	H40.30X1	H40.30X2	H40.30X3	H40.30X4
H40.31X0	H40.31X1	H40.31X2	H40.31X3	H40.31X4
H40.32X0	H40.32X1	H40.32X2	H40.32X3	H40.32X4
H40.33X0	H40.33X1	H40.33X2	H40.33X3	H40.33X4
H40.40X0	H40.40X1	H40.40X2	H40.40X3	H40.40X4
H40.41X0	H40.41X1	H40.41X2	H40.41X3	H40.41X4
H40.42X0	H40.42X1	H40.42X2	H40.42X3	H40.42X3
H40.43X0	H40.43X1	H40.43X2	H40.43X3	H40.43X4
H40.50X0	H40.50X1	H40.50X2	H40.50X3	H40.50X4
H40.51X0	H40.51X1	H40.51X2	H40.51X3	H40.51X4
H40.52X0	H40.52X1	H40.52X2	H40.52X3	H40.52X4
H40.53X0	H40.53X1	H40.53X2	H40.53X3	H40.53X4
H40.60X0	H40.60X1	H40.60X2	H40.60X3	H40.60X4
H40.61X0	H40.61X1	H40.61X2	H40.61X3	H40.61X4
H40.62X0	H40.62X1	H40.62X2	H40.62X3	H40.62X4
H40.63X0	H40.63X1	H40.63X2	H40.63X2	H40.63X4
H40.811	H40.812	H40.813	H40.819	H40.821
H40.822	H40.823	H40.829	H40.831	H40.832
H40.833	H40.839	H40.89	H40.9	H42
Q15.0				

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