



INLAND EMPIRE HEALTH PLAN

IEHP UM Subcommittee Approved Authorization Guidelines
Diabetes Retinopathy Screening

Policy:

IEHP covers extended initial ophthalmoscopy with retinal drawing and interpretation, or subsequent extended ophthalmoscopy with retinal drawing and interpretation annually for patients with diabetes mellitus type 1 or type 2. [(American Diabetes Association, 2015) (APOLLO, 2013)]

The fundus photography may be performed under the following circumstances:

1. At the initial visit along with ophthalmoscopic exam in a patient with diabetes type 1 or 2;
2. When there is diagnosis of moderate or severe non-proliferative diabetic retinopathy; or
3. When the ophthalmoscopic exam reveals a change in the fundus condition. [(Anthem, 2015) (Aetna, 2015)]

CPT codes covered if indications are met:

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CPT Code	Description	Special Note
92225	Initial ophthalmoscopy, extended with retinal drawing, interpretation and report.	Can't be billed with 92226 on same date of service
92226	Subsequent ophthalmoscopy, extended with retinal drawing, interpretation and report	Can't be billed with 92225 on same date of service
92250	Fundus photography with interpretation and report	Can be billed with 99225 OR 99226 but NOT with multiplier

CMS: Local Coverage Determination for Fundus Photography ((Medical, 2015)):

Fundus photography may be necessary in:

- Initial diabetic retinopathy to establish the baseline photograph

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IEHP UM Subcommittee Approved Authorization Guidelines

Diabetic Retinopathy Screening

Page 2 of 8

- Subsequent follow up after diagnosis of retinal edema in moderate non-proliferative diabetic retinopathy. The purpose of the follow up is to determine possible progression of diabetic macular edema and to be used for making decision to advise the patient regarding the laser photocoagulation procedure.

Medical: Ophthalmology and reimbursement:

The CPT-4 90000 series of codes for eye procedures are considered unilateral services. When performed on one eye the bill must include a quantity of “1” and either modifier LT (left side) or RT (right side) to indicate which eye. When performed on both eyes, procedures must be billed on a single line using modifier 50 (bilateral procedure) with a quantity of “2”. These CPT codes include 92225, 92226, and 92250.

American Academy of Ophthalmology (American Academy of Ophthalmology, 2014):

Frequency of Screening:

- Type 1 diabetes: 3-5 years after the diagnosis and then annually
- Type 2 diabetes: At the time of diabetes diagnosis and then annually
- Pregnancy: Prior to conception and in first trimester. Follow up every 1-3 months for severe non-proliferative diabetic retinopathy or worse. Follow up every 3-12 months for either no retinopathy or mild/moderate non-proliferative diabetic retinopathy.

The initial examination includes:

- Visual acuity
- Slit-lamp biomicroscopy (pupils should be dilated)
- Intraocular pressure
- Dilated funduscopy including the stereoscopic examination
- Examination of the peripheral retina and vitreous
- Gonioscopy when indicated

Fundus Photography:

- In clinical research, this technique was found to be superior to clinical exam alone, in diagnosing diabetic retinopathy.
- May be necessary for retinopathy progression and treatment follow up.
- Not useful in minimal diabetic retinopathy or if diabetic retinopathy has not changed in comparison to the previous photograph.
- However, inferior to clinical exam in detecting retinal thickening which is associated with macular edema.
- Does not substitute for the periodic comprehensive ophthalmic examination since the digital imaging is not effective at quantifying other ophthalmic abnormalities.

IEHP UM Subcommittee Approved Authorization Guidelines

Diabetic Retinopathy Screening

Page 3 of 8

- Non-dilated exam compromises the quality of the exam. However, non-dilated fundus photography may increase the patient compliance.

ADA Standards of Medical Care in Diabetes ((American Diabetes Association, 2015)):

- Patients 10 years or older with type 1 diabetes should have an initial diabetic retinopathy screening within 5 years after the onset of diabetes.
- Patients with type 2 diabetes should have diabetic retinopathy screening shortly after the diagnosis
- Subsequent examination should be done annually for type 1 and type 2. Less frequent screening may be considered depending on an eye care professional's advise
- Fundus photography does not substitute for comprehensive eye exam. This should be done on initial visit and at intervals recommended by an eye care professional.
- Diabetic patient planning a pregnancy should have comprehensive eye examination and in first trimester. Close follow up needed throughout pregnancy and for 1 year postpartum.

AHRQ on Management of Microvascular Complications of Type 2 Diabetes Mellitus

(National Guideline Clearinghouse, AHRQ, 2015):

Frequency of Screening:

- Within 5 years of the diagnosis of type 1 diabetes, or at the time of type 2 diagnosis and annual follow up thereafter. (grade A)
- Alternately, fundus photography may be used by a qualified reading centers under the supervision of a retinal specialist (grade B)
- May be followed every 2 years by eye care professionals if previous dilated retinal exam was normal.

Literature Review:

Diabetic retinopathy is a result of damage to the blood vessels in the retina. It is the most common eye disease in diabetics and is a leading cause of blindness in adults. (Anthem, 2015). There are four stages, starting from mild nonproliferative retinopathy, leading to moderate nonproliferative retinopathy, then severe nonproliferative retinopathy and finally proliferative retinopathy (National Eye Institute, 2012). The nonproliferative stages are characterized by retinal vascular related abnormalities noted as venous dilation, cotton-wool spots, intraretinal hemorrhages and microaneurysms. As the diseases progresses there is a gradual closure of retinal vessels that lead to impaired perfusion and retinal ischemia. A regular ophthalmologic exam or screening of high quality retinal photographs of patients with no previous treatment of diabetic retinopathy or other eye disease is important for the care of a diabetic patient (American Academy of Ophthalmology Retina/Vitrous Panel).

IEHP UM Subcommittee Approved Authorization Guidelines

Diabetic Retinopathy Screening

Page 4 of 8

Nonmydriatic digital stereoscopic retinal imaging is sensitive and specific for screening and diagnosis of diabetic retinopathy and could increase the patient compliance for diabetic eye care ((American Diabetes Association, 2015)).

Retinal photography is superior in comparison to ophthalmoscopy in detection of diabetic eye disease which needs ophthalmology referral ((Lesse, Ellis, Morris, & Ellingford, 2002))

Fundus photography is more sensitive than clinical examination in detecting retinopathy. However, clinical examination is superior in detection of retinal thickness which is associated with macular edema and therefore better at detecting fine caliber neovascularization ((American Diabetic Association, 2002)).

Medical Review Criteria Guidelines for Managing Care ((APOLLO, 2013)):

Frequency of diabetic retinopathy follow up:

- Adult with type 1 diabetes: within 5 years after the diagnosis of diabetes
- Adult with type 2 diabetes: Initial screening shortly after the diagnosis
- Subsequent screening for type 1 and type 2 diabetes: annually. Less frequent exams such as every 2-3 years may be acceptable when patient is found have normal eye exam and with consideration of eye care professional's advise.
- Planning pregnancy: Comprehensive eye examination in first trimester and close follow up until the 1 year postpartum for ONLY preexisting diabetes. Not apply to gestational diabetes mellitus since these patients do not have increase risk of diabetic retinopathy.

Fundus/Intraocular Photography:

- Covered benefit when procedure done by a qualified eye professionals (ophthalmologist and optometrist)
- May be used to document a baseline diabetic retinopathy evaluation and follow up of diagnosed retinopathy
- Not covered for diabetic retinopathy screening, except for the initial screening.

Anthem Medical Guideline Retinal Telescreening (Guideline CG-MED-35 along with Edit# 270 and 579) (Anthem, 2015):

Code Rule:

- 92225 may not be billed along with 92226
- 92225 or 92226 separately reimbursed with 99201-99285 as necessary
- 92250 may not be billed along with another 92250
- 92227 – Remote imaging for detection of retinal disease with analysis and report under physician supervision, unilateral or bilateral

IEHP UM Subcommittee Approved Authorization Guidelines

Diabetic Retinopathy Screening

Page 5 of 8

- 92228 – Remote imaging for monitoring and management of active retinal disease (eg. Diabetic retinopathy) with physician review, interpretation and report, unilateral or bilateral.

Retinal telescreening medically necessity:

- Individual does not have prior known diabetic retinopathy; AND
- Imaging technique obtains total retinal area (DRS7); AND
- Final images are graded for diabetic retinopathy using a manual process

Retinal telescreening exclusion criteria:

- Follow up of known diabetic retinopathy
- Examination of undilated pupils
- Evaluation of other ophthalmologic abnormalities other than the diabetic retinopathy such as the macular degenerations
- Imaging technique that does not cover the entire retinal area.
- When the final image is graded automatically using such technique as the artificial neural networks.

Aetna Clinical Policy Bulletin Number 0539 and 0563 (Aetna, 2015):

Fundus photograph:

- May be necessary to establish the baseline in initial visit which can be used to evaluate the progression of disease.
- May be necessary when the ophthalmoscopic exam reveals a change in the fundus condition.
- May be necessary if the exam reveals new disease of the fundus or in preparation of a surgical treatment.
- Only considered medically necessary where the results may influence the management of the patient.
- Sequential series of photographs are considered medically necessary only if they document a clinically relevant condition that is subject to change and the change would directly affect the management.
- Not necessary to simply document the existence of a condition When using the fundus photography, the medical necessity should be documented.
- Non mydriatic high quality fundus photography may be appropriate if dilation of pupil is contraindicated. No rigorous studies have been done to validate the quality of non mydriatic exam and further study is needed.

IEHP UM Subcommittee Approved Authorization Guidelines

Diabetic Retinopathy Screening

Page 6 of 8

Retinopathy Telescreening Systems:

- Aetna considers diabetic retinopathy telescreening systems medically necessary for diabetic retinopathy screening as an alternative to retinopathy screening by an ophthalmologist or optometrist
- Telescreening systems experimental or investigational for following the progression of disease in members with diabetic retinopathy, for screening of other diseases (not limited to) macular degeneration/edema, retinopathy of prematurity and for all other indications because of insufficient evidence of their clinical value.

CIGNA Coverage Policy Number: 0080:

Covered imaging study for diabetic retinopathy:

- Standard film or digital fundus photography
- Retinal telescreening
- Optical coherence tomography
- Fluorescein angiography
- Heidelberg Retina Tomograph
- Confocal scanning laser ophthalmoscope
- Retinal thickness analyzer

Above image study is used for screening and detection of diabetic retinopathy and not other ophthalmologic abnormalities.

Background:

Diabetic retinopathy is a complication of both type 1 and 2 diabetes and is the major cause of blindness in the diabetic population. The prevalence rate of retinopathy for all adults, 40 and older, with diabetes is 28.5%. After 20 years of diabetes, most type 1 diabetics and greater than 60% of type 2 diabetics will have some degree of retinopathy. Diabetic retinopathy is due to abnormalities of retinal vasculature. Since there are treatment options for retinopathy which are more effective with early detection, screening of all diabetic patients is recommended. Currently there are different retinal screening methods including digital fundus photography as well as the biomicroscopy ((Anthem, 2015 (Aetna, 2015) (APOLLO, 2013)) Due to the large number of patients with type 2 diabetes there is a larger proportion of the disease burden when compared to patients with type 1 diabetes (American Academy of Ophthalmology Retina/Vitrous Panel).

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IEHP UM Subcommittee Approved Authorization Guidelines

Diabetic Retinopathy Screening

Page 7 of 8

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IEHP UM Subcommittee Approved Authorization Guidelines

Diabetic Retinopathy Screening

Page 8 of 8

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