

Policy #: 065

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Title

**Screening for Diabetic Retinopathy
Retinal Imaging for the detection of Diabetic Retinopathy
Retinal telecreening systems (Digital retinal imaging)**

Description:

The American Diabetic Association recommends that people with diabetes mellitus undergo annual screening for the presence of diabetic retinopathy, beginning within 3-5 years of onset for Type I diabetics and upon diagnosis for Type II diabetics. Traditionally, screening has been performed by trained professionals (ophthalmologists and optometrists) through a dilated pupil, using indirect ophthalmoscopy with conventional fundus photography. The development of digital retinal imaging technology has created an opportunity to increase the rate of screening for diabetic retinopathy. The technology enables the acquisition of full-fundus digital retinal images in a PCP's office (or closely located site) by trained technicians. The images can then be transmitted electronically to a remote site for evaluation by trained personnel under the supervision of ophthalmologists, and an interpretation can be transmitted back to the PCP for further management, if indicated. The sensitivity and specificity of digital retinal imaging performed through a dilated pupil for detection of diabetic retinopathy are equivalent to indirect ophthalmoscopy by eye care professionals using conventional fundus photography. Studies have not demonstrated an equal level of performance of digital retinal imaging through an undilated pupil. Digital retinal imaging through a dilated pupil can be used by ophthalmologists and optometrists in lieu of conventional fundus photography to document the condition of the retina.

When services are covered for all Products including Medicare HMO Blue, Medicare PPO Blue and Blue Medicare PFFS Plus Rx

We cover screening for retinopathy in diabetics **performed by ophthalmologists or optometrists** using conventional fundus photography OR digital retinal imaging technology when all of the following criteria are met:

- The individual does not have prior known diabetic retinopathy;
- The imaging technique covers a total retinal area which includes the Diabetic Retinopathy Study seven-standard fields (DRS7);
- Use does not exceed one study, utilizing either method, per member, per provider, per year.

We cover screening for retinopathy in diabetics ordered by non-eye care professionals using digital retinal imaging technology when all of the following criteria are met:-

- The individual does not have prior known diabetic retinopathy;
- The imaging technique covers a total retinal area which includes the Diabetic Retinopathy Study seven-standard fields (DRS7);
- Use does not exceed one study per member per provider per year.

Note: Digital retinal imaging can be performed through either a dilated or undilated pupil.

Restriction on the annual use of HCPCS code S0625 or CPT code 92250 applies to members with a diagnosis of diabetes mellitus when used for screening of diabetic retinopathy only.

When services are not covered for all Products, including Medicare HMOB, Medicare PPO Blue, and Blue Medicare PFFS Plus Rx Products

We do not cover all other uses of retinal telescreening systems, including, but not limited to those listed below:

- To follow the progression of disease in members who have been diagnosed with diabetic retinopathy
- To screen or evaluate retinal conditions other than diabetic retinopathy, including, but not limited to macular degeneration
- When the final composite image captured does not include the entire DRS7 field area
- When the final retinal images are graded using an automatic process only (e.g., artificial neural networks)

Individual consideration

All our medical policies are written for the majority of people with a given condition. Each policy is based on medical science. For many of our medical policies, each individual's unique clinical circumstances may be considered in light of current scientific literature. For consideration of an individual patient, physicians may send relevant clinical information to:

For services already billed

Blue Cross Blue Shield of Massachusetts
Provider Appeals
P. O. Box 986065
Boston, MA 02298

Prior to performance of service

Blue Cross Blue Shield of Massachusetts
Case Creation/Medical Policy
One Enterprise Drive
Quincy, MA 02171
Tel: 1-800-327-6716
Fax: 1-888-641-5330

Managed care guidelines

No authorization is required

Indemnity and PPO guidelines

No authorization is required

Coding information

Procedure codes are from current CPT, HCPCS Level II, Revenue Code, and/or ICD-9-CM manuals, as recommended by the American Medical Association, Centers for Medicare and Medicaid Services and American Hospital Associations. Blue Cross Blue Shield Association national codes may be developed when appropriate.

The following code is included below for informational purposes. Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.

HCPCS code: S0625, Retinal telescreening by digital imaging of multiple different fundus areas to screen for vision-threatening conditions, including imaging, interpretation and report

CPT code 92250: Fundus photography with interpretation and report

Other information

The current diabetic retinopathy screening recommendation of the American Diabetic Association includes:

Patient Group	First Examination Recommendation	Minimum Follow-up Recommendation
Type 1 diabetes	Within 3–5 years after diagnosis of diabetes once patient is 10 years or older	Annually
Type 2 diabetes	At time of diagnosis of diabetes	Annually
Pregnancy in preexisting diabetes	Prior to conception and during first trimester	Physician discretion pending results of first trimester exam

Policy update history

9/08, New policy issued based on review of literature and decision that digital imaging systems may be considered **medically necessary** as a screening technique for the detection and interpretation of diabetic retinopathy. Updated 9/08, by removing ICD 9 diagnosis codes and clarifying language that restriction applies to members with a diagnosis of diabetes mellitus when used for screening of diabetic retinopathy only. Updated 1/09, to permit evaluation of retina via dilated and non-dilated pupils prior to digital photography. References numbered. Reviewed 2/09 MPG – Psychiatry, Ophthalmology and Endocrinology, no changes in coverage were made.

Footnotes

¹ Based on BCBSA national policy 9.03.13, Digital Imaging Systems for the Detection and Evaluation of Diabetic Retinopathy issued 8/05.

References:

References for footnote 1:

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12. Heaven CJ, Cansfield J, Shaw KM. The quality of photographs produced by the non-mydratic fundus camera in a screening programme for diabetic retinopathy: a 1 year prospective study. *Eye* 1993; 7(pt 6):787-90.
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15. Wilson C, Horton M, Cavallerano J et al. Addition of primary care-based retinal imaging technology to an existing eye care professional referral program increased the rate of surveillance and treatment of diabetic retinopathy. *Diabetes Care* 2005; 28(2):318-22.
16. Hansen AB, Hartvig NV, Jensen MS et al. Diabetic retinopathy screening using digital non-mydratic fundus photography and automated image analysis. *Acta Ophthalmol Scand* 2004; 82(6):666-72.

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