*Extract from -* [*EBI\_Guidance\_List3\_0523.pdf (aomrc.org.uk)*](https://ebi.aomrc.org.uk/wp-content/uploads/2023/03/EBI_Guidance_List3_0523.pdf)

*Published in 2023*

**Glaucoma referral criteria**

Currently, glaucoma (a common eye condition where the optic nerve, which connects the eye to the brain, becomes damaged, leading to sight loss) is usually found in people during routine sight tests by optometrists (opticians). The optometrist will then refer them to a hospital. However, the accuracy of sight tests for ruling out glaucoma is poor. This can create unnecessary anxiety for patients and unwarranted referrals. Evidence shows that additional clinical assessment by optometrists will improve the accuracy of referrals.

The EBI programme proposes that the pathway for the referral of glaucoma and related conditions (such as ocular hypertension [OHT] which is raised eye pressure without optic nerve damage) to a hospital eye service is consistent across England to include additional clinical assessments and repeat measurements performed by optometrists, as recommended by NICE NG81 These services are outside of the sight test and need to be locally commissioned.

**Clinical overview**

Glaucoma is a leading cause of irreversible blindness worldwide. In England, new glaucoma cases are detected in primary care via routine optometric sight tests. These are then referred to HES for monitoring and treatment. However, these sight tests have accuracy limitations for detecting or ruling out glaucoma and glaucoma-related conditions, resulting in a high percentage of false positive referrals to secondary care (up to 40% in certain cases). This causes unnecessary anxiety for patients who do not need referral and potential delays for those who do, risking avoidable blindness.

**Guidance**

This guidance applies to those 18 years and over.

Before referral for further investigation and diagnosis of glaucoma and related conditions, offer all of the following tests, which are separate from a sight test:

— Central visual field assessment using standard automated perimetry (full threshold or supra-threshold)

— Optic nerve assessment and fundus examination using stereoscopic slit lamp biomicroscopy (with pupil dilatation if necessary) and optical coherence tomography (OCT) or optic nerve head image if available.

— Intraocular pressure (IOP) measurement using Goldmann-type applanation tonometry

— Peripheral anterior chamber configuration and depth assessments or, if not available, or the person prefers, the van Herick test or Optical Coherence Tomography (OCT).

Before deciding to refer, consider repeating visual field assessment and IOP measurement on another occasion (repeat measures) to confirm a visual field defect or IOP of 24mmHg or more, unless clinical circumstances indicate urgent or emergency referral is needed.

Refer for further secondary care investigation and diagnosis of glaucoma and related conditions, after considering repeat measures, if:

— There is optic nerve head damage on stereoscopic slit lamp biomicroscopy

OR

— There is a visual field defect consistent with glaucoma OR — IOP is 24 mmHg or more using Goldmann-type applanation tonometry.

Please note that this guidance is intended as a standard threshold for access. However, if you/ your patient falls outside of these criteria, the option to apply for an Individual Funding Request is still available to you.

**Rationale for recommendation**

Ophthalmology is the busiest outpatient speciality in UK secondary care, with demand increasingly surpassing capacity. Monitoring and treating patients with glaucoma accounts for 20% of current ophthalmology outpatient activity. Over the next 10 (20) years glaucoma cases are predicted to rise exponentially; confirmed glaucoma diagnoses by 22% (44%), suspected glaucoma cases by 10% (18%) and OHT by 9% (16%).

Currently, new glaucoma cases are referred via routine optometric sight tests. However, evidence suggests there is poor sensitivity and specificity for detecting glaucoma and glaucoma-related conditions, resulting in a high percentage of false positive referrals to secondary care (up to 40% in certain cases). A variety of enhanced primary eye care services and referral filtering models have been developed to improve the accuracy of referrals. Referral filtering models range from 1) 'repeat measurement' schemes in which IOP measurement or visual field assessments, or both, are repeated at a separate visit by the referring optometrist to 2) enhanced case finding (more extensive tests than IOP measurements) undertaken by another optometrist, to 3) referral refinement, in which another optometrist who is specifically trained undertakes a more comprehensive set of tests defined by NICE NG81.