# How to stratify the risk or complexity for glaucoma to direct patients to appropriate clinics

## Sharing current practice

Ophthalmology is now the busiest outpatient specialty and demand is outstripping capacity. Patients are experiencing delays across the UK and this is leading to recurrent episodes of harm, particularly for glaucoma patients. National professional organisations and NHS transformation programmes recommend the use of:

- models of care incorporating referral refinement or step down care in the community
- the full range of multidisciplinary ophthalmic team, virtual (telemedicine) and consultant led care delivery
- that the choice of care setting, type and professional should be based on risk stratification.

However, currently there is no agreed system for how to undertake this risk stratification and which level of risk or complexity is suitable for which care delivery model.

Ideally, each regional system (STP, ICS etc) working with its local hospitals and providers, will develop an agreed clinical risk stratification system to direct patients to suitable risk and complexity stratified care models, in conjunction with all local stakeholders and clinicians. The exact details of how such a system will operate depends on the different models of available care delivery, and the measurement and mapping of risk to care setting or professional will depend on the local providers' and system's staffing, training, IT systems, internal processes and patient population.

This document summarises and amalgamates tools shared by a number of UKOA trusts which they are using already to try to direct patients to various models of care, particularly within the hospital delivered system.

**General Principles:**

- A patient's eye condition will start off with a certain risk level but this can change with time as more data is obtained and analysed
- A patient's eye condition can move from high to medium to low & vice versa during a lifetime of care
- Complexity and risk can be different- risk is about the risk of permanent visual loss rather than complexity e.g. complex patient having had two drainage procedures or secondary glaucoma
- Because most patients have two eyes, each eye can have different risk and the patient should be managed in line with the higher risk eye
- Clinical risk should be re-assessed at every visit
- At the completion of the consultation, the patient should be allocated a recommended follow up interval AND ALSO a judgement on clinical risk or complexity score or similar which allows clerical staff to understand which type of clinic to book.

**Factors to consider**

The following factors are commonly taken into account for individual patients when making decisions on suitability for differing clinic types, staffing and setting:

- Diagnosis
    - POAG, PACG, OHT, PAC (narrow angles), glaucoma suspect (suspicious discs or fields), complex or secondary glaucoma etc
    - One or both eyes affected
- Visual acuity – low levels of vision may affect ability to perform visual fields or may raise the level of individual risk of sight loss if disease progresses
- Visual field (VF) status – pattern of loss, mean deviation,
- Intraocular pressure (IOP) level
- Optic nerve/retinal nerve fibre layer (RNFL) status
- Corneal thickness
- Disease stage: early, moderate, advanced
- Disease stability based on rate of field and optic disc progression and/or control of IOP
- Previous glaucoma surgery or laser and how recently performed
- Patient factors
    - ethnicity
    - current age
    - age at diagnosis
    - learning/communication difficulties, reduced mental capacity
    - medication compliance issues
    - ability to comply with, or undertake good quality, tests e.g. unreliable or impossible VFs or poor disc images
- Ocular factors
    - only eye
    - co-morbidities and if stable or not
    - phakic/pseudophakic
    - myopia
- Other potentially relevant systemic diseases such as diabetes and migraine

**Suggested classification and relationship to clinic type**

Decisions for all cases should be at the discretion of the consultant and choice may need to be individualised for patients with specific or unusual clinical situations and taking all the above factors into consideration.

| **Low risk stable patients** |
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| **Technician led virtual clinic** with experienced glaucoma opinion remotely (consultant/senior glaucoma doctor, experienced autonomous non- medical advanced practice HCP with route to consultant opinion as required) |
| • Ocular hypertension on treatment with controlled IOP<br>• Glaucoma suspects<br>• Early glaucoma which is stable<br>• Moderate glaucoma which is stable at consultant discretion<br>• Advanced glaucoma which is stable at consultant discretion<br>• Pseudophakic PAC/G |
| **Exclusions:** Only eyes at discretion of consultant, ocular co-morbidities not managed elsewhere, inability to comply with tests (e.g. very frail/poor mobility, mental or learning difficulties, or very poor visual acuity inhibiting testing), unstable patients, high risk patients. |

| **Medium risk patients** |
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| **Non-consultant face to face clinic** with experienced glaucoma opinion remotely (optometrist, nurse, orthoptist, trainee doctors, SAS doctor experienced and trained in glaucoma care with route to consultant opinion as required) |
| • Young patient <50 years who are stable<br>• Afrocaribbean patients who are stable<br>• Only eyes which are stable<br>• Early glaucoma with unstable IOP or visual field<br>• Moderate glaucoma which is stable<br>• Moderate glaucoma which is unstable at consultant discretion<br>• Advanced glaucoma which is stable<br>• Advanced end stage glaucoma<br>• Post-surgery or laser glaucoma which is stable >1 year |
| **Exclusions:** Only eyes at discretion of consultant, ocular co-morbidities not managed elsewhere, inability to comply with tests (e.g. very frail/poor mobility, mental or learning difficulties, or very poor visual acuity inhibiting testing), unstable patients, high risk patients. |

| **High risk or complex patients** |
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| **Consultant led clinic** with doctors working alongside the multidisciplinary ophthalmic team (optometrist, nurse, orthoptist experienced and trained in glaucoma care) able to obtain immediate senior medical opinion |
| • Recent surgery<br>• Advanced glaucoma<br>• Unstable moderate or advanced glaucoma<br>• Unstable Afro-Caribbean patients<br>• Suspected neurological pathology<br>• Complex or secondary glaucoma<br>• Only eye<br>• Primary angle closure<br>• Learning/communication/mental capacity/frailty issues limiting tests or management<br>• Compliance issues<br>• Unmanaged or unstable ocular co-morbidities |
| **Exclusions**: Those suitable for non-consultant clinics, only eyes at discretion of consultant |

One straightforward way of defining is as follows, others more complex definitions exist.

**Unstable:** IOP not at target level, worsening optic disc or RNFL glaucoma features, VF rate of progression mean deviation (MD) >-2dB per year.

**Early glaucoma:** Unequivocal RNFL loss/ optic disc features and/or unequivocal, reproducible VF defect consistent with glaucoma with MD better than -6dB in either eye.

**Moderate glaucoma**: optic disc/ RNFL features consistent with glaucoma AND reproducible VF defect consistent with glaucoma, with MD between -6dB and -12dB in either eye.

**Advanced glaucoma**: optic disc/ RNFL features consistent with glaucoma AND reproducible VF defect consistent with glaucoma, with MD worse than -12dB in either eye.

**Other**

It is important to ensure that there are appropriate systems, ideally electronic, to measure and record risk to visual loss and permanent harm not only to indicate type of clinic but also to support the measuring, monitoring and managing outpatient follow up delays and to support failsafe mechanisms, compliant with the High Impact Interventions, GIRFT and RCOphth recommendations.

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