Insert Name Provider or Commissioner
Community Optometrist Cataract Care Pathway

Protocol for Community Optometrists

This service allows accredited optometrists to assess patients with cataract in the community and refer those who are visually disabled by cataract directly to secondary care/hospital eye service (HES).

The patient must have significant cataract affecting their vision and daily life and the patient must want surgery in compliance.
They must fulfil any local commissioner clinical thresholds.

CCG Clinical thresholds for elective cataract surgery

- **E.g. Patient has a best corrected visual acuity of 6/9 or worse in either the first or second eye**
  AND
- **Patient has impairment in lifestyle such as substantial effect on activities of daily living, leisure activities and risk of falls.**

Other indications for surgery are where surgery is undertaken for management of ocular co-morbidities:

- Glaucoma
- Cataract hinders disease management or monitoring eg. diabetic retinopathy, AMD, RVO, neuro-ophthalmic disorders, diabetic retinopathy screening
- Oculoplastic conditions where fellow eye requires closure as part of eyelid reconstruction
- Corneal disease where early cataract removal would reduce chance of losing corneal clarity eg Fuchs dystrophy or after corneal graft
- Corneal or conjunctival disease where delays might increase the risk of complications
- Severe anisometropia in patients who wear glasses
- Posterior subcapsular cataracts.

IT IS NICE GUIDANCE NOT TO HAVE SUCH THRESHOLDS

The accredited optometrist will undertake a pre-operative assessment, working to a specific protocol. The aim of the pre-operative assessment is to:

- Diagnose the cataract and ensure that the patient wants surgery using shared decision making tools
- Counsel the patient with verbal and written information about cataract surgery
- Identify any ocular co-morbidity that may limit the visual outcome of surgery
- Identify factors in the patient's medical, psychological or ocular state that may interfere with the ability to operate safely or to operate under local anaesthetic (See Appendix 1)
- Discuss refractive outcome eg if myopic, do they wish to retain some myopia

Referral is via an electronic system (Name of system) with a standard electronic form or via a standard digital form to be emailed or via a standard paper referral form and will be screened by a clinician in order to identify any patients who may require an ophthalmologist's examination prior to surgery (See Appendix 2 High Risk Cases).

Patients will attend a pre-operative assessment clinic shortly before the date of surgery, during which there will be a general health assessment, biometry will be performed and informed consent obtained, and the IOL chosen. In low risk cases this may be a non-medical led clinic.

The patient will meet the surgeon on the day of the surgery. The surgeon will check all the details, examine the patient and answer any final questions.

Following surgery, the patient will leave with an advice sheet, drops and emergency contact numbers.

All patients with no complications will attend an accredited optometrist for a post-operative assessment at 1-2 weeks after finishing their post-operative eye drops (usually 4-6 weeks post-op.

If there are any complications during surgery, the patient will be examined at the hospital clinic, timing to be determined by the surgeon.

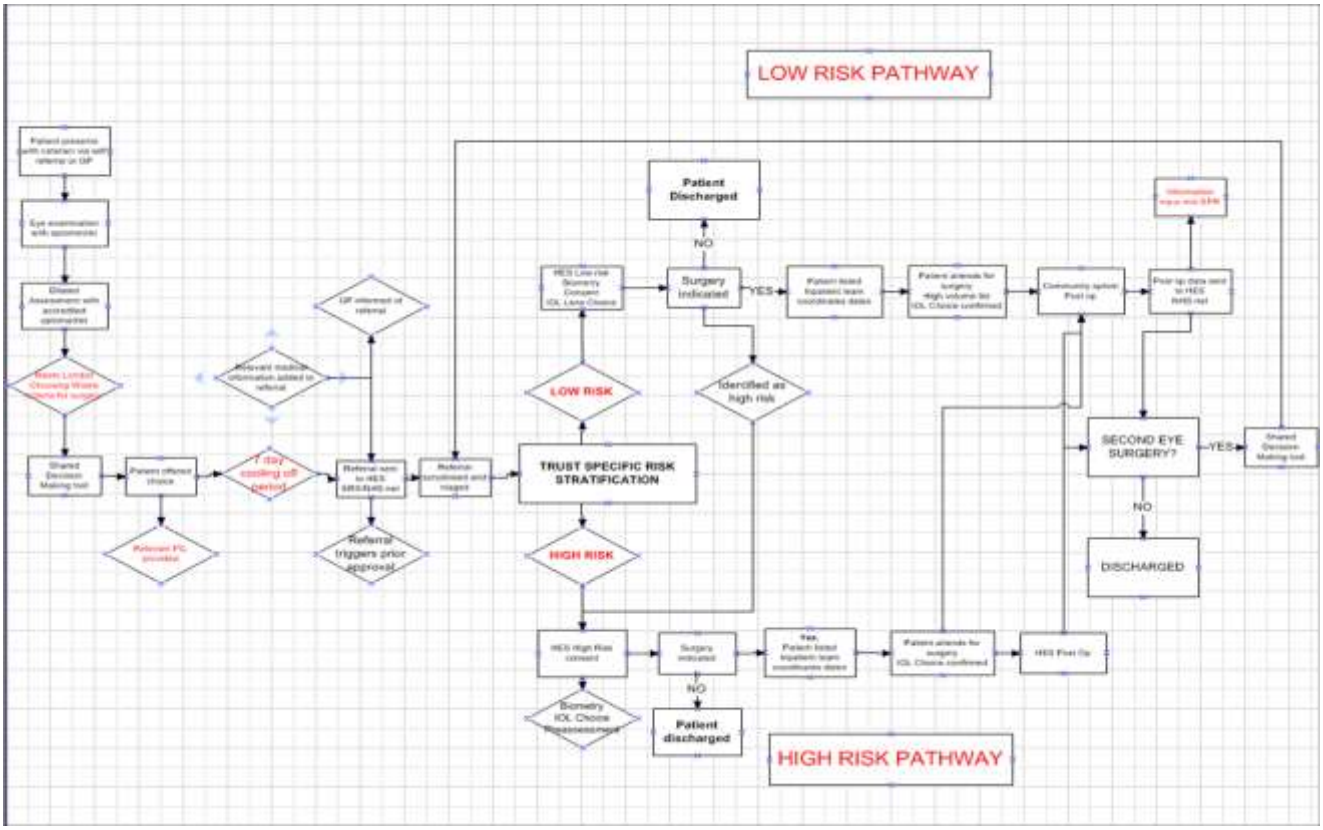
Some patients with other co-morbidities may need attendances in addition to their post-operative attendance at the accredited optometrist at an appropriate time interval.

The accredited optometrist will undertake a post-operative assessment, working to a specific protocol. The aim of the post-operative assessment is to:

- Review patient's post-operative history and any symptoms
- Undertake refraction and assess acuity
- Assess for any post-operative complications (See Appendix 3)
- Return outcome data to the hospital.

The patient can then be referred for their second eye operation if required, or discharged by the accredited optometrist.

Community Optometrist Cataract Pathway



PRE-OPERATIVE ASSESSMENT

History and Symptoms

Visual Symptoms

- General blur/reduced vision
- Glare
- Reduced night vision
- Multiple images
- Difficulty reading or other specific tasks
- Difficulty with mobility (steps/kerbs etc)

Previous Ophthalmic History

- Amblyopia/strabismus
- Glaucoma
- Diabetic Retinopathy
- Trauma
- Surgery or Laser

Medical History

- Record all medical conditions, ask patient to bring print out from GP
- Hypertension, ischaemic heart disease, TIA, stroke. Pls specify when.
- Diabetes
- COAD/Asthma
- Neck/back problems
- Severe mental/psychiatric problems including dementia, learning difficulties
- Hearing impairment/ language difficulties
- Uses wheel chair or poor mobility
- Can they lie flat for the operation?

Medication

- Record all systemic medication – ask patient to bring prescription or print out from GP
- Anti-coagulant medication eg warfarin, steroids, insulin
- Alpha blockers eg tamsulosin, doxazocin
- Eyedrops

Allergies

- Allergies to any medication, latex etc.

Social History

- Occupation
- Driver especially HGV drive
- Lives alone, dependents

Visual acuity

- Visual acuity unaided
- VA pinhole if necessary
- VA best corrected distance

Refraction

- Previous refraction or changing refraction due to cataract.
- Present refraction and BCVA

GP contact lens wearers should be advised that they must leave them out for 2 weeks prior to the pre-op assessment appointment, for soft contact lenses they must leave them out for 1 week.

Ophthalmic Assessment

Slit Lamp Examination of Anterior Segment

- Eye Lids e.g. significant blepharitis, entropion, ectropion
- Cornea: scars and opacities, careful look for guttatae/ endothelial changes,
- A/C Depth - Van Herick
- Pupil: adhesions, shape
- Any other abnormalities including careful look for. pseudoexfoliation

Intra-ocular pressure (& method used)
Pupil responses (incl RAPD)

Dilated Fundus Examination

- Pupil: degree of dilation
- Look again for pseudoexfoliation
- Lens: type and density of cataract (indicate if dense brown/white or no fundal view).
- Optic Disc – CD ratio, pallor etc
- Macula – signs of AMD, DR, ERM
- Fundus – any abnormalities

Any other abnormalities found

EXCLUSION CRITERIA

Please do not undertake a COCCP referral if the patient is clearly not eligible or suitable/ready for surgery.
We will not pay invoices for these patients.

Before Referral, please check:

Is the patient eligible for cataract surgery?

Ensure the patient fulfils the CCG criteria for surgery ie

- As per CCG, patient has a best corrected visual acuity of 6/9 or worse in either the first or second eye
  AND
- Patient has impairment in lifestyle such as substantial effect on activities of daily living, leisure activities and risk of falls.
  OR
- Has an ocular co-morbidity in the list above which requires surgery

- If not eligible but you think they may benefit from cataract surgery, or you detect an ophthalmic condition which requires assessment or treatment, refer the patient directly to the eye department and they will be booked to see an ophthalmologist or contact the patient's GP to consider an Individual Funding Request (IFR) application to the commissioners.

Does the patient want cataract surgery?

-Discuss the process, and the risks and benefits of surgery
-Undertake the shared decision making process using the tool
-Reduced visual function caused by cataract must be interfering with daily activities in order to be considered for surgery
- Only refer if they want surgery

Identify potential problems for tolerating local anaesthetic surgery:

-Are they able to co-operate & communicate for local anaesthetic (lie flat & keep still and follow instructions for 30 mins etc)?
-Any problems with positioning (eg back, neck, breathing, cough)?
-Are there any significant communication/comprehension/anxiety concerns?
-Patient requesting sedation or GA

Patient information

-Discuss visual needs of patient, refractive aims and record (default is emmetropia to very low myopia e.g. -0.2 to -0.6D). Those who may require toric lenses or monovision will be seen in the hospital consultant clinic before decision made for surgery.
-Offer choice of hospital provider: *note that if patient is already under a provider for a chronic eye condition e.g. glaucoma or wet AMD or DR, do NOT send routinely to another provider for cataract surgery. Either refer to current hospital or liaise with current hospital before referring elsewhere to ensure they feel it is safe to refer and to facilitate clinical information sharing.*
-Provide information leaflet
-Advise about referral process
-Ask patient to agree to be referred for surgery - Advise any high risk patient they will usually be seen in hospital eye clinic before making a final decision for surgery with an ophthalmic surgeon

Provide information on hospital requirements:
Interpreter required: if so detail language
Transport required
Surgery for first or second eye
Surgery for right eye or left eye (usually do worse VA eye first or otherwise which one patient wants)

To Refer for Surgery

Complete the electronic or paper Referral for Cataract Surgery form but do not send
Advise patient they have a 1 week “cooling off” period. During this time if they have not got all their medical and medication detail, they can obtain these from the GP and drop them in to you to enter on the form.
If you do not hear back from the patient in 1 week, complete the referral form and make the referral.

Retain a copy of the assessment for your own records.

POST-OPERATIVE ASSESSMENT (1-2 weeks after finishing their post-operative eye drops, usually 4-6 weeks post-op).

History and Symptoms

Perception of visual improvement
Any significant problems/symptoms e.g. pain or discomfort, visual problems
Compliance with drops (standard drop regime lasts 4 weeks, dark eyes may be given a longer course)

Refraction and Acuities

Unaided Acuities
Refraction and BCVA (Distance and Near)

Slit Lamp examination

- Degree of redness
- Wound
- Corneal clarity/oedema
- Degree iritis/AC activity
- IOL Position
- Significant posterior capsule opacity
- Pupil/Iris abnormalities
- IOP (and method used)
- Fundoscopy usually undilated
- Dilated fundoscopy if vision not satisfactory, if symptoms warrant (e.g flashes and floater) or posterior segment pathology known or suspected requires detailed assessment.

Refer for second eye if required
Ensure pre-operative assessment data all completed and recorded
Need to undertake again reminder of risks and benefits, and shared decision making tool
Please indicate if patient needs to be listed for the 2nd eye.
Please discuss and indicate refractive aims for the 2nd eye.

To Return Post-Operative Assessment Form

Complete the (paper or online or email) postoperative form and if referring for second eye surgery, any outstanding information requirements.
Maintain a copy of the assessment for your own records.

To Refer back to Eye Clinic

Patients should be referred back to the Eye Clinic if there are signs of undiagnosed pathology or unexpected abnormalities. Anything other than emergency (same day) or urgent (within 1 week) referrals can be referred using the post-op assessment form.

Emergency

- Suspected endophthalmitis

Urgent

- Significant refractive surprise
- Retinal detachment/retinal tear/flashes and floaters
- Wound closure problems
- Marked or moderate iritis
- IOP>28mmHg
- Corneal oedema
- Unexpected IOL displacement
- Severe diabetic retinopathy
- Cystoid macular oedema
- Drop allergy

Routine

- Mild iritis
- Significant symptomatic PCO
- Patient not happy with vision/refractive outcome/comfort following discussion with community optometrist

For urgent enquiries:

Office hours please contact XXXXXXXXXXXXXXXXXXX

Out of hours contact XXXXXXXXXXXXXXXXXXXXXXX

Optometrist helpline / email for routine enquiries XXXXXXXXXXXXXXXXXXX

Appendix 1: Relevant preoperative factors to be identified

Factors that may interfere with the patient keeping still or lying flat or tolerating a local anaesthetic (or may interfere with the capacity to consent in mental or psychiatric issues)

- Anxiety, dementia, learning difficulties, psychiatric problems, severe deafness, comprehension problems, communication problems, claustrophobia
- Cough, breathing problems/chest disease (eg asthma, chronic bronchitis), severe heart disease, neck stiffness, spinal curvature (Ask patient can you lie flat and still for 30 mins?)
- Young patients (<50 years)
- Patient requests general anaesthesia or sedation

Factors we need to be aware of before booking on local anaesthetic list

- On Alpha Blockers
- Lid squeezers

Medical factors that may make it unsafe or difficult to perform surgery

- Severe angina, severe chest disease, uncontrolled diabetes, uncontrolled hypertension, recent heart attack or stroke
- On warfarin or other anticoagulants
- Any active infection (eg leg ulcer, urinary tract infection)

Conditions of the eye that may limit the visual outcome

- Glaucoma
- Age-related macular degeneration
- Diabetic retinopathy
- Previous retinal detachment
- Amblyopia
- Optic atrophy
- Dense cataract precluding visualisation of the fundus
- Previous eye trauma

Conditions of the eye that may interfere with the ability to do the operation safely

- Blepharitis
- Lid position abnormalities especially entropion
- Corneal opacities
- Corneal guttatae or Fuch’s endothelial dystrophy
- Shallow anterior chamber
- Pseudoexfoliation
- Poorly dilating pupil
- Posteior synechiae or previous uveitis
- White cataract
- Very dense brown nuclear cataract
- High myopia or hypermetropia
- Previous major eye surgery

Appendix 2: HIGH RISK CRITERIA
Require review in hospital eye clinic

- Previous refractive surgery or laser
- High myopia / High hypermetropia (+/-5.00DS), axial length <21mm, > 28mm
- Shallow AC <2.3mm
- Previous retinal detachment surgery or vitrectomy
- Multiple intravitreal injections
- Other major eye surgery e.g. corneal graft, trabeculectomy, tube
- Significant corneal disease (eg keratoconus), opacity or scarring, Fuchs dystrophy or multiple guttatae
- Eye lid problems eg entropion, ectropion, trichiasis, severe blepharitis, marked epiphora
- Other serious or undiagnosed ocular pathology eg uncontrolled glaucoma, marked macular degeneration, active diabetic retinopathy etc
- Dense or white cataract, no fundal view
- Posterior polar cataract
- Previous history of eye trauma (risk phacodonesis/weak zonules/very deep AC etc)
- Pseudoexfoliation
- Small pupil (<6mm dilated), posterior synechiae
- Head tremor, nystagmus
- Dementia, learning disability or other significant reduced mental capacity (inability to consent for themselves)
- Young Patient (<50years)
- Issues potentially significantly compromising positioning (eg unable to lie flat), communication (eg deafness, language difficulties) or co-operation (e.g highly anxious, psychiatric disease, dementia) with surgery
- Complications in first eye surgery
- Only seeing eye (vision irreversibly less than 6/12 in worse seeing eye)
- On tamsulosin, doxazocin or other alphablockers
- Patient requesting monovision
- Patient with astigmatism of >2.0D (may require toric lens)
- High visual needs e.g. pilot
- Other complicating factors at discretion of optometrist or surgical provider

Appendix 3: Post-operative problems requiring referral to hospital

Refer: Emergency- immediate

- **Endophthalmitis**

Infection inside the globe. Presents as painful, red eye with poor vision. Severe iritis usually with hypopyon. Opaque vitreous with poor view of fundus

Refer: Urgent- let us know the same day

- **Marked or moderate iritis**

Uncomfortable and slight blurring of vision. Ciliary injection, marked cells and flare. Sometimes a problem as tapering drops. Can be start of endophthalmitis

- **Significant Wound Closure Problems**

May be asymptomatic.
Wound edges may not seal together which presents as a wound gape, a wound plugged with prolapsed iris tissue, or may be Seidel test +ve.
If severe leakage from eye, IOP will be low and AC shallow.

- **Retinal detachment and retinal tear**

Presents as flashes and floaters, and possibly visual field loss or reduction in acuity (if retina detached). Maybe a PVD, but need referring if shortly after cataract surgery.
Higher risk in high myopes, and those with serious operative complications.

- **Raised IOP >28mmHg**

Usually occurs in first few days following surgery, but can persist longer. If severe may be associated with reduced acuity and corneal oedema

- **Corneal oedema**

Presents as blurred vision and corneal opacity with sometimes visibly increased corneal thickness and Descemet's membrane folds. Mild corneal oedema is common in first few weeks following surgery. Usually resolves over time.
Must ensure not caused by raised IOP. Rarely does not recover and requires corneal graft.

- **Drop allergy**

Presents as sore, itchy red eye +/- skin rash on lids

- **IOL displacement**

Presents as reduced vision, increased astigmatism and monocular diplopia. IOL may be partially or completely displaced from central position across the pupil (up/down or occasionally forwards/backwards). May see part of the IOL in front of pupil/iris, or iris trapped behind part of IOL. Pupil may be distorted. More obvious with dilated pupil

- **Cystoid macular oedema**

Presents as blurred vision, usually delayed onset after surgery. VA reduced, may be Amsler distortion, and swelling or cysts visible at macula. More common in diabetic, even if no retinopathy.

- **Deteriorating diabetic retinopathy**

Diabetic retinopathy can sometimes deteriorate rapidly after surgery, even to the point of frank maculopathy or new vessels requiring laser treatment.

Refer: Routinely

- **Very mild iritis.**

Very occasional cell can occur once stop drops. If asymptomatic and the examination seems satisfactory usually nothing seriously wrong.

- **Posterior capsular opacification**

The commonest complication causes reduction in vision and loss of transparency behind the IOL. Usually occurs after several months – years, but occasionally occurs early. Can be treated with simple laser therapy if significant symptoms and opacity. **All patients being discharged from care should be warned of the possibility of this complication.**

- **Significant Refractive Surprise**

Patient's refraction does not match the predicted outcome, or there is significant unplanned anisometropia. Anisometropia in between surgery for first and second eye is common.