

The ROYAL COLLEGE of
OPHTHALMOLOGISTS

The Way Forward

Options to help meet demand for the current and future care of patients with eye disease

Cataract

This summary leaflet provides a quick reference guide to the options and practical steps outlined in the full report document available on the RCOphth website.

The Way Forward was commissioned by the RCOphth to identify current methods of working and schemes devised by ophthalmology departments in the UK to help meet the increasing demand on ophthalmic services. The **information aims to offer a helpful resource for members who are seeking to develop their services to increase capacity.** The findings are based on more than **200 structured interviews offered to ophthalmology clinical leads** in all departments in the four home nations.

Models of care outlined in The Way Forward have, in general, grown rapidly through necessity because of the urgency of increased need in a climate of limited capacity. The majority of the schemes and new ways of working reported, have been successful and the benefits and limitations are highlighted to provide a realistic picture.*

This is one of four summary leaflets covering each of the particularly high volume areas of ophthalmic care:

- Cataract
- Glaucoma
- Medical retina – encompassing macular degeneration and diabetic eye disease
- Emergency eye care

More detailed report findings for each of these areas are available on the RCOphth website.**

The Way Forward can be shared amongst the ophthalmic community as a practical resource for the development of service redesign. The RCOphth will facilitate communication by putting members in touch with those who have contributed to The Way Forward and who will be able to offer further information and advice.

Professor Carrie MacEwen
President

Cataract

- 35% of people over 65 years old have visually significant cataract
- Cataract surgery is the commonest surgical procedure undertaken in the UK (more than 400,000 cases per annum)
- The demand for cataract services is predicted to rise by 25% over the next 10 years and by 50% over the next 20 years
- Only 10% of consultants interviewed indicated that they still use the traditional cataract pathway (Fig 1), with 90% having modified aspects of referral guidance, patient assessment, surgical flow and follow-up, and/or developed the roles of non-medical HCPs

Cataract Pathway

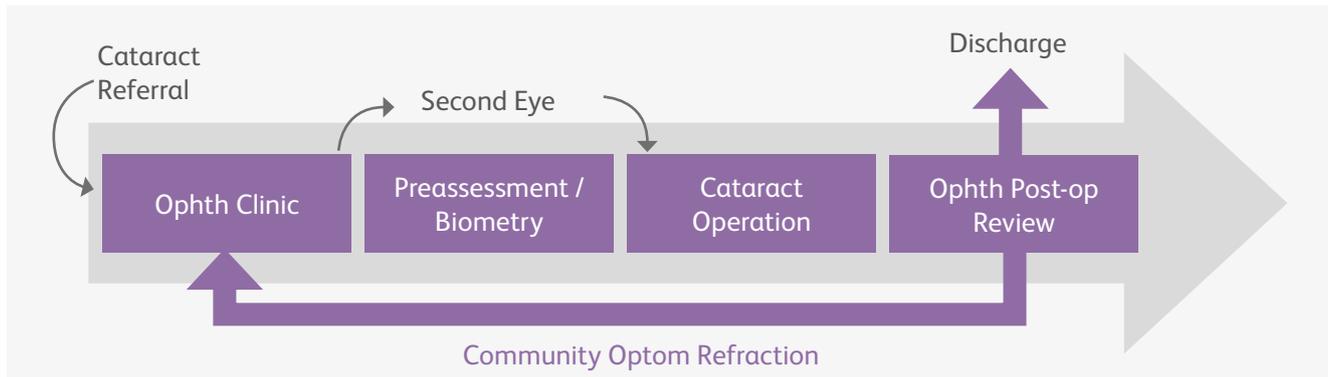


Figure 1: Traditional Cataract Pathway – 90% of those interviewed have updated this pathway

Improving referral criteria to reduce false positives

- Patients who attend the HES who do not wish or need surgery do not represent a good use of resources
- The development of referral guidance, bespoke referral forms and focused education for optometrists and GPs has improved the conversion rate to surgery, thereby improving efficiency
- Patients should be selected based on symptoms and clinical need rather than visual acuity and the following questions facilitate a high conversion rate by ensuring that those referred need and want an operation

1. Does the cataract affect the individual's sight and quality of life?
2. Does the patient understand the risks and wish to have surgery?

Benefits	Limitations
<ul style="list-style-type: none"> • A reduction in the number of patients referred specifically for surgery who are not listed for surgery: high conversion rates to surgery are reported in many schemes • Frees up clinic appointments • Improves patient experience 	<ul style="list-style-type: none"> • Significant resources are required to ensure all local optometrists / interested GPs are adequately trained

Adjusting HES cataract clinic protocols – Improving in-hospital flow

There are three broad clinic systems currently utilised in the UK to assess patients referred with cataract.

Traditional cataract clinic

Ophthalmologists examine and assess all patients for suitability of surgery. Biometry and admission assessment, for those who require surgery, by trained HCPs performed as part of same appointment or patient returns at later date.

Benefits	Limitations
<ul style="list-style-type: none"> • Patients assessed, risk stratified, listed and consented by an experienced ophthalmologist • Good training opportunities for junior staff 	<ul style="list-style-type: none"> • Lack of sufficient consultant ophthalmologists available to meet demand • May require two appointments

Mixed Economy cataract clinic

Utilisation of appropriately trained HCPs to perform initial examination and assessment but all patients seen and consented by an ophthalmologist at same appointment.

Benefits	Limitations
<ul style="list-style-type: none"> • Patients assessed by expanded team of HCPs • Consultant can examine a large number of patients in a short time • Patients are risk stratified, listed and consented by an experienced ophthalmologist • Good training opportunities for junior staff • Large numbers can be assessed in one clinic if sufficient HCP team available • Only one appointment required 	<ul style="list-style-type: none"> • Recruitment, training and retention of sufficient HCPs to permit high numbers that can be seen in a short time by the ophthalmologist

Ophthalmologist-light cataract clinic

Utilisation of trained HCPs to assess, risk stratify, commence the consent process and schedule patients for surgery. *Note: not all patients will be seen by an ophthalmologist in this clinic model and this is not consistent with RCOphth standards or commissioning guidelines unless patients receive a further appointment to see an ophthalmologist in advance of their admission for surgery.*

Benefits	Limitations
<ul style="list-style-type: none"> • Frees up ophthalmologists' clinic time • Increases number of patients undergoing assessment overall as clinics can take place when ophthalmologists are not available 	<ul style="list-style-type: none"> • RCOphth standards/commissioning guidelines state “<i>Although many aspects of preoperative assessment for cataract surgery can be delegated, it is very important that the final decision to operate and an individualised care plan is undertaken in advance of the patient’s admission by an appropriately qualified and skilled member of the cataract surgical team responsible for the patient’s operative care</i>” – an additional clinic visit may be necessary to achieve this • The inefficiency of ophthalmologists potentially meeting patients for the first time on day of surgery may: <ul style="list-style-type: none"> - interfere with theatre time if pre-operative “round” becomes a “clinic” due to increased time necessary to examine, discuss and consent the patients - reduce number of patients on each surgical list • Has implications for ophthalmologists in training unless actively involved in these clinics • Difficulty in recruitment, training and retention of suitable HCPs

Improving surgical flow and throughput

- Maximising utilisation of theatre and surgeon's time is an important factor to improve overall surgical throughput
- These are dependent on clinical case-mix; training needs, local staffing levels and skills-mix, and space and layout of departments
- The Way Forward initiative revealed a significant variation in the number of patients routinely placed on dedicated cataract lists with a median of 5-6 on 'training' lists (range 4-8) and 6-7 on 'consultant only' lists (range 4-12)
- Action on Cataracts (2000) and the 2015 RCOphth/Monitor report recommended one case every 30 minutes for routine training lists with the ability to offer slightly longer slots for very junior surgeons or very complex cases

Two patterns of list planning were identified

Time efficient high volume lists (>1 patient every 30 minutes)

- Consultant and experienced senior trainee surgeons
- Patients with limited co-morbidities

Benefits	Limitations
<ul style="list-style-type: none"> • Increased capacity • Reduced cost per patient • Reduced patient waiting time 	<ul style="list-style-type: none"> • Reliant on increased numbers of theatre/ward staff and well designed theatre and pre-theatre space • Potential for surgeon fatigue • Recruitment and retention of theatre staff may be an issue

Routine volume lists (approximately 1 patient every 30 minutes)

Routine cataract lists to encompass training and a variety of case complexities. Categorising patients regarding surgical difficulty using a grading system can assist in optimising the make-up of a list as longer slots may be required for more complex cases and to permit training of very inexperienced junior surgeons.

Benefits	Limitations
<ul style="list-style-type: none"> • Promotes efficient patient flow through surgical system <ul style="list-style-type: none"> - Train junior surgeons - Treat complex cases 	<ul style="list-style-type: none"> • Needs adequate levels of trained staff in all areas - which has been the rate limiting step in some regions

There is a requirement for both types of lists. Measures to improve efficiency are multi-factorial and include:

- Geography of surgical unit
 - keep pre-op patients close to theatre to reduce delays
- Staffing and skill-mix
 - sufficient ward staff to prepare patients efficiently for theatre
 - sufficient staff to permit safe and rapid patient turnaround
 - double scrubbing reduces time between patients and can increase a list by more than 50% with small investment
 - prepared theatre notes with box ticking
 - local anaesthetic trained support staff
- Patients
 - known to surgical teams and fully consented in advance
 - select straightforward cases – complex conditions not best suited
- Surgeons
 - stamina to perform high volume surgery that is demanding both physically and mentally
 - use simulated training to help development of basic surgical skill out-with the theatre environment
- Management
 - reward staff for efficient working

Post-operative care and discharge policies – who reviews the patients?

- Only 11% of interviewees in The Way Forward project reported that ophthalmologists routinely reviewed their cataract patients post-operatively
- 57% were reviewed by HCPs in the HES
- 27% were discharged directly to community optometrists

Models of post-operative care

Traditional hospital based post-operative clinics

Patients reviewed by surgeon or member of the surgical team

Benefits	Limitations
<ul style="list-style-type: none"> • Opportunity for surgeons and trainees to fully review and assess their own post-operative patients • Post-operative clinical outcomes including refraction available • Patients can be assessed, listed and consented for second eye surgery 	<ul style="list-style-type: none"> • Lack of sufficient ophthalmologist and appointment capacity available to meet increasing demand

Hospital based post-operative clinics

Staffed by appropriately trained HCPs

Benefits	Limitations
<ul style="list-style-type: none"> • Opportunity for surgeons and trainees to see a proportion of their own post-operative patients • Details of post-operative refraction available to assist second eye planning • Patients can be assessed and listed for second eye surgery when required • Frees up consultant time 	<ul style="list-style-type: none"> • Large number of out patient appointments required at HES with limited capacity • Training and retaining HCPs

Community Optometrist “clinics”

All routine post-operative cases seen at 4-6 weeks by local optometrist

Benefits	Limitations
<ul style="list-style-type: none"> • Frees up large numbers of appointments in the HES • Frees up consultant time • Location and time of appointment may be more convenient for patients • Well developed audit of post-operative patients can be developed from essential feedback 	<ul style="list-style-type: none"> • Ophthalmology trainees unable to review their post-operative patients • Communication and continuity of care – patient and optometrist must have direct line of communication to HES for problems/routine transfer of audit data • Training and retaining competences and maintaining up to date protocols • Potential financial implications of transfer of care

Second eye surgery – optional models

The majority of patients require surgery to their second eye, therefore mechanisms to ensure that this is done efficiently and effectively should be in place; respecting wishes of those who do not wish or need second eye surgery undergo unnecessary surgery.

Hospital based post-operative clinics – staffed by ophthalmologists and/or trained HCPs

Patients undergo first eye post-operative review at the HES and are listed for their second eye surgery by the ophthalmologist where indicated

Benefits	Limitations
<ul style="list-style-type: none"> Post-operative refraction information available and refractive target of second eye can be defined Patient can be consented, risk assessed and listed at clinic appointment following first eye post-operative assessment and patient's overall visual needs 	<ul style="list-style-type: none"> Requires large number of appointments at HES to see increasing numbers of post-operative cases

Community optometrist post-operative assessment

- Community optometrist relays outcome data to HES after first eye surgery review
- Can combine with listing for second eye at first eye surgery when appropriate (Fig 2)

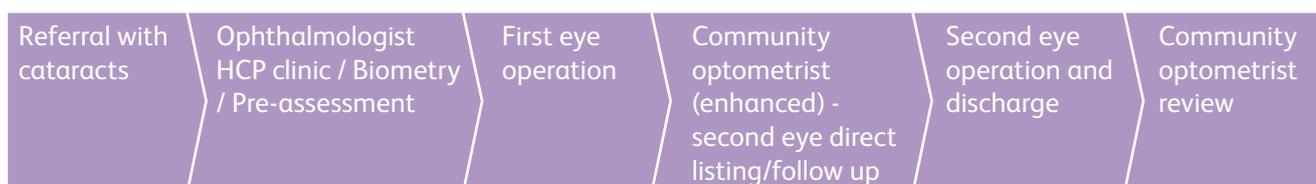


Figure 2: Direct listing for second eye surgery

Benefits	Limitations
<ul style="list-style-type: none"> Convenient for patient – reduced visits to HES – three for surgery to both eyes Post-operative refractive information should be available 	<ul style="list-style-type: none"> Patient may need to be consented and risk assessed at HES before surgery thus adding another visit to the pathway or on day of second eye surgery Time period for this pathway needs to be limited

Direct listing at time of first eye surgery

- Both eyes are listed at the initial visit and the first eye is reviewed on day of second eye surgery (Fig 3)
- Suitable for those patients who definitely require second eye surgery (visual symptoms, density of cataract, planned induced anisometropia, associated pathology)

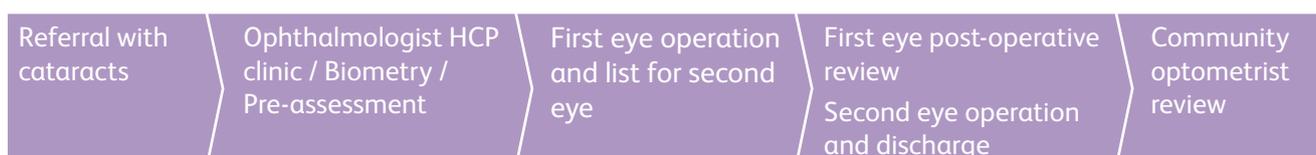


Figure 3: Both eyes listed at initial visit

Benefits	Limitations
<ul style="list-style-type: none"> Reduced number of visits to HES Patient aware of clear pathway with minimal delays 	<ul style="list-style-type: none"> Only useful for those who will definitely require second eye surgery May take up valuable theatre time for first eye post-op review on day of second eye surgery

Questions to consider for improving your services

- Meet with hospital managers. Outline the projections for the prevalence of cataract to rise by 25% in the next 10 years
- Map your current cataract pathway, then map what you would like it to look like. Create a stepwise programme of change to improve your service based on current availability of staff
- Audit cataract referrals – what proportion are listed for surgery? If it is less than 80%, your cataract clinic capacity is probably being sub-optimally utilised. There may be value in creating clearer written advice to referral sources that reflect RCOphth commissioning guidelines
- Consider the possibility of coming to an arrangement with local optometrists that incorporates training and communication arrangements so that second eye cataract patients can be discharged directly following their operation if the surgery has been uncomplicated and:
 - There were no postoperative complications with the first eye
 - There are no increased risk factors for post-operative complications
 - There are no other significant ocular co-morbidities
 - The patient has been through the procedure once and knows what to expect
 - Trainees – and consultants – get adequate exposure to post-operative care
- Remember:
 - There must be a mechanism of direct communication with the HES if the patient or optometrist needs to flag up problems
 - If your patients are currently being brought back to the hospital to see a HCP, this should free up their time for other patients
 - Tens of thousands of UK patients are discharged in this way annually and have been for many years without major systematic problems

Additional actions departments could do immediately with minor system alteration to improve service efficiency

- If more than 10% of your cataract specific operating lists have anaesthetist input, organise to collect patients requiring GA onto a dedicated lower volume list
- In cases where infiltrative anaesthesia may be desirable, this could be given by the ophthalmologist or an appropriately trained HCP

Factors to consider as part of a pathway redesign

- Training either HES HCPs or community optometrists to see routine post-operative patients following uncomplicated first eye surgery
- Start a “Higher Volume Cataract Surgery” work stream with theatre/ward/day case unit staff and managers. Engage the team in finding answers to the questions such as, “why are we only able to do 6 operations with a total surgery time of around 90 minutes on a four hour (240 minute) operating list?” and “How can we improve turnaround time?” Progressing this agenda will certainly require engagement of the full team. It may require expansion of that team, and may require reviewing theatre practices such as the setting up of trays and improving portering services

***Where schemes do not comply fully with RCOphth standards, this has been highlighted**

**** The more detailed report findings for each of the high volume areas of ophthalmic care are available at www.rcophth.ac.uk/standards-publications-research/the-way-forward/**

Members can email: wayforward@rcophth.ac.uk for more information

The Way Forward was commissioned on behalf of The Royal College of Ophthalmologists and appreciation is extended to everyone who contributed to the development of this important initiative. This includes all members who took part in the interviews conducted by Mr John Buchan in undertaking research for The Way Forward.

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