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Improving the delivery of cataract surgery in Scotland:

A guide for implementing Immediate Sequential Bilateral Cataract Surgery (ISBCS)

May 2026



Foreword

Cataracts represent the largest proportion of the population waiting to be seen and treated within ophthalmology services in NHS Scotland and the number of patients requiring cataract surgery is predicted to increase over the next few decades.

Innovation in how we deliver care is essential to improve the current situation as well as preparing for the increased demand expected. Where it is clinically appropriate, Immediate Sequential Bilateral Cataract Surgery (ISBCS) has huge potential to increase capacity and improve the patient experience.

I am inspired when I look at what has already been achieved by my pioneering colleagues in Scotland. NHS Tayside is one such example, which the Royal College of Ophthalmologists has featured as a case study of good practice – doubling surgical throughput, improving patient satisfaction and increasing training opportunities for resident doctors.

This guide should help ensure that units across Scotland can move towards emulating this, and be supported to consistently deliver a high-quality, safe ISBCS service. These must be grounded in the best available evidence, robust governance and clear patient-centred decision-making.

Ophthalmology departments will also need to have the right resourcing in place. This means appropriate theatre space and staffing of ophthalmologists, perioperative and other support staff. Improvement and continued movement towards digital systems to support care delivery, that integrate fully with existing digital infrastructure to allow more seamless sharing of images and patient information between community optometrists and hospital eye services.

As a clinical community, we now have a fantastic opportunity to work together to ensure ISBCS is implemented effectively and safely. This will allow us to realise huge gains for patient care – for our cataract patients directly, and also by boosting the sustainability of the whole comprehensive ophthalmology service.

Professor Ben Burton

President of the Royal College of Ophthalmologists

Introduction

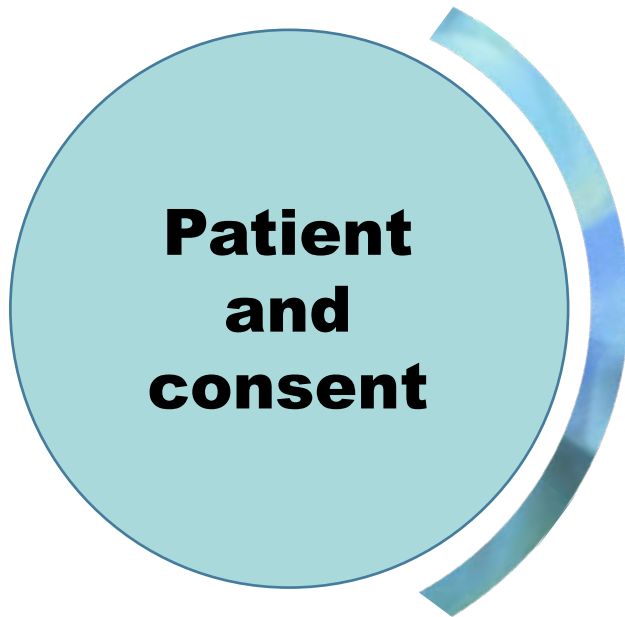


- Immediate Sequential Bilateral Cataract Surgery (ISBCS) is where both eyes are operated on as 2 separate procedures on the same day. This differs from Delayed Sequential Bilateral Cataract Surgery (DSBCS) where both eyes are operated on separately on different days.
- ISBCS is increasingly normalised in clinical practice where indications are met.
- Scotland is well placed to lead the nations of the UK in delivering change towards the estimated 60% uptake rate of ISBCS that public health studies predict.
- This guide has been developed as an additional resource to support the [Improving the Delivery of Cataract Surgery in Scotland: A Blueprint for Success](#) and focuses on the practicalities needed for implementation of ISBCS. It aims to provide the fastest, safe visual rehabilitation of the population, and encompasses the economic, environmental and efficiency benefits of bilateral surgery.
- This guide has been endorsed by the Royal College of Ophthalmologists.

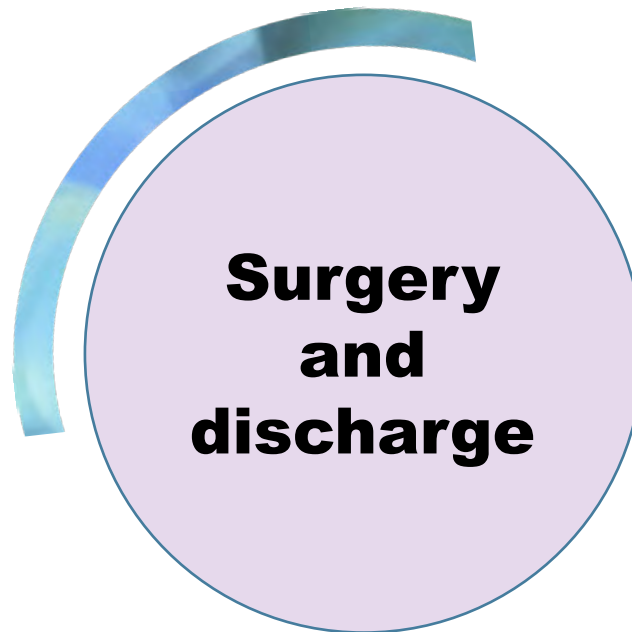


Considerations for ISBCS

Selection Criteria



Theatre Planning



Review and Evaluation





Patient Information

Information leaflet: recognise local information leaflets will continue to be used

- **Sample of ways to incorporate ISBCS vocabulary in pre-operative information literature in your hospital**
- “When you see the specialist at the hospital you may be offered surgery for the eye you feel is worst, first (with a plan to do the second eye at a later date if the cataract gets worse), or they may offer to do both eyes on the same day, one immediately after the other. Ask them about this option which suits about two thirds of people, but not everyone.”
- “If you have both eyes done the same day, the second will only be done if the first goes exactly as planned.
- Remember you can decide on the day not to proceed with the second if you change your mind. We take precautions to prevent cross infection meaning the risk of an infection to both eyes is one in 30 million.”



Patient Selection for ISBCS

Patient suitability

- The patient has bilateral cataracts and is capable of topical anaesthesia in at least the first eye.
- The patient has a reasonable expectation of there being no complications with surgery.
- The patient has an adequate comprehension of the risk versus benefit as part of the consent process.
- The patient understands surgery on the second eye will only proceed if surgery on the first eye is uncomplicated / managed and they are happy to continue.
- There is no contraindication to intracameral Cefuroxime.
- The patient's social circumstances are suitable. For example, discussion has taken place in relation to their home circumstances and whether they live alone.
- Patients can be listed for ISBCS from a one-stop clinic.



Exclusions for ISBCS

Absolute exclusions

- Patients who are immunocompromised. e.g. are currently undergoing chemotherapy or other immune modulating treatments or in the presence of diseases that can cause immunosuppression.
- There is a high risk of endothelial failure.
- History of uveitis.

Relative exclusions; which will be refined in accordance with the experience of the healthcare team

- Previous ocular trauma, zonulopathy e.g. Pseudoexfoliation (PXF) Syndrome
- Extremes of axial length (greater than 21 (< 21) and less than 27 (>27) to reduce the risk of refractive surprise, Pachychoroid Disease and Cystoid Macular Oedema (CMO).
- Previous refractive laser.
- Uncontrolled glaucoma.
- Active diabetic retinopathy or maculopathy or other retinal co-morbidity.
- Patient is resident in a nursing home.



Consent for ISBCS

Consent

Patients should be free to choose between ISBCS and Delayed Sequential Bilateral Cataract Surgery (DSBCS), which is when cataract surgery is undertaken on both eyes, but on separate days.

Consent example – local implementation to include elements of choice

We intend to improve sight, lower eye pressure or better see the back of the eye to care for retinal conditions. This is the achieved for 98% of patients. As with all surgery things can go wrong. The thin tissue that holds the cataract can break 1 in 300 times and usually this is not a problem but it can slow down the healing period and more rarely needs a second operation to secure the implant-lens. Infection can get inside the eye about one time in 5,000 and serious haemorrhage can affect the eye one time in 3,000. Slower recovery of vision after the operation from swelling at the back of the eye can affect about 3% of patients. Almost always this gets better with time, and with the eye drops we give you, but rarely it can fail to recover, leading to blurred sight below the driving standard.

Consent ISBCS

Is this the first you've heard of getting both eyes done on the same day or have you had time to give this some thought?

- I have had time to think about this option
- I am having 1 eye surgery: Right / Left

Modern cataract surgery is very successful, but it is possible for cataract surgery to leave you worse off than you are now. One person in every 1,000 will have visual impairment or severe visual impairment in the eye as a direct result of the operation. That is particularly serious when you're having both eyes done together. Remember that you do have the option of having one eye operation at a time.

Do you have any questions for me about that or about anything you have read, or want me to go into more detail on anything? Are you still happy for me to put you down for both eyes together?

- I understand that I can have the 2 eyes done on separate days
- I am not on any drugs that reduce the strength of my immune system (e.g. chemotherapy). If in doubt show your healthcare practitioner your medication list.
- I have had a chance to ask questions, and am aware that not going ahead is a legitimate option, but after consideration, I wish to proceed.



Surgery

Pre-operative planning

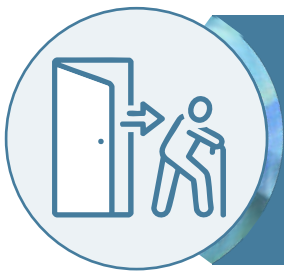
- Standardise the cataract tray sets. e.g. 5 instruments inclusive of drape scissors, speculum, micro-toothed forceps, capsulorhexis forceps and an instrument of choice.
- Whenever possible, separate batch numbers for all consumables, for example, Ophthalmic Viscosurgical Devices (OVD), Cefuroxime etc.
- Separate batches in left and right cupboards on arrival; beforehand simplifies day of surgery.
- There is no requirement to have separate instrument runs in central sterilisation unit autoclaves for right and left eyes.

Surgery

- Each eye should be treated as a completely separate surgical procedure i.e. nothing used during surgery on the first eye can be used for the second eye.

To avoid laterality errors;

- always do the right eye first regardless of acuity or
- mark brow with 1 and 2 relating to order – worst first in case complication on eye 1 prevents most needed eye 2.
- A surgical pause should always be performed before each eye regardless of any change to the perioperative team present.
- Only bring the intraocular lens (IOL) for the eye being operated on into theatre.
- Always use an intracameral antibiotic – if this is contraindicated the patient is unsuitable for ISBCS.



Recovery and Discharge

Post-operative

- Eye shields are not necessary, however these may be used in some cases, for example, following sub-tenon's injection.
- Drops to bring down the size of the pupil may be considered to reduce blurring, particularly for some patients, for example, those living with memory loss.
- There is no requirement for patients to wait any longer before going home.
- Patients and carers receive clear information regarding routine post-operative care as well as information regarding any potential post-operative complications. This information is the same for DSBCS and ISBCS.



Coding for ISBCS

Coding guidelines

Capture patient activity data for ISBCS on theatre administrative systems at the time of surgery, to inform the Discovery Dashboard. If using Opera, this can be done by recording the bilateral code Z94.1 as the third procedure code with “bilateral” stated as localisation.

For SMR clinical coding (Scottish Clinical Coding Standards), split the C75.1/C71. – pair as follows:

If the ISBCS is clinically stated to be performed using phacoemulsification (Phaco IoL) – it should be coded as:

- **Main operation**
C75.1 Insertion of prosthetic replacement for lens NEC / Z94.1 Bilateral operation.
- **Other operation 1**
C71.2 Phacoemulsification of lens / Z94.1 Bilateral operation.

If the ISBCS is clinically stated to be performed using unspecified extra-capsular lens extraction (ECLE IoL) – it should be coded as:

- **Main operation**
C75.1 Insertion of prosthetic replacement for lens NEC / Z94.1 Bilateral operation.
- **Other operation 1**
C71.9 Unspecified extracapsular extraction of lens / Z94.1 Bilateral operation.



Governance

Suggested actions

- Everyone involved in delivering ISBCS has read and fully understands these guidelines.
- Standardised processes are observed, and if there is an arrangement with another organisation or organisations, these processes are underpinned by a Standard Operating Procedure (SOP) or Memorandum of Understanding (MOU).
- There is documented evidence of staff training appropriate to the role being undertaken, and this is maintained through continued professional development.
- There is compliance with data submission on nationally agreed criteria for cataract for the purposes of measuring performance.
- There is a system in place for on-going local monitoring and review of data (qualitative and quantitative) for the purposes of improvement – for understanding how things are working and where further improvements are needed.
- A culture of learning from best practice, continuous quality improvement and audit is promoted to ensure any changes being made carry on showing positive results and have a lasting impact.
- A mechanism is established for providing regular feedback to referring optometrists, in particular to reduce any potential for inappropriate referral.
- A robust process is in place for recording and responding to and learning from any adverse events.

Useful Websites



- [ARHAI](#)
- [Association for Perioperative Practice \(AfPP\)](#)
- [Centre for Sustainable Delivery \(CfSD\)](#)
- [Getting It Right First Time \(GIRFT\)](#)
- [Healthcare Improvement Scotland \(HIS\)](#)
- [NHS Education for Scotland \(NES\)](#)
- [NHS Scotland Academy \(NHSSA\)](#)
- [Public Services Delivery Scotland \(PSD Scotland\)](#)
- [Realistic Medicine](#)
- [The College of Optometrists](#)
- [The Royal College of Ophthalmologists \(RCOphth\)](#)
- [The Royal College of Surgeons of Edinburgh | RCSEd](#)
- [The Scottish Government](#)
- [UK Ophthalmology Alliance \(UKOA\)](#)



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