Improving the Delivery of Cataract Surgery in Scotland;

A Blueprint for Success

Centre for Sustainable Delivery

NHS SCOTLAND

Overview

Professor Dame Carrie MacEwen, Ophthalmology Specialty Adviser to the Scottish Government leading the National Ophthalmology Workstream in Scotland described the situation in 2016 as, "a perfect storm of increased demand, caused by more eye disease in an ageing population requiring long- term care".

- Ophthalmology is one of the busiest services in the NHS, responding to a mixture of ophthalmic conditions that may be sight-threatening or sight-limiting, requiring one-off interventions (surgery) and long-term disease management (medical) requiring life-long monitoring. Patients with ophthalmic conditions are often vulnerable, and as the majority of demand is age-related, the demand is continually increasing as the population lives longer.
- Cataract surgery is the most successful operation delivered across NHS Scotland. It has a high success rate in improving visual function with low morbidity and mortality. In 2000, Action on Cataracts (NHS Executive) recommended at least 1 cataract every 30 minutes and encouraged high volume surgery. In 2017, the Royal College of Ophthalmologists also encouraged **high volume surgery of 10-14 procedures** in ring-fenced theatre sessions. This is being delivered in other areas of the UK, yet only happening in isolated pockets across NHS Scotland.
- This paper offers health boards a blueprint to deliver higher volume cataract surgery in operating theatres across Scotland; the aim being to deliver a minimum of 8 procedures per core 4-hour session or a minimum of one procedure every 30 minutes. Bespoke centres should implement high volume surgical throughput.

Background

The newly established Centre of Sustainable Delivery (CfSD) was set up to support Scotland in working towards a better healthcare system building on existing work around redesign and transformation by assisting the rapid roll-out of new techniques and innovations aimed at improving patient pathways, and offering assistance around tackling challenges across the health and care system.

- During 2021, the Scottish Government commissioned the CfSD to address the current challenges around cataract surgery in Scotland. In January 2022, the Scottish National Cataract SLWG was constituted with the aim of increasing the number of cataracts per core session. This SLWG comprised of multi-professional ophthalmology clinical, operational and managerial experts from across NHS Scotland, the Scottish Government and NHS Education for Scotland (NES) and was supported by Healthcare Improvement Scotland (HIS), clinical experts from NHS England, the Royal College of Ophthalmologists (RCOphth), and the Royal College of Surgeons, Edinburgh (RCSEd). Over a period of 4 meetings, this group has developed a blueprint for higher volume cataract surgery to be offered to health boards for implementation.
- The purpose of the SLWG was to agree a set of principles that could be implemented, on a sustainable basis, and which would assist in future proofing cataract surgical services for patients. This is to be achieved by building on existing work undertaken by the National Eyecare Workstream (2017), embedding recommendations from Health Board Ophthalmology Peer Reviews, implementing the Royal College of Ophthalmologists' guidelines for training and high volume service lists and adopting what good looks like from Health Boards across NHS Scotland and other parts the UK.

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National Eyecare Workstream

Improvements to the Cataract Pathway in Primary care Optometry

- NHS Education for Scotland (NES) developed a training programme to enable and support optometrists in the best ways to manage and refer patients with cataract.
- The opportunity of an additional appointment is now available to optometrists to ensure understanding and agreement of their patient to the cataract referral, why it is required and likely options.
- Almost all post-cataract review appointments are now conducted in community optometry. An Electronic Patient Record (EPR) will help with this feedback to hospital colleagues and data collection from 2024.
- Feedback is always appreciated by community optometrists from the Hospital Eye Service (HES) and this should be provided whenever a GP letter is sent as a minimum. Feedback is particularly important where the decision is made not to proceed to cataract surgery or where surgical outcomes are not as good as may have been expected.

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Values underpinning the Blueprint

- Using an evidence-based approach, the best clinical outcomes are achieved for patients
- Services are safe and sustainable
- Services are patient focused
- Services are efficient making best use of resources
- Services are affordable and provided within the funding available
- Services are accessible and provided as locally as possible
- Services are considerate to their environmental impact
- Services are adaptable achieving change over time

Enablers

- High Volume Cataract Mindset
- Co-production and Collaboration
- Clinical and senior management leadership and multi-disciplinary whole team approach
- Workforce development, training and education – establishing high-performing teams and opportunities for career progression
- Jointly agreed patient selection criteria, high volume cataract surgery pathways and SOPs
- Realistic Medicine – shared decision making and patient experience
- Data driven improvements
- Research and innovation including digital pathways
- Accountability – governance and reporting

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10 Steps to Success

1. Ensure any change is clinically led

- *Appointing a Cataract Lead within the Ophthalmology department will ensure that there is someone with dedicated responsibility for the cataract service.*

2. Understand the whole of the pathway

- *Redesigning one part of the pathway may inadvertently impact on another part of the pathway. Any pathway redesign needs to take account of the whole pathway.*

3. Involve the whole hospital team

- *Forming partnerships from the start with peripheral teams that support and supply theatres such as estates, facilities, infection control and pharmacy is essential, as these teams will also need to change and adapt to meet any new demand.*

4. Optimise the environment

- *Reviewing the theatre environment and how it is being used could potentially free up space which could be re-purposed for a value added step in the process e.g. next patient waiting area.*

5. Shrink the non-surgical time

- *Operating time averages 10-15 mins per case and is therefore not a rate-limiting step. Having better insight into the processes around the actual operating time (turnaround times) and looking for chances to standardise practice will capitalise the theatre flow. Do as much administrative preparation in advance.*

10 Steps to Success

6. Know how many staff you will need

- *Finding one surgeon is much easier than finding a team of theatre staff to support one surgeon. Map out how many staff are needed to deliver a high volume list, what role they will need to fulfil and ring-fence this resource.*

7. Create a high performing team

- *Developing career pathways for the whole theatre team, investing in training and education and identifying opportunities to upskill staff will maximise productivity. Specialised, motivated, well co-ordinated teams with clear roles, responsibilities and goals are needed in productive and efficient lists.*

8. Seek new ways to deliver surgical training

- *Focussing on individual surgical elements of a procedure instead of concentrating on the whole procedure can help provide a more intense and focused training experience with minimum impact on the overall procedure time particularly for those in the earlier years of training.*

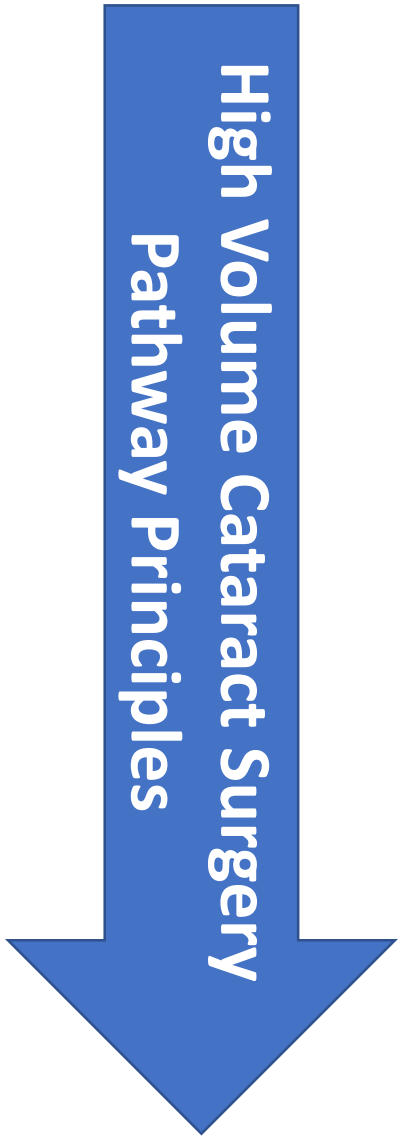
9. Leave no patient behind

- *Promoting equity of access will safeguard against patients being unintentionally disadvantaged. Some teams aggregate their high volume lists taking account of surgical difficulty, some teams identify a "golden patient" who will give the best chance of the list starting on time, and some teams run "friends and family" lists for patients who require extra support.*

10. Engage with the public

- *Engaging with the public pro-actively ensures that those interacting with and using the service are being listened to. Involve users within service redesign planning.*

Pathway Overview



- Referral from primary care
- Pre-operative assessment
- Theatre planning
- Pre-admission
- Surgery
- Recovery and Discharge
- Review

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Referral and Assessment

Referral from Primary Care

- *Standardised e-referral form with access to a compatible EPR*
- *Additional appointment under General Ophthalmic Services to discuss with patient (shared decision-making/Realistic Medicine)*
- *National CPD training package*
- *Future plan to deliver EPR product to support the whole pathway*
- *Feedback by HES when referral is avoidable (prevents referrals of no benefit in the future)*
- *One-stop clinical assessment*

Pre-operative Assessment

- *Direct listing by non-medical staff using a standardised protocol*
- *On-line/telephone pre-operative assessment – enhance pre-operative F2F clinical assessment*
- *Screen for medical co-morbidities*
- *Measurements e.g. BP and BM (blood sugars) – no repeat on day of surgery unless unwell*
- *Nurse-led biometry clinics – toric bank or equivalent*
- *Optimise pre-operative assessment – consider technology to enable remote assessments*
- *Offer of ISBCS where suitable – always consider if listing for GA*
- *Identification of any specific patient needs e.g. suitability, pre-habilitation, transport, social*
- *Pre-assessment checklist/booking form – relevant and focused "at a glance" data/EPR*
- *Consent*

Theatre Planning

- *Waiting list validation*
- *Risk stratification to define and optimise list case mix without any disadvantage or bias to any individual patients*
- *Reduce same day cancellations*

Surgery and Discharge

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Pre-admission

- *List and list order review – include confirmation of implant*
- *Confirmation of attendance/availability for surgery*
- *Pre-operative instructions, including installation of eye drops and arrival times*

Surgery

- *Allocation of a dedicated, competent and specialised team with clear roles and responsibilities*
- *Consent checks*
- *Eye marking*
- *Standardisation of theatre start times and knife to skin (eye) taking into account time for team briefs, checklists and biometry*
- *Theatre equipment/kit and provision for sterilisation*
- *Pre-populated theatre/operation notes – EPR/consider scribe if no EPR*
- *Provision for unexpected events and emergencies*

Recovery and Discharge

- *Clear arrangements and patient information for routine post-operative care and regarding post-operative complications*
- *Discharge packs*
- *Medications*
- *Follow-up*

Review

- *Follow-up – standardised follow-up protocol*
- *Embed patient surveys/questionnaires – PROMS*
- *Links back from community optometry to HES*
- *Share outcome data and complications via National Ophthalmology Database (NOD)*

Accountability

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Governance

- Agree measurement framework and collate/analyse on a routine basis - SOPs
- Benchmark with national data sets – national reporting, NOD, accountability
- Use quantitative and qualitative data to inform continuous improvement – audit, peer review
- Professional – competency, codes of conduct
- Risk – risk assessment, incident reporting
- Once for Scotland Electronic Patient Record (EPR)

NHS Scotland innovation examples

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- One stop cataract surgery service applicable to around two thirds of all Ayrshire and Arran cataract patients developed in strong partnership with optometrists allowing high volume lists delivery through well designed processes and easy access if needed to a 2 stop process.

NHS Ayrshire and Arran

- Introduced a Jack and Jill theatre set up as a key enabler for redesign of their service in the face of rising waiting times resulting in a 50% increase in throughput and reduction in waiting time.

NHS Fife

- Undertakes approximately one fifth of all cataract procedures in NHS Scotland and with the recent opening of a bespoke designed eye centre ongoing refinement of pathways, workforce and training environment are underway.

NHS Golden Jubilee

- Delivers outreach cataract surgery to the Western Isles, Caithness and Orkney. Strong proponents of Immediate Sequential Bilateral Cataract Surgery (ISBCS) and the benefits this brings primarily to the patient as well as the positive impact this has on contributors to climate change. Can do attitude and agile working with the remote and rural setting.

NHS Highland

- Excellent community optometry relationships and virtual asynchronous assessment with a high performing and motivated procedure team and co-designed process within the existing theatre footprint. This allows high volume lists to deliver 24-32 procedures of all complexity per day depending on the number of Immediate Sequential Bilateral Cataract Surgeries (ISBCS) undertaken. There is no reduction for ST1 training and resilience of the approach has been established for ST6s.

NHS Tayside

Further Resources

Action on Cataracts (NHS Executive) 2000

Cataracts in adults: management NICE guideline [NG77] (October 2017)

Cataract surgical training in high volume cataract settings, The Royal College of Ophthalmologists (December 2021)

High Flow Cataract Surgery Version 2.0, Ophthalmic Services Document, The Royal College of Ophthalmologists (January 2022)

MacEwen C. Eye risk from 'overstretched NHS', BBC News. 2016: http://www.bbc.co.uk/news/health-35743550

National Ophthalmology Workstream: Hospital Eye Services Progress, Priorities & Practical Actions for A Safe, Sustainable Service across Scotland (April 2017)

Ophthalmic Services Guidance, Restarting and Redesigning of Cataract Pathways in response to the COVID 19 pandemic, The Royal College of Ophthalmologists (August 2020)

Ophthalmology GIRFT Programme National Specialty Report, C MacEwen, A Davis and L Chang (December 2019)

The Way Forward: Cataract Options to help meet demand for the current and future care of patients with eye disease, The Royal College of Ophthalmologists (January 2017)

Workforce Guidance: Cataract Services and Workforce Calculator Tool, The Royal College of Ophthalmologists (March 2021)

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