Shared care and referral pathways
Part 3: See through cataract referral

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Cataract surgery is the most frequently undertaken surgical intervention in the UK, with day case rates of 98%-100% being achieved in most NHS ophthalmic surgical facilities. Cataract surgery in the UK is performed predominantly on elderly patients with over 90% being 60 years of age or older, and just under 60% being 75 years or older. Serious co-existing eye conditions such as glaucoma, age related macular degeneration (AMD), diabetic retinopathy or amblyopia, are present in 30% of patients having cataract surgery. This article provides an overview of cataract referral pathways and, in light of new NHS changes which came into effect on April 1 2013, ponders the implications to eye care practitioners.

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Learning objectives
Be able to work within a multi disciplinary team, knowing the roles of other health care professionals, including knowledge of cataract shared schemes (2.2.2.)
Be able to manage patients with cataract, including making decisions on referral, understanding referral pathways and HES management (6.1.6.)

About the author
Chris Steele is consultant optometrist, head of optometry at Sunderland Eye Infirmary. Over the past 19 years he has developed a wide range of extended roles involving hospital optometrists undertaking cataract, anterior segment, diabetes, glaucoma, paediatrics and medical retina case loads. He has authored over 50 publications on topics including glaucoma, diabetes, specialist medical contact lenses, refractive surgery and clinical risk management, and has undertaken many presentations both nationally and internationally. Chris was a member of the NICE Glaucoma Guideline Development Group from 2007 to 2009, which produced the NICE glaucoma guidelines published in 2009.

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The Department of Health’s (DoH) ‘Action on Cataracts’ publication1 and the Royal College of Ophthalmologists’ Cataract Surgery Guidelines2 have greatly assisted ophthalmology units to improve the quality and standards for cataract patients. Large, well conducted observational studies consistently provide evidence for the clinical effectiveness of cataract extraction in routine practice, and demonstrable improvement in reported outcomes in patients with and without additional ocular conditions.3

‘Action on Cataracts’

The DoH’s ‘Action on Cataracts’ report led to a nationwide revolution in the way in which the patient-pathway for cataract surgery was to be re-organised. Prior to 2000, unacceptably long waiting times for cataract surgery were common, with some waiting up to two years before receiving treatment. However, within five years there had been huge gains in productivity of cataract services and, despite a steady increase in the numbers of elderly people in the population, waiting times for surgery fell dramatically. The gains in productivity were achieved almost entirely by increases in throughput by NHS clinical teams rather than by the provision of additional capacity in independent sector treatment centres.

‘Action on Cataracts’ established best practice guidance and some straightforward eligibility criteria which when fully implemented would prevent situations where people experienced a reduction in their quality of life (QoL) owing to treatable cataracts. The guidance also ensured that people did not undergo unnecessary surgery. ‘Action on Cataracts’ did not establish a VA threshold, but instead employed three basic criteria for cataract surgery eligibility:4
1. The cataract, as the main cause, affects the individual’s sight
2. The reduction in the patient’s sight has a negative impact on their QoL
3. The patient understands the risks and agrees to have surgery

‘Action on Cataracts’ supported the increased role of the optometrist in cataract care pathways. It recommended the introduction of locally agreed direct referral pathways between ophthalmologists and optometrists, but keeping the GP informed. It was also recommended that the number of hospital visits could be reduced by combining the initial diagnostic visit and pre-operative assessment into one visit, coupled with a reduction in the amount of post-operative follow-up care (see later).

The NHS Plan and the role for external healthcare providers

The NHS Plan (2000) set out a 10-year strategy aimed at building a more responsive and more patient-centred NHS with uniform standards of care and access.5 Central to the strategy was a staged reduction in the time that patients wait for surgery, for example cataract down to six months in 2005 and eventually a maximum waiting time from referral to definitive treatment of 18 weeks, with a guaranteed choice of providers, including those from the independent sector.

Another Government paper paved the way for a rapid increase in elective surgical capacity in the UK by awarding contracts to companies to perform elective surgery, such as cataract, within NHS premises (usually at weekends), in mobile operating theatres or fixed treatment centres.6 The use of these independent sector treatment centres proved highly controversial and very expensive because of contracts that were awarded based on fixed fees rather than volume of work completed, which actually turned out to be very low. Many of these centres experienced abnormally high complication rates and continuity of care issues. With this experience in mind, current health policy continues to encourage a plurality of providers for elective surgical care, including non-NHS providers.

Department of Health ‘hospital episode statistics’

DoH ‘hospital episode statistics’ show that the number of cataract operations peaked in 2010 with a total of 350,602 compared with approximately 201,000 in 1998/9 prior to ‘Action on Cataracts.’ In 2011, this data showed a sudden fall in the number of cataract treatments performed in England to 338,565. The main reason for this has been blamed on crudely applied, ill-thoughtout spending cuts within the NHS.

NHS budgetary challenges and cataract surgery rationing

Since 2008, and against this background of...
enormous budgetary challenges and spending cuts facing the NHS, many of those responsible for commissioning healthcare arbitrarily decided that cataract surgery was being undertaken too readily on people without significant visual disability. Although there are significant variations in the rates of cataract surgery between different areas of the country, as demonstrated by the Atlas of Variation, there is very little evidence to support the view that cataract surgery is undertaken unnecessarily.

It has been the Government’s stated policy that cuts to frontline services should always be avoided. Controversially cutting access to cataract surgery has therefore been reported as a particularly inappropriate course of action owing to the benefits to patients and its proven cost-effectiveness in the longer term.8

In 2011 the RNIB submitted a Freedom of Information request to all primary care trusts (PCTs) in England, asking them to reveal any policies which were in place to control access to cataract services.9 A total of 133 PCTs replied, of which almost two thirds had imposed thresholds for cataract surgery which were partly based on VA, outside which they would not fund the procedure.

It is well recognised that certain types of cataract (for example posterior sub-capsular – Figure 1) can leave patients’ vision apparently unaffected according to VA measurement alone, but these can dramatically reduce sight in certain situations for example glare from sunlight or headlights while driving. Excluding such patients from surgery, because their vision is ‘too good’ according to VA attainment levels, might cause significant danger on the roads and even loss of livelihoods for many patients. A patient whose sight is restricted by a cataract will, at some stage, absolutely need surgery. Introducing such arbitrary VA thresholds, therefore, often only delays cataract surgery anyway, resulting in a false economy. This short-term saving in delaying cataract surgery could lead to older people having surgery anyway, resulting in a false economy. The proportion of referrals to the Hospital Eye Service (HES) from optometrists has been increasing in recent years (39% in 1988; 48% in 1999; 72% in 2010) with optometric referrals being mainly for cataract and posterior capsular opacification (PCO – Figure 2) (27%), followed by glaucoma or suspect glaucoma (20%) and diabetic retinopathy (10%).10 In contrast, GPs mainly refer patients with anterior segment disorders, particularly lid lesions, based on direct observation and symptoms.

Studies have demonstrated that optometric direct cataract referrals provide better information on objectively measured vision and better delivery of pre-operative counselling. In contrast, traditional GP referrals contain better medical history, drug information, and details of personal circumstances. In one recent study, cataract surgery operative (conversion) rates were higher for the optometric direct referrals relative to GP only referrals (87% compared with 69%).11

Emerging local enhanced cataract referral pathways

Throughout the UK, community optometric practices are successfully and safely delivering local enhanced services in primary care with high levels of patient satisfaction, as part of local integrated pathways. Cataract enhanced services, partly as a result of Action on Cataracts, are amongst the more straightforward systems to implement. They are well liked by patients and their effectiveness in reducing the number of hospital visits has been clearly demonstrated.

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For those practitioners working in local direct cataract referral pathways, it is essential that participating optometrists provide all relevant details for every referral to the HES. Consequently, all schemes have devised standardised referral forms, which have led to improved referral quality.

Co-managed care in cataract pathways has provided ophthalmologists with more time to treat greater numbers of patients with day-case cataract surgery. Cataract patients highly rate co-managed care pathways even where there is no or minimal pre- or post-operative contact with ophthalmologists.12

The role of LOCSU in the new NHS April 2013

According to the LOCSU website, LOCSU’s main purpose is to ‘support Local and Regional Optical Committees to increase the role of optometrists and opticians in delivering high quality eye care services in the community and in improving the eye health of the local population.’13 The overall changes currently in progress for healthcare in England are probably the most significant since the inception of the NHS. In order to meet the challenges and maximise opportunities for the optometry profession, it is vital that Local and Regional Optical Committees (LOCs and ROCs) are equipped to cope with this new emerging NHS structure. Increasingly LOCs/ROC are being expected to provide advice and support to Commissioners, Health and Wellbeing Boards (Health Boards in Wales) and other stakeholders in the redesigning of local eye care pathways. The new NHS will expect improved outcomes and better value from all providers, and LOCSU will play an important role in the shaping of future services with the effective rolling out of existing successful local services to much wider areas.

Pre- and post-operative cataract enhanced service pathway (LOCSU)

The aims of any new or re-designed cataract referral pathway should be to:

- Reduce unnecessary referrals to the HES
- Eliminate unnecessary visits to the GP
- Reduce patient anxiety and increase capacity within the overburdened HES
- Provide accurate, appropriate referrals with high conversion rates to surgery
- Provide a more cost effective service with a greater number of patients being managed within the primary care setting

Cataract management is a multi-
professional process involving ophthalmologists, optometrists, nurses and technicians. Although cataract surgery is performed by an ophthalmic surgeon, most of the pre- and post-operative care may be undertaken by other suitably trained and supervised healthcare professionals. The decision on whether to proceed with surgery should always be made by the patient in discussion with an ophthalmologist or other practitioner for example an experienced optometrist to whom the responsibility for the diagnosis and management has been delegated by the ophthalmologist. According to the Royal College of Ophthalmologists’ cataract surgery guidelines, the recommended minimum steps in a direct referral cataract pathway are as discussed below.

Step 1: Referral
Usually a routine GOS (or domiciliary for housebound patients) sight test or private sight test will reveal the presence of cataract which can then be discussed with the patient. Following this initial consultation, referral for cataract surgery can be initiated either by the optometrist or GP. Action on Cataracts’ suggested that direct optometrist referral according to locally agreed protocols be followed. The DoH National Eye Care Plan also proposed this as the preferred referral method.14

Whatever method of referral is used, there are important underlying principles to consider:
• The patient should have sufficient cataract to account for the visual symptoms (if not, then consider other co-morbidity for example macular disease, corneal scarring)
• The cataract should affect the patient’s lifestyle
• The risks and benefits of surgery should be discussed with the patient and relevant written information supplied
• The patient should wish to undergo cataract surgery
• This information together with a report from a recent sight test should form the minimum data on the standardised (locally agreed) direct referral form.

Patients who do not meet all of the above criteria should not be automatically disregarded. Patients with co-morbidity who might appreciate only slight benefit from surgery may wish to consult with an ophthalmologist to discuss their case. Patients with lifestyle impairment owing to cataract who do not complain should, if necessary, be encouraged to consider cataract surgery – particularly those who live alone or act as carers. Cataract referrals should usually be sent routinely, unless there is other co-existing eye disease which may require more urgent attention.

Step 2: Diagnostic and pre-operative assessment
Under the recently revised LOCSU pre- and post-operative cataract pathway,15 a diagnostic assessment undertaken by the optometrist in practice is recommended. This would include thorough fundus examination following pupil dilation, time to explain cataract surgery in greater detail with the patient, and also a discussion of treatment provider options.

The latest Royal College of Ophthalmologists cataract surgery guidelines recommend that the diagnostic and pre-operative assessment should be combined into one outpatient (HES) appointment once a patient is referred. The purpose of the pre-operative assessment is to ensure that the patient is fit for surgery and to instigate a care plan. At Sunderland Eye Infirmary for example, trained hospital optometrists undertake this role in conjunction with nursing staff who undertake the biometry and surgical care planning. Biometry allows the type and power of the intraocular lens (IOL) to be selected, as well as discussion of any refractive surgical procedure. The advantage of this set up is that
the hospital optometrists have direct access to biometry and other clinical investigations, such as optical coherence tomography (OCT) and ultrasound at this diagnostic stage, to identify any co-existing pathology. Obtaining patient consent is also one of the most important parts of this assessment.

A detailed visual history should be affirmed (much of which should be provided by the referring optometrist), including vision and best corrected VA (distance and near), previous personal ocular history and family ocular history, and binocular status and function. Questionnaires, as used successfully in many areas, can be helpful in documenting patient symptoms and extent of visual disability, but should be used in conjunction with history taking and examination when deciding on surgery.

A full medical history should be recorded, with particular emphasis on cataract related to systemic disease (for example due to diabetes – Figure 3) and drugs which may increase the risk of surgery; examples are tamsulosin hydrochloride and other alpha-antagonists and anticoagulants.16-18 Also consider other medical conditions which may make positioning or lying supine during the procedure difficult.

A complete ophthalmic examination at this stage should include:

- Measurement of VA (an up-to-date refraction should be available as part of the optometrist’s report)
- Pupil examination
- External eye examination including lids and lashes
- Measurement of intraocular pressure (IOP)
- Full slit lamp examination
- Dilated examination of the cataract and fundus
- Biometry

If indicated, photokeratometry. Where the fundus view is completely obscured by the cataract, B-scan ultrasonography or electro-diagnostic tests will need to be performed to investigate suspected retinal and visual pathway dysfunction.

Step 3 – Cataract surgery

The actual surgery (Figure 4) is usually undertaken as a day case, taking up to half a day. After the procedure, suitably trained practitioners will process the patient’s discharge and will supply instructions for post-operative medication.

Step 4 – The post-operative visit

The timing of the follow-up post-operative outpatient visit varies considerably and is therefore open to local agreement. In general, around 90% of cataract cases are uncomplicated and therefore the final review is often deferred until four to six weeks after surgery, provided which adequate patient counselling has been given and that there is good access to urgent ophthalmic review if required. It is not acceptable for patients to simply attend their nearest A&E department or to just contact their GP if they have problems! The provider must be able to manage any post-operative complications in a timely and appropriate way or have previously agreed arrangements in place for access to specialist care. It is also essential that all essential data (VA and post-operative refraction) are recorded and reported back to the surgeon for the purposes of clinical audit, governance, quality assurance and validation.

Only eye cataract surgery

Indications for cataract surgery in one-eyed patients are the same as for two-eyed patients, but the possibility of total blindness if severe complications should occur must be fully explained to the patient. An experienced cataract surgeon should always perform a one-eyed patient’s cataract operation.

Second eye cataract surgery

Over one third of all NHS cataract operations are performed on the second eye.19 Second eye surgery enables significant additional gains in visual function for everyday activities and quality of life above and beyond those achieved after surgery to the first eye.15 Functional improvement in visual symptoms after second eye surgery has been demonstrated.20,21 Surgery for cataract on the second eye also enables a greater proportion of patients to meet the legal driving standard.21 These benefits of surgery are recognised clinically, and its value should not be overlooked in the management of cataract.

Conclusion

Cataract surgery is the most frequent surgical intervention in the UK. The efficiency savings expected from the NHS has had a negative impact on the provision of cataract surgery in England in recent years. Commissioners must not abandon evidence-based medicine to achieve the efficiency targets they have been set. Instead, they should work with clinicians and patients to identify ways of improving productivity so that the growing number of people with cataracts can expect to access surgery when they and their consultants agree that it is necessary, following revised and properly thought through, efficient and timely care pathways, maximising the skills of optometrists and other healthcare professionals in a multi-disciplinary team approach.