The Royal College of Ophthalmologists' Glaucoma Commissioning Guidance:

Executive Summary

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Conflicts of interest:

Anthony Khawaja has consulted for Novartis and Allergan and received compensation.

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Running title:

RCOphth Glaucoma Commissioning Guidance

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Background and scope

The Royal College of Ophthalmologists (RCOphth) have recently published a commissioning guide for glaucoma care[1] and this article is a summary of the key components of the guideline. This guidance applies to commissioning services for adult-onset glaucoma and adults who are at risk of developing glaucoma but does not apply to paediatric and juvenile glaucoma.

Commissioners of glaucoma care should work in partnership with a range of stakeholders, including service users and carers, community optometric services, general practitioners, health and wellbeing boards, the hospital eye service (HES), community pharmacy services, established local networks, social care, rehabilitation officers for the visually impaired, voluntary organisations, and adjacent clinical commissioning groups or bodies. Organisations should use the Commissioning Guide[1] to assess their current performance against evidence-based measures of best practice, and identify priorities for improvement.

Methods

The Glaucoma Commissioning Guide[1] was developed in accordance with the RCOphth Commissioning Guidance Process Manual,[2] and this process was granted National Institute for Health and Care Excellence (NICE) accreditation in July 2015. NICE guidance applies primarily in England and Wales but as a Royal College commissioning document the guidance has relevance for commissioning of glaucoma and related services across the NHS. A Guideline Development Group was established to undertake the process and the group included representation for patients and the public (lay), nurses, pharmacists, general practitioners, optometrists, commissioners and ophthalmologists. A systematic review of the literature was undertaken to inform the guidance. The Guideline Development Group came to a consensus on the topics and questions for the search, formulated in a PICO (P – patient, problem or population; I – intervention; C – comparison, control or comparator; O – outcome) structure if appropriate. The systematic search included the Cochrane Libraries, MEDLINE, EMBASE, NHS Evidence – guidelines, NHS Evidence – commissioning, National Guidelines Clearing House, Google and other grey literature including the RCOphth and College of Optometrists (CoO) websites. Based on the evidence identified by the systematic review and consensus expert opinion within the Guideline Development Group, the Commissioning Guide[1] was written and revised following subsequent internal and external review. The current article summarises key points of the Commissioning Guide with a particular emphasis on community care settings, referral pathways,

requisite health care practitioner (HCP) competencies and qualifications, and recommendations not covered by current NICE publications.

High value care pathway

Defining a high quality and high value care pathway for glaucoma management is a central component of the Commissioning Guide[1] and is based on the best available evidence identified in the systematic review. Listing all recommendations to commissioners for high value glaucoma care in the Commissioning Guide[1] is beyond the scope of this summary and many of the recommendations highlight standards of care previously established by NICE publications[3–5] and RCOphth and CoO guidance.[6,7] One notable departure from the NICE guideline (CG85)[3] is regarding treatment of people with OHT (who may or may not have equivocal Chronic Open Angle Glaucoma like features, i.e. suspected COAG). Specifically, NICE recommended treating people with IOP >25 to 32 mmHg and central corneal thickness 555–590 µm with a beta-blocker until aged 60 years. At least one prostaglandin analogue (PGA) has come 'off patent' since the NICE guidance in 2009, and for generic prescribing the cost is now considerably lower. For this reason, the subgroup recommendation in the Commissioning Guide[1] has switched to a PGA which is known to be more clinically effective with less systemic side effects and now available with alternative preservatives and in preservative free formulations.

There are over a million glaucoma-related outpatient visits in the English HES alone annually with an estimated 30% of these attendances being related to ocular hypertension (OHT) and suspected glaucoma. Much of this workload could be commissioned in the community and delivered by HCPs other than ophthalmologists under appropriately governanced contracting. This approach has the potential to relieve the HES of significant workload and to assist with current chronic HES under capacity. The Commissioning Guide[1] clearly sets out NICE compliant care setting options for people with glaucoma or at risk of glaucoma, with agreed recommendations for qualifications and competencies of HCPs involved in care pathways for OHT, suspected COAG and established COAG.

Care setting options and referral pathways

Table 1 presents some examples of NICE compliant care settings for people with glaucoma or at risk of glaucoma and how these settings relate to different referral pathways as well as the recommended training and competencies for HCPs in the different settings (see next section).

'Repeat measures' and 'Referral refinement' are pathways previously defined by NICE.[3,4] 'Repeat measures' is a term that primarily describes the repeated measurement of parameters related to the diagnosis of glaucoma. A simple repeat measures scheme may involve repeat measurement of intraocular pressure (IOP) only or may also include repeated measurement of visual fields and other relevant ocular parameters when clinically necessary. 'Referral refinement' is a term specific to glaucoma management that describes a two-tier assessment in which initial evidence of abnormality during case-finding assessment or 'screening' is validated by a subsequent assessment which adds clinical value beyond that achieved through a simple 'repeat measures' scheme. A referral refinement service involves the undertaking of tests sufficient for diagnosis of OHT and suspected COAG and the interpretation of these clinical findings, with specialist HCPs who are delivering this service independently, being qualified and experienced in accordance with NICE guidance. Practitioners providing a referral refinement service should be qualified to make a diagnosis of OHT and suspected glaucoma, and to carry out gonioscopy to exclude angle-closure glaucoma.

In addition to established NICE terminology the term 'Enhanced Case Finding' was introduced in the Commissioning Guide[1] to provide for enhanced services which include slit-lamp mounted Goldmann applanation tonometry, dilated slit-lamp indirect biomicroscopy and other relevant or repeated tests deemed necessary by the HCP according to their clinical judgement.

Appropriate settings for the care of patients with established glaucoma depends on the perceived risk for progression to blindness (Table 1b). 'Low risk' includes patients with OHT and/or COAG suspects (i.e. equivocal optic disc or visual field), and those with primary angle-closure who have been successfully treated and have been demonstrated to have non-occludable angles. Essential elements of the care of low risk patients include the fact that the optic disc and visual field are undamaged due to glaucoma and a diagnosis has been established by an appropriately trained and experienced HCP (as specified by NICE) and a management plan has been formulated and communicated along with relevant information for monitoring and triggers for return referral. There is a distinction between monitoring of low risk patients, and the management of low risk patients which requires further qualifications and enables a change of treatment plan within the care setting.

'Medium risk' includes early to moderate established and apparently 'stable' glaucoma. 'High risk' refers to complex glaucoma (including COAG, angle-closure glaucoma, secondary glaucoma and rare glaucomas) patients at high risk of significant visual loss, and those under active management or requiring, or having recently undergone glaucoma surgery.

HCP competencies and qualifications

As with other medical conditions, it is the clinical needs of patients which ultimately dictate the necessary skills, competences and experience required of HCPs to deliver services for different levels of clinical case complexity. The Commissioning Guide[1] sets out these requirements as defined by NICE (Table 2).[3,4] In the context of care for glaucoma by non-medically qualified HCPs, the CoO has been particularly active in developing a suite of higher professional qualifications which align to various levels of clinical case complexity in glaucoma. Whilst it must be stressed that these training and experience requirements apply to all HCPs, the Commissioning Guide[1] used the CoO higher qualifications as an illustrative example because they are the most highly developed and they relate to the professional group outside of medicine which currently has the greatest level of involvement in glaucoma related care. The CoO Certificate A and Certificate B (B=Diploma in Glaucoma) have now been phased out and replaced by the 'Professional Higher Certificate in Glaucoma' and the 'Professional Diploma in Glaucoma' respectively. In addition, a lower level 'Professional Certificate in Glaucoma' has been introduced by the CoO which will standardise the training required for the new 'enhanced case finding' (see above) and for low risk monitoring (Level II in Table 2). It should be noted however that where other fully NICE aligned qualifications exist, which cater appropriately for relevant levels of case complexity, these should be equally acceptable. Alternative qualifications may, for example, in future apply to non-optometric HCPs; it is the skill set of the HCP which is of primary importance, and ideally access to training should be available to all relevant and interested allied health professional groups. Since publication of the Commissioning Guideline a multi-professional workgroup has developed and published a 'Common Clinical Competency Framework' which sets out generic requirements for multi-professional working across a number of ophthalmological service areas, including services for glaucoma and related conditions.[8]

Eye Care Liaison Officer

The Commissioning Guide[1] recommends that an Eye Care Liaison Officer (ECLO) service should be commissioned as part of every glaucoma pathway to work alongside the clinical team in providing information and support. The ECLO compliments the information and support provided by the clinical team by offering appropriate emotional and practical support and linking patients with relevant local services and support groups including social care and a falls service. ECLOs are well placed to encourage adherence to drop treatment and have a key role in patient education.

Patient referral and appointments

The Commissioning Guide[1] recommends that local systems allow:

- Urgent referrals to be "red-flagged" permitting direct and timely access to the HES. Such urgent cases would include acute angle-closure or very high IOP (which would be defined locally, but may be ≥32 mmHg)
- HCPs to refer people directly to a consultant ophthalmologist on the basis of examination and test results rather than having to ask a person's GP to refer
- All referrals to indicate relative urgency, so that HESs can manage demand optimally.
- Transfer of complete information on clinical findings including fields (and images where applicable).

Commissioners should be aware of the risk of avoidable sight loss when patients miss monitoring appointments, or when appointments are delayed or cancelled. Therefore, commissioners should monitor providers' compliance with the NICE monitoring criteria and should adopt the recommendations provided by the National Patient Safety Agency.[9]

Summary

- The Glaucoma Commissioning Guide defines a NICE compliant high value care pathway for adults with glaucoma or at risk of glaucoma
- There are over a million glaucoma-related outpatient visits in the English HES alone annually
- A third of these attendances are related to OHT and suspected glaucoma, and much of this workload could be commissioned and delivered by HCPs other than ophthalmologists in the community
- 'Repeat measures', 'Enhanced Case Finding' and 'Referral refinement' schemes may reduce unnecessary HES appointments, freeing up capacity for glaucoma patients at higher risk of blindness
- The Commissioning Guide sets out NICE compliant recommendations for qualifications and competencies of HCPs involved in care pathways for OHT, suspected glaucoma and glaucoma
- The CoO have developed a suite of higher professional qualifications in glaucoma which align to the different levels of clinical case complexity presented in the Commissioning Guide
- It is anticipated that optometrists and non-optometrist professional groups will move towards gaining these or equivalent NICE compliant qualifications from accredited providers

Table 1: Recommended care setting options and requisite HCP training for people at risk of glaucoma and for the diagnosis and monitoring of people with glaucoma and related conditions (1a – for newly identified patients; 1b – for established glaucoma patients).

✓ Permitted by NICE and advised; ✗ Not permitted by NICE – should not be commissioned;

** Referrals should be in line with Joint College guidance on the referral of Glaucoma suspects by community optometrists.*[6]

*** Consultant supervision should be in line with the joint college guidance in relation to glaucoma-related care by optometrists.*[7]

Table 1a: Case finding & diagnostic services for newly identified patients

Care Setting Options	*Simple Repeat Measures (IOP & Fields, Optic disc normal)*	*Enhanced Case Finding (Repeat Measures plus)*	*Referral refinement with Diagnosis of OHT/COAG suspect*	*Glaucoma Diagnosis*
Community				
Community Optometrist (HCP) Core competence *	✓	✗	✗	✗
Community Optometrist (HCP) CoO Professional Certificate in Glaucoma (or equivalent)	✓	✓	✗	✗
Optometrist (HCP) with specialist training, competence and experience as specified by NICE. Care may be delivered in Community or Outreach setting. CoO Professional Higher Certificate in Glaucoma (or equivalent) ≈ Glaucoma Certificate A	✓	✓	✓	✗
Optometrist (HCP) with highest level specialist training, competence and experience as specified by NICE. Care usually in HES (inc. outreach) and rarely in a Community Optometric setting. CoO Professional Diploma in Glaucoma (or equivalent) ≈ Glaucoma Certificate B	✓	✓	✓	✗
Hospital or Consultant Supervised (may include outreach)				
Consultant Ophthalmologist delivered and supervised HES care. **HCPs participating in such supervised services**** may be medically qualified (e.g. trainee ophthalmologists) or non-medically qualified HCPs (e.g. optometrists, nurses, orthoptists)	✓	✓	✓	✓

Table 1b: Risk Stratified Management by Perceived Risk of Progression to Blindness				
Care Setting Options	***Low Risk (monitoring only)***	***Low Risk (monitoring & management)***	***Medium Risk***	***High Risk***
Community				
Community Optometrist (HCP) Core competence *	✗	✗	✗	✗
Community Optometrist (HCP) CoO Professional Certificate in Glaucoma (or equivalent)	✓	✗	✗	✗
Optometrist (HCP) with specialist training, competence and experience as specified by NICE. Care may be delivered in Community or Outreach setting. CoO Professional Higher Certificate in Glaucoma (or equivalent) ≈ Glaucoma Certificate A	✓	✓	✗	✗
Optometrist (HCP) with highest level specialist training, competence and experience as specified by NICE. Care usually in HES (inc. outreach) and rarely in a Community Optometric setting. CoO Professional Diploma in Glaucoma (or equivalent) ≈ Glaucoma Certificate B	✓	✓	✓	✗
Hospital or Consultant Supervised (may include outreach)				
Consultant Ophthalmologist delivered and supervised HES care. **HCPs participating in such supervised services**** may be medically qualified (e.g. trainee ophthalmologists) or non-medically qualified HCPs (e.g. optometrists, nurses, orthoptists)	✓	✓	✓	✓

Table 2: Experience, qualifications and competencies of HCPs involved in care pathways for OHT, suspected glaucoma and glaucoma.

* Local foundation level or core competence refresher training as provided by the Local Optical Committee Support Unit (LOCSU) and the Wales Optometry Postgraduate Education Centre (WOPEC) is widely undertaken in current schemes for some low risk subgroups of patients. Joint College Guidance[6] allows for defined low risk subgroups who do not require treatment to not be referred. Similarly, people not requiring treatment who have been monitored for a period and who have been found to be stable are advised by NICE to attend their optometrist for annual visits (e.g. people with mild OHT and thick central corneal thickness). A repeat measures scheme may provide a useful context for observation of these subgroups of low risk individuals who do not require formal monitoring.

** Consultant supervision should be in line with the joint college guidance in relation to glaucoma-related care by optometrists.[7] Principles which apply to optometrists should similarly apply to other HCPs.

	Level I	Level II	Level III	Level IV
Type of care	Case finding; Repeat measures (IOP/Fields only, optic disc appearance normal); Observation of individuals not requiring referral (Joint College Guidance[6]) and stable individuals off treatment discharged to annual optometric visits (CG85[3]).*	Enhanced Case Finding (IOP and other measures; Monitoring (but not altering the treatment of) people with an established diagnosis and management plan for OHT or suspected glaucoma (Level I activities also permitted)	Diagnosis of OHT/COAG suspect; Management of OHT and suspected glaucoma (Level I & II activities also permitted)	Management of established glaucoma where a diagnosis has been made by a consultant ophthalmologist (or someone working under their supervision**) (Level I,II & III activities also permitted)
Experience / qualification / supervision	Core competence for optometrists	CoO Professional Certificate in Glaucoma, or equivalent. (Prior to this CoO qualification local refresher training and accreditation in common use.)	Specialist qualification (CoO Professional Higher Certificate in Glaucoma, or equivalent, or Glaucoma Certificate A), or working under supervision of a consultant ophthalmologist**	Specialist qualification (CoO Professional Diploma in Glaucoma, or Glaucoma Certificate B), or equivalent, or working under supervision of consultant ophthalmologist**
Competency and familiarity in performing and interpreting	• Goldmann type applanation tonometry • standard automated perimetry • central supra-threshold perimetry • anterior segment examination	As per Level I, **and**: • experience and ability to detect a change in clinical status from normal to abnormal • slit lamp mounted Goldmann applanation tonometry • stereoscopic slit lamp biomicroscopic examination of the anterior segment • Van Herick's peripheral anterior chamber depth assessment • examination of the posterior segment using slit lamp binocular indirect ophthalmoscopy	As per Level II, **and**: • medical and ocular history • differential diagnosis • gonioscopy • CCT measurement NB. Optometrists working at Level III who *in addition* have prescribing rights (Independent prescribing / supplementary prescribing / patient group directions) may themselves prescribe or supply (initiate or alter) topical treatment for people with OHT / COAG Suspect status (fields and discs normal or equivocal). Those without prescribing rights can do so in conjunction with a prescriber.	As per Level III, **and** should be trained and able to make management decisions on: • risk factors for conversion to glaucoma • coexisting pathology • risk of sight loss • monitoring and clinical status change detection • pharmacology of IOP-lowering medications • advise treatment changes for COAG, COAG suspect status and OHT (with consideration given to relevant contraindications and interactions) NB. Optometrists working at Level IV who *in addition* have prescribing rights may themselves prescribe topical treatment for people with an established diagnosis of COAG.

References

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