

Clinical governance in action

Primary eyecare in the community: GP ophthalmic referrals to optometrists

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ABSTRACT

In December 2001 a general practitioner (GP) referral scheme was set up within the former North Charnwood Primary Care Group locality to improve the service to patients with ophthalmic problems. In the first year of the scheme, 113 patients were referred to accredited optometrists by their GP. Of those, 84 (74%) were treated by the optometrists, 21 (19%) were referred to casualty, and the other eight (7%) were referred on for specialist opinion. Audit revealed the project to be an unreserved success, especially amongst the patients. Referrals are examined locally, usually on the same day, thereby saving up to six months' wait for a hospital appointment.

Keywords: audit, ophthalmic problems, referrals

Introduction

The ophthalmic co-management committee was set up as a subcommittee of North Charnwood Primary Care Group (PCG) in late 1999 for three reasons:

1 to tackle the unacceptably long ophthalmic waiting list in Leicestershire and particularly in Loughborough
2 even at that time, there were over 100 ophthalmic co-management schemes already in place throughout the UK (*Association of Optometrists Primary Care Resource Pack*)[1]
3 the overwhelming advantages to GPs, ophthalmologists, hospitals and especially patients.

Advantages to GPs

- Busy GPs have difficulty in deciding whether to refer patients to hospital through lack of experience, lack of instrumentation and time.
- There are 11 million GP consultations per year for ocular problems and optometrists have the equipment, training and time to investigate and treat ophthalmic conditions thereby freeing up GP surgery time.
- 50% of GP referrals are said to be 'inappropriate' but this is not surprising when one considers the cost and availability of high-tech equipment together with the time and training needed to use it.

Advantages to hospital and ophthalmologists

- Waiting times are reduced by the reduction of unnecessary appointments when optometrists monitor and triage patients in primary care.
- Quicker initial appointments result in more effective treatment.
- When a patient is referred on to hospital by an optometrist, a detailed referral report ensures that the patient sees the most appropriate consultant.
- Ophthalmologists are relieved of managing minor problems leaving more time to treat more serious conditions.

Advantages to patients

- Patients are often seen the same day instead of having a six-month wait or longer for a non-urgent referral.
- Early treatment produces the optimal outcome.

- Local optometrists are invariably closer and more accessible.
- Parking is usually easier.
- Appointments are made at the convenience of patients rather than the hospital.
- Continuity of care is ensured, as the patient sees the same practitioner at each visit.
- The patient needs less time off work, possibly protecting the patient's income.
- The consultation is conducted in a more relaxed atmosphere than the busy emergency or outpatient's department.

Patients Association

The Patients Association produced a report in February 2002 following a survey of NHS ophthalmology services.[2] One statistic showed that the average waiting time to see an ophthalmologist across the country was between three and six months, with 9% waiting over six months. The average waiting time to see an ophthalmologist for an urgent referral was 8–28 days with 3% waiting over 28 days. The author's experience is that patients often wait over nine months for a simple procedure such as a posterior capsulotomy.

Method

A survey to determine the enthusiasm for co-management was undertaken amongst all GPs in the former North Charnwood PCG in late 1999. Twenty-two replied out of 42. Individual comments on the questionnaires included:

> 'It would be helpful if at times optometrists could refer directly to ophthalmologists rather than coming via the GP as the latter acts as a middle man, delaying things.'
>
> 'Let's finally move into the new millennium.'
>
> 'Needs to be actively encouraged and pursued by the PCG.'

This response encouraged the author of this report to set up the GP Ophthalmic Referral Scheme in December 2001.

Much experience had been gained by the Loughborough Hospital Walk-in Centre Ophthalmic Referral Scheme that was launched by the author in August 2000. This enables nurse practitioners to refer ophthalmic patients with inconclusive diagnoses to local accredited optometrists (for details of accreditation, equipment and appointment timings see Appendix 1). Audited figures from that scheme indicate that 75% of patients are consistently managed by the optometrists, with the remainder referred on to either eye casualty or named ophthalmologists. Of course even those who are referred on benefit as they are accompanied by a detailed referral letter including such details as intra-ocular pressures, visual fields and retinal photography. A referral procedure protocol was developed together with referral form, report form, prescription fax form and patient satisfaction questionnaire (see Appendices 2–5).

The criteria for referral from GP to optometrist include the following:

- loss of vision including transient loss
- ocular pain
- systemic disease affecting the eye
- differential diagnosis of red eyes
- foreign body and emergency contact lens removal
- dry eye
- epiphora
- trichitic eye lashes
- differential diagnosis of lumps and bumps in the vicinity of the eye
- diplopia
- flashes and floaters.

More serious conditions such as retinal detachments and acute glaucoma naturally still require direct referral to hospital.

The procedure for referral is:

- a phone call is made to an accredited optometrist's practice to request that the patient be seen and to agree a level of urgency
- if the patient presents within the times of agreed availability they are seen that day
- a referral form is completed by the GP, a copy is retained and the top copy is given to the patient in an envelope marked 'confidential'
- the patient attends the optometrist at the appointed time and is examined.

Note that the referral form in Appendix 2 contains a space for the patient unique identification number. This is to satisfy Caldicott if the optometrist needs to fax the GP later for a drug prescription (see Appendix 4).[3] After examining and treating the patient, the optometrist completes the report form detailing the results of the examination within five working days.

If medication is required the prescription form (see Appendix 4) is faxed to the GP to enable the patient to obtain a prescription (at present optometrists can only prescribe drugs privately – not through the NHS).

After the optometrist has examined the patient and completed the report form, a copy is sent back to the referring GP with a diagnosis and recommended treatment and whether a follow-up appointment has been arranged. The optometrist keeps a copy for his/her own records. If a referral on to eye casualty or a named ophthalmologist is deemed necessary, then a further copy is given for the patient to present at the

Table 1 GP referral analysis Dec 2001 - Nov 2002: statistics by incidence

Reason for referral		Number of referrals
Posterior vitreous detachment	++++++++++++++++++	18
Blepharitis	++++++++++++	13
Blocked nasolacrimal system	++++++++++++	12
Meibomian gland dysfunction	++++++	6
Anterior uveitis	+++++	5
Corneal ulcer	+++++	5
Recurrent corneal erosion	+++++	5
Nothing found	++++	4
Allergy – idiopathic	+++	3
Dry eye	+++	3
Episcleritis	+++	3
Retention cyst	+++	3
Branch retinal vein occlusion	++	2
Cataract	++	2
Conjunctivitis – bacterial	++	2
Ectropion	++	2
Foreign body	++	2
Migraine	++	2
No diagnosis – red eye	++	2
Refractive change	++	2
Scleritis	++	2
Trichiasis	++	2
Visual field loss	++	2
Allergy – betnesol	+	1
Allergy – chloramphenicol	+	1
Amblyopia	+	1
Possible basal cell carcinoma	+	1
Contact lens problem	+	1
Diplopia – sudden onset	+	1
Foveal burn with laser pen	+	1
Glaucoma – acute	+	1
Hypertensive retinopathy	+	1
Interstitial keratitis	+	1
Iris haemorrhage	+	1
Posterior uveitis	+	1
Pterygium	+	1
Retinal detachment	+	1
Retrobulbar neuritis	+	1
Sinusitis	+	1
Subconjunctival haemorrhage	+	1
Systemic medication side effects	+	1
Vitreous haemorrhage	+	1

+++ The crosses are a graphical representation of the number of referrals.
113 patients were seen, 65% were treated by the optometrist in one visit, 19% required two or more visits. Of the 29 referred on to hospital, 21 were referred to casualty and 8 directly to ophthalmologists. There were two prescription faxes sent. Hence 74% were treated by optometrists alone and the other 26% arrived at hospital often already with the diagnosis and the results of other investigations such as intraocular pressures, visual fields and dilated ophthalmoscopy. Several patients presented with more than one condition.

Table 2 GP referral analysis Dec 2001 - Nov 2002: statistics by condition

Reason for referral		Number of referrals
Allergy – betnesol	+	1
Allergy – chloramphenicol	+	1
Allergy – idiopathic	+++	3
Amblyopia	+	1
Anterior uveitis	+++++	5
Bacterial conjunctivitis	++	2
Possible basal cell carcinoma	+	1
Blepharitis	++++++++++++	13
Blocked nasolacrimal system	++++++++++++	12
Branch retinal vein occlusion	++	2
Cataract	++	2
Contact lens problem	+	1
Corneal ulcer	+++++	5
Diplopia – sudden onset	+	1
Dry eye	+++	3
Ectropion	++	2
Episcleritis	+++	3
Foreign body	++	2
Foveal burn with laser pen	+	1
Glaucoma	+	1
Hypertensive retinopathy	+	1
Interstitial keratitis	+	1
Iris haemorrhage	+	1
Meibomian gland dysfunction	++++++	6
Nothing found	++++	4
Photopsiae of migraine	++	2
Posterior uveitis	+	1
Posterior vitreous detachment	++++++++++++++++++	18
Pterygium	+	1
Recurrent corneal erosion	+++++	5
Red eye – no diagnosis	++	2
Refractive change	++	2
Retention cyst	+++	3
Retinal detachment	+	1
Retrobulbar neuritis	+	1
Scleritis	++	2
Sinusitis	+	1
Subconjunctival haemorrhage	+	1
Systemic medication side effects	+	1
Trichiasis	++	2
Visual field loss	++	2
Vitreous haemorrhage	+	1

+++ The crosses are a graphical representation of the number of referrals.

Table 3 Comparison by condition Dec 2001 - Nov 2002: Walk-in and GP scheme

Condition	Walk-in centre		GP scheme	
		Number of referrals		Number of referrals
Allergy – betnesol			+	1
Allergy – chloramphenicol			+	1
Allergy – idiopathic	+++	3	+++	3
Allergy – tropicamide	+	1		
Amblyopia			+	1
Anterior uveitis	+	1	+++++	5
Possible basal cell carcinoma			+	1
Blepharitis	++++++	6	++++++++++++	13
Blocked nasolacrimal system	+	1	++++++++++++	12
Branch retinal vein occlusion			++	2
Cataract			++	2
Chalazion	+	1		
Concretion	+++	3		
Conjunctival cyst	+	1		
Conjunctivitis – allergic	++	2		
Conjunctivitis – bacterial	+++++++	7	++	2
Conjunctivitis – giant papillary	+	1		
Conjunctivitis – viral	++	2		
Contact lens problem	+	1	+	1
Corneal abrasion	++++++++++++++++	16		
Corneal neovascularisation	+	1		
Corneal ulcer	++++	4	+++++	5
Diplopia – sudden onset	+	1	+	1
Dry eye	++	2	+++	3
Ectropion			++	2
Episcleritis	++++++	6	+++	3
Foreign body	+++++++	7	++	2
Foveal burn with laser pen			+	1
Glaucoma – acute	+	1	+	1
Hypertensive retinopathy			+	1
Interstitial keratitis			+	1
Iris haemorrhage			+	1
Keratitis	++++	4		
Lid granuloma	+	1		
Meibomian gland dysfunction	+	1	++++++	6
Migraine	+	1	++	2
No diagnosis – blurred vision	++	2		
No diagnosis – red eye	++	2	++	2
Nothing found	+++++	5	++++	4
Posterior uveitis			+	1
Posterior vitreous detachment	++++++++++	10	++++++++++++++++++	18
Pterygium			+	1

Table 3 (cont) Comparison by condition Dec 2001 - Nov 2002: Walk-in and GP scheme

Condition	Walk-in centre		GP scheme	
		Number of referrals		Number of referrals
Recurrent corneal erosion	++++	4	+++++	5
Refractive change	+	1	++	2
Retention cyst			+++	3
Retinal detachment	+	1	+	1
Retinal haemorrhage	+	1		
Retrobulbar neuritis			+	1
Scleritis			++	2
Sinusitis	+++	3	+	1
Stye	+	1		
Subconjunctival haemorrhage	++++++++++++	12	+	1
Suture protruding	+	1		
Systemic medication side effects			+	1
Tarsal cyst	++++++	6		
Trichiasis	+++++	5	++	2
Visual field loss	+++++	5	++	2
Vitreous haemorrhage			+	1

+++ The crosses are a graphical representation of the number of referrals.

hospital. A special relationship has been arranged with the eye emergency department of a large local teaching hospital: if the optometrist feels the patient should be seen urgently then he/she telephones the eye emergency department and organises a convenient time for the patient to attend for examination. On occasion a specific course of investigation is decided over the telephone, e.g. the patient goes straight to the fluoraescein angiography department instead of eye casualty.

In all cases, either on discharge from the optometrist or referral to hospital the patient receives a patient questionnaire (see Appendix 5) to complete. This is placed in a sealed envelope and forwarded to the strategy and development manager at the local primary care trust (PCT).

Results

Table 1 is an analysis by incidence of the patients referred during the first year of the GP referral scheme.

Table 2 is an analysis by incidence of referrals by named condition presenting to the optometrist in the first year.

Table 3 compares the conditions referred to optometrists by GPs and the walk-in centre over the same period of time.

Several results are worthy of note:

- Anterior uveitis and potentially blocked nasal lacrimal system causing epiphora presented more commonly to GPs, presumably because they are usually more chronic problems that can wait several days for attention.
- Corneal abrasions, foreign bodies and subconjunctival haemorrhages are more acute problems and patients seek immediate advice by attending the walk-in centre.
- Posterior vitreous detachments are amongst the most common presentations to both the walk-in centre scheme and the GP scheme. The differential diagnosis of vitreous versus retinal detachment is crucial and the optometrists were pleased with the confidence that was placed in them to perform this.
- 74% of the 113 patients referred from GPs were dealt with by optometrists compared to 75% of the 111 patients referred by the walk-in centre in the same annual audit; these results were similar but with completely different patient mixes.

Conclusions

Although the optometrists were pleased with the level of referrals received during the first year of the scheme, analysis of the results revealed that although three of the local 13 GP practices each referred 20–30 patients, the remaining ten sent only six patients or less. It was resolved that visits to the latter surgeries are necessary to present the audit and discuss the success of the first year and thereby encourage the GPs to refer more eye problems to local accredited optometrists.

A pilot scheme is underway to reduce the ophthalmic waiting list in the local hospital. Accredited optometrists are reviewing the referral letters and listing those patients who could potentially be managed by optometrists. Early analysis reveals that almost all of those listed have in fact been successfully managed and in a considerably shorter time than if they had remained on the waiting list.

Presentations have been requested and given to other PCTs and enquiries made from organisations in other parts of the country about expanding the scheme to their areas.

There are tremendous advantages in ophthalmic co-management and triage between GPs and optometrists. Everyone benefits: the GPs, the hospitals, ophthalmologists – but most of all the patients.

ACKNOWLEDGEMENTS

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REFERENCES

1 *Association of Optometrists Primary Care Resource Pack 2001*. Copies from: Head of Professional Services, Association of Optometrists, 61 Southwark Street, London SE1 0HL. Tel: +44 (0)20 7261 9661, ext 28.
2 The Patients Association (2002) *NHS Ophthalmology Services: a survey of UK health authorities and health boards, February 2002*. Also available at www.patientsassociation.co.uk
3 The Caldicott Committee (1999) *Report on the Review of Patient-identifiable Information. December 1997*. NHS Executive: London.

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Appendix 1

Accreditation, equipment and appointment timings

Accreditation

To obtain accreditation optometrists attend the Oxford Eye Hospital casualty course which is an intensive one-day course working one-to-one with an ophthalmologist in the eye casualty clinic. This is supplemented by several sessions at Queen's Medical Centre, Nottingham, eye accident and emergency clinic. The costs for accreditation are between £210 and £290 per optometrist depending on whether the optometrist requires overnight accommodation or not.

To maintain accreditation and to increase the range of conditions with which the optometrists feel able to manage, an ongoing programme of continuing education and mentorship is being developed.

Equipment

No additional equipment other than that already in use within the accredited optometrist's practices was found necessary as the optometrists are already highly motivated and clinically aware with state-of-the-art instruments in everyday use with both NHS and private patients.

Appointment timings

The practices maintain one 'emergency' appointment slot each morning and one in the afternoon. If these are not taken by a GP referral scheme or Loughborough Hospital Walk-in Centre Referral Scheme patient, they can usually be filled on a casual basis. Occasionally it is necessary to see patients during a lunch break or at the end of the usual appointment timings.

Appendix 2

North Charnwood PCG
GP Ophthalmic Referral Scheme

Referral Form

Surname Forename(s) Date of Birth

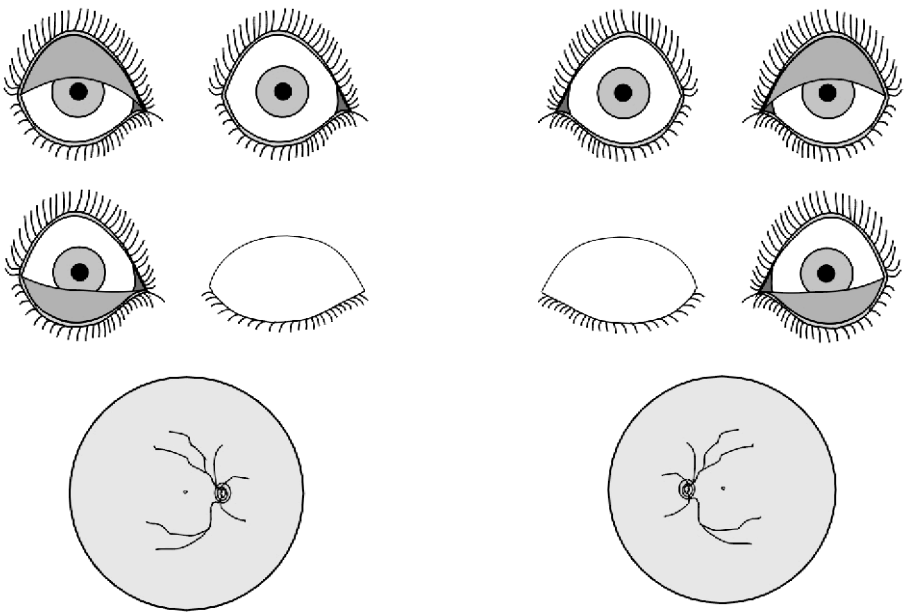
Patient Unique Identification Number:
Address Tel. Home

Work

Date of Referral Time

Reason for Referral (indicate position of lesion or foreign body):

Right Left



Any relevant past history/allergies & medication:

GENERAL PRACTITIONER

Signed **Date**

White Copy: Optometrist **Yellow Copy: General Practitioner**

Appendix 3

North Charnwood PCG
GP Ophthalmic Referral Scheme

Report Form

Surname **Forename(s)** **Date of Birth**

Address **Tel. Home**

Work

Date of Referral **Time**

History

Procedures & Results

Diagnosis

Recommended Treatment

Follow-up Appointment Yes/No Date

Further Comments:

OPTOMETRIST

Signed **Date**

White Copy: General Practitioner **Blue Copy: Optometrist**

Appendix 4

North Charnwood PCG
GP Ophthalmic Referral Scheme

Rx Fax Form

Patient Unique Identification Number:

Diagnosis:

Drug:

Dose:

Discontinue after (date):

Script needed: today ☐ tomorrow ☐

Follow-up Appointment with Optometrist? Yes/No Date:

Further Comments:

NOTE:

PLEASE CONFIRM YOUR SURGERY HAS RECEIVED THIS FAX BY PHONING:

01509

OPTOMETRIST
Signed **Date**

Appendix 5

Patient satisfaction questionnaire

North Charnwood Primary Care Group

Patient Questionnaire

North Charnwood PCG

GP Ophthalmic Referral Scheme

Question	Yes	No
Were you dealt with politely & professionally by the Optometrist & staff?	❑	❑
Did the Optometrist explain the reason for being sent to him/her?	❑	❑
Did the Optometrist explain the results of their examination & proposed treatment?	❑	❑
Were you satisfied with the treatment or information given to you?	❑	❑

Please add any further comments you wish to make:

This questionnaire will be forwarded to North Charnwood Primary Care Group who are conducting an evaluation of this service.

After completion please place in the envelope supplied and seal.